



# **Analysis of the relationship between user immersion levels and the quality of UX design in Red Dead Redemption 2**

Final Degree Project Report

**Degree in Multimedia**

Usability and Interfaces

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## **Dedication**

To my parents, my friends and every single passionate game developer out there.

## Abstract

This Final Degree Project goes into a deep analysis of the User Experience (UX) Design in the video game *Red Dead Redemption 2*. The main objective is, on one hand, to determine if the design meets the expected usability and UX standards in a high quality interactive product. On the other hand, if the actual status of the organization of information and mechanics is enough for the players to feel immersed in the design while playing the game.

In order to answer these two main questions, they are approached from a UX centred perspective and usability analysis, which features evaluations of the product from both professional and user perspectives. It also evaluates of the immersion experienced by the users.

Keywords: usability, user experience design, UX design, video games, playability, user centered design, Red Dead Redemption 2, analysis.

## Abstract (Versión en español)

Este Trabajo de Fin de Grado analiza en profundidad el Diseño de Experiencia de Usuario (Diseño UX) del videojuego *Red Dead Redemption 2*. El objetivo principal es determinar si el diseño cumple con los estándares de usabilidad y experiencia de usuario que se esperan en un producto interactivo de alta calidad. Por otra parte, si el estatus actual de la organización de la información y las mecánicas es suficiente para que el jugador se sienta inmerso en el diseño cuando juega.

Para tratar de responder estas dos preguntas, el enfoque será desde una perspectiva centrada en el Diseño UX y análisis de la usabilidad, que contará con la evaluación del producto desde una perspectiva profesional y la de los propios usuarios. También cuenta con una evaluación del nivel de inmersión de los usuarios.

Palabras clave: usabilidad, diseño de experiencia de usuario, diseño ux, videojuegos, jugabilidad, diseño centrado en el usuario, Red Dead Redemption 2, análisis.

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# 1. INTRODUCTION

## 1) PROLOGUE

There are few developers that can afford being ambitious enough to try and excel in every single aspect that conforms realism (or even hyperrealism) in a product like a video game. This, sadly, is mostly reserved to the privileged ones: astronomical budgets, thousands of employees and creators that are experienced in building this intricate puzzle. A puzzle that needs to work together, and which is expected to be flawless.

We can surely say Rockstar Games is one of those studios. Their products usually live up to the expectations in almost every tiny, little detail. In 2018, they had one of the most anticipated releases of the year, *Red Dead Redemption 2*, the prequel to *Red Dead Redemption* (2010) that promised to complete an epic journey along the downfall of the American West. It came out on the 26<sup>th</sup> October, amidst a big polemic about *crunch* in the video game industry. With the studio in the spotlight, it still managed to get several 10/10 initial reviews and also collecting several awards later on.

I personally have enjoyed *Red Dead Redemption 2*. Because of that, I've known for a long time that I wanted to focus my Final Degree Project on going over the aspects of this product I feel that, somehow, fail to be compelling and consistent with the quality of the rest of it. Deeper aspects that are never tackled in specialized journalistic reviews, and never taken in account when making an overall valuation of a video game. I truly believe we are talking about an exceptional product that is so incredibly rich in detail, so ambitious on immersing the players in the vast world they created, that sometimes it feels like it is a bit too much to process.

With all due respect to Rockstar Games employees and ex-employees who have worked into developing this video game, I would like to analyse their work

on approaching playability and immersion from a User Experience Design perspective, hoping to answer some questions I've repeatedly made myself during the countless hours and thoughts I've gone through alongside *Red Dead Redemption 2*.



## 2) DEFINITION AND CONTENT

There are a few important concepts to take into consideration before defining this project itself:

### **User Centred Design (UCD)**

Based in several descriptions (All About UX,2012), UCD is mostly approaching the design of an interactive product from a deeply user centred perspective, which means all the phases of the designing process are taking into account the user needs and opinions. Users are featured and engaged in the process of creation since the very beginning, to ensure those needs and opinions are always top priority.

It's a process that will allow developers to take easy steps back and forth if the project requires it, and also, as the product is user tested in almost every step of the process, it will speed up the error/bug correction and minimize the number of mistakes in the final stages of production.

### **User Experience (UX) Design**

Among other definitions, UX Design comprehends all the aspects of the relationship between people (users) and an interactive product. It is not limited to the general impression or how the product feels, but also relates to how quick it is understood by the users and if it fits correctly on the context in which is being used.

In video games, good UX design translates into better playability.

### **Playability and re-playability**

This concept is often referred to in video game reviews, but very few times is defined correctly. In the context of this project, playability could be defined as

the level of enjoyment a video game produces in the players <sup>1</sup>(users). When we say a video game has a good playability we are referring to a product that is able to delay the sensation of fatigue that all the players are going to experience, eventually, when playing a video game for a certain period of time.

Playability also introduces an interesting concept called re-playability<sup>2</sup>. A video game is highly re-playable or has a high re-playability, when it's able to maintain highly interesting to the player after having beaten the game or having spent a big amount of time playing it. Re-playability comes in different ways: some games feature different endings, if they are narrative centred. Others (mostly online and multiplayer games) are constantly updated with new content and features that will draw the players back to the game.

## Immersion

Immersion is defined as the capacity of an interactive product to make the player (user) not only take an active role when interacting with the product, but to create a sensation of inclusiveness around the reality they are presenting. For example, a video game is immersive when it is able to contextualize and set the player in the middle of the virtual action and that very often goes hand in hand with a feeling of isolation from reality<sup>3</sup>.

This project will scope all the aspects in *Red Dead Redemption 2* that are related to the concepts defined in previous chapters of this report, which implies a need to analyse the product from both technical and user perspectives. It will divide in four phases:

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<sup>1</sup>González Sánchez J.L., Padilla Zea N., Gutiérrez F.L. (2009) From Usability to Playability: Introduction to Player-Centred Video Game Development Process. In: Kurosu M. (eds) Human Centered Design. HCD 2009. Lecture Notes in Computer Science, vol 5619. Springer, Berlin, Heidelberg

<sup>2</sup> Márquez, S. (2012). Desmontando al gamer (III): rejugabilidad. Retrieved 31 January 2020, from <https://blogs.elpais.com/aula-de-videojuegos/2012/09/desmontando-al-gamer-iii-rejugabilidad.html>

<sup>3</sup> Arsenault, D. (n.d.). *DARK WATERS: SPOTLIGHT ON IMMERSION*. [online] Papyrus.bib.umontreal.ca. Available at: [https://papyrus.bib.umontreal.ca/xmlui/bitstream/handle/1866/13052/2005\\_Dark\\_Waters\\_Spotlight\\_on\\_Immersion.pdf?sequence=1&isAllowed=y](https://papyrus.bib.umontreal.ca/xmlui/bitstream/handle/1866/13052/2005_Dark_Waters_Spotlight_on_Immersion.pdf?sequence=1&isAllowed=y) [Accessed 31 Jan. 2020].

- ✦ **Previous analysis on playability:** In this phase, the product is going to be analysed from a technical perspective and evaluated following the standards of UCD and UX Design. It will go through interfaces, menus and mechanics, as well as visual and interactive narratives.
- ✦ **User Experience test:** The second phase of the project will require to design a simple user experience test to evaluate how a limited amount of users have interacted and engaged with the game, through their gameplays. Also, it will help to create different personas amongst the objective public of *Red Dead Redemption 2*.
- ✦ **Evaluation of the immersion levels:** It is required to know if the design is able to engage players, as it is
- ✦ **Final evaluation:** This final step is the most important one, since it culminates the project into the conclusions extracted from all the previous work, and will tell if the questions have been successfully answered or not.

In conclusion, this project aims to establish if stripping *Red Dead Redemption 2*'s UX Design from the emotional part of the game, it is still able to engage well enough with the public.

### 3) Objectives

#### **Main Objectives**

- Frame and isolate the present problems in *Red Dead Redemption 2*'s UX Design.
- Explore the users' perspective to understand what and why doesn't work.
- Create a tangible measuring tool.

#### **Secondary Objectives**

- Establish a base to develop further a scale to easily track immersion and playability levels in video game development.

## 4) METHODOLOGY

The technical evaluation of Red Dead Redemption 2 will be made through an heuristic evaluation on the UX design side. An heuristic evaluation is a series of qualitative guidelines that allows professionals and/or experts to evaluate an interactive product's usability.

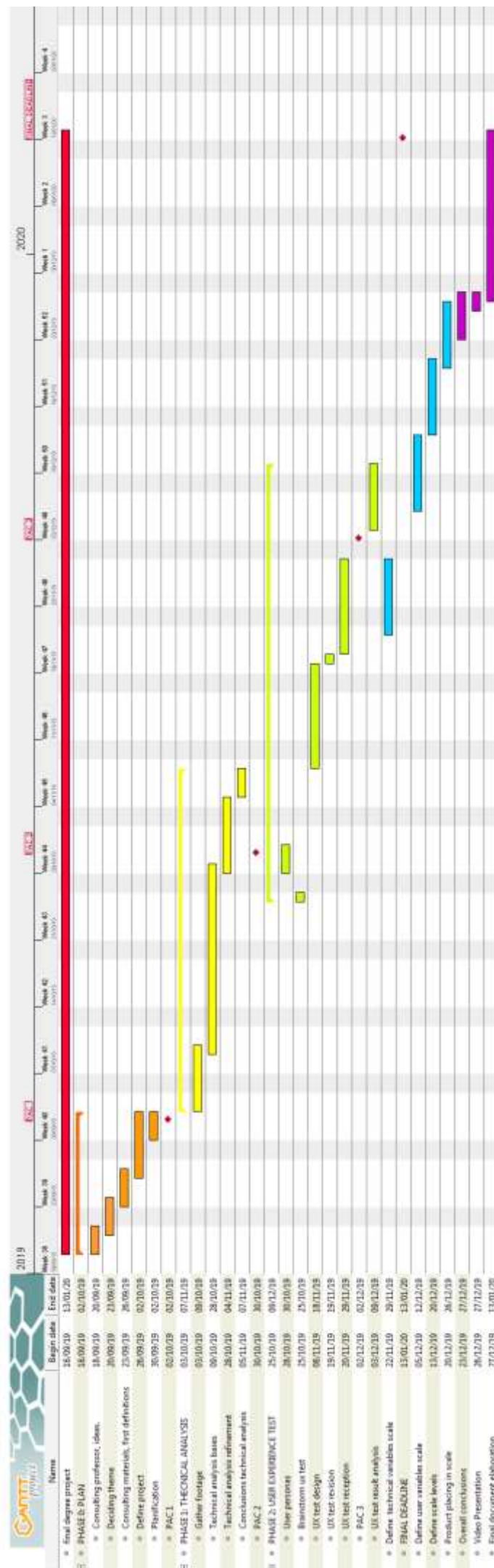
For this project, special guidelines are needed (since it's a video game what it's being analysed). Pinelle, Wong and Stach (2008) published a report called *"Heuristic Evaluation for Games: Usability Principles for Video Game Design"*, which has a solid take on how usability in video games differs from other products, also providing specific guidelines to an heuristic evaluation.

On the matter of the immersion scale, Norman (2010) develops a report on immerseAbility called *"Development of Instruments to Measure ImmerseAbility of Individuals and ImmersiveNess of Video Games"* which has some guidelines that will be useful to stablish a basis for the Immersion scale.

## 5) PLANNING

The planning of this project relies on:

- Accorded “PAC” (Continuous Evaluation Test) on the study plan:
  - PAC 1: 02/10/2019
  - PAC 2: 30/10/2019
  - PAC 3: 01/12/2019
  - FINAL DEADLINE: 13/01/2020
- Amount of time each task requires.
- Difficulty of the tasks.
- Tasks relying only on me or in third parties.
- My personal availability and planned events.
- Unexpected events that might occur.



## 2. HEURISTIC ANALYSIS ON PLAYABILITY

This chapter will go over the most relevant aspects of RDR2's playability on Single Player Mode on PS4. Online mode uses almost the same structure and resources. It will go over the ups and downs of the design, trying to identify all the problematics that the design presents.

It will be structured as sub-chapters, featuring different aspects of the game's description, its strong points and the problems (numbered) the design presents in that specific matter. This chapter will also feature a complete chart, summing up all the problematics that have to be taken in account when building the user test and the immersion scale, and sorting them into the categories present in *Heuristic Evaluation for Games: Usability Principles for Video Game Design (2008)*.

### 1) NARRATIVE AND WORLDBUILDING FEATURES

#### 1.1 MAIN STORYLINE

The main RDR2 storyline divides in 6 chapters and 2 epilogues, featuring over 100 main missions. Arthur Morgan is the playable character for the first 6 chapters and John Marston (main character in the prequel) is the playable characters for the epilogues.

To put a bit of context in the actual plot: Arthur is some kind of a second/third in hand in a gang of outlaws. The main plot of the game begins when they are escaping the law after something went wrong in a robbery. The main objective is to keep the gang alive and well and, allegedly, getting enough money to buy land on the west and settle.

I do not believe there is anything in the way of organizing, nor the chapters or the story itself, that would need to be improved in order to make the player more immersed. It is masterfully crafted, it is absorbing and it offers the most



well-rounded ending to Arthur's storyline through the first 6 chapters, as the epilogues perfectly connect this prequel to the 2009 Red Dead Redemption's storyline.

## **1.2 SECONDARY STORYLINES**

There are roughly two dozens of secondary missions (not spontaneous events or other type of events) that have their own secondary plotlines going through the entirety of the gameplay.

The spontaneous events will appear from time to time in random places of the world and they customize the experience for the player, because they will happen so naturally that it's almost impossible to know when will they trigger. If the player has gone through more than one gameplay, it will be easy to notice *some* of the spawning or triggering spots. The good thing is that there are dozens of them, so it still feels organic and surprising, helping to improve the experience of re-playability.

1. About secondary timelines, something I don't think it made a lot of sense was leaving The Veteran storyline up to the player's choice, either to be played during chapter 6 with Arthur or during the epilogues with John. There's a spawn of a couple of years between Arthur and John's storylines, and the main theme on this secondary missions fits much better with Arthur's situation in Chapter 6, rather than whole John's story.

## **1.3 OTHER HIDDEN STORYLINES AND COLLECTIBLES**

This is a very brief chapter, since there are, indeed a few hidden stories in the game. The collectibles divide in several categories such as dinosaur bones, dreamcatchers, cigarette cards, legendary animals/fish, etc. The player is not obliged to collect them if they want to beat the main story, but they will have to (at least a part of them) if they want to complete the 100% of the game.

2. Cigarette cards are, theoretically, found disperse in the world and/or in cigarette packs. As the other collectibles, the player shouldn't be able to complete the collection before epilogue 1, because forcing them to do so helps to keep the player engaged with the game, despite maybe having finished the main story. But, as the plot goes on, the pay for the missions gets bigger, so the player can actually "cheat" and get the 160-ish cigarette cards just by buying packs of cigarettes and waiting until they get all the cards. This is a small problem of consistency could be, in fact, justified.

#### **1.4 TERTIARY NPCs (NON STORYLINE RELATED CHARACTERS)**

Every NPC has their own story and individual life, not only the secondary characters (Van der Linde gang members) that will keep interacting with the player for the whole play-through. According to a little experiment<sup>4</sup> run by *DefendTheHouse* in their YouTube channel, random NPCs are provided with fully detailed schedules and working days. In their experiment, three random NPCs are followed in their deeds for a whole day (from 6 AM to 1AM approx.).

It is also interesting for the player to greet people on the trail. Some of them will be friendly and compliment the horse or even say something very heartfelt. Some others, will be intimidated by Arthur and how he looks, with the interaction ending up in a blatantly rude comment and even pulling a gun out.

Regarding NPC details that could be improved: I would only say a few "odd" responses that don't match the conversation. It's extremely important to take into account that the amount of NPC repetition throughout the game is barely noticeable, and it is a big world. It is obvious and expected from developers to reuse as many elements as possible.

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<sup>4</sup> DEFENDTHEHOUSE (2018) Following NPCs in Red Dead Redemption 2 for a Whole Day [online] [viewed: 27/11/2019] Available at: <https://www.youtube.com/watch?v=MrUJJgppMn4>

### **1.5 SECONDARY NPCs (STORYLINE RELATED CHARACTERS)**

Regarding the NPC from the Van der Linde gang members, it gets even more complex. Camp works because every single member has a part on it. They have routines that may change every day. Some days the player can see Charles and Bill doing guards outside camp and the next day it is John and Lenny.

Every member also does have some activities they will repeat on and on, because it is in their own personal nature to do so. For example, Keiran spends a lot of time around horses, taking care of them. Miss Grimshaw will go to a certain spot of the camp whenever she needs a break and smoke a cigarette. Every character is deeply detailed with a personality, mannerisms and roles.

Their mood and relationship with both Arthur and other camp members will swing, there will be fights or days where Arthur comes up to any of them to talk, and they will respond more or less effusively, depending on what happened to them or how are they feeling. This is especially noticeable in Sadie, who spends a good part of chapter 2 completely depressed and crying on every corner, basically dismissing Arthur as he tries to comfort her. When she slowly overcomes the pain, she ends up being fierce and one of Arthur's most loyal friends (and John's, later on).

3. The player can't customize their experience by developing more the relationships with the characters they are more fond is, in fact, a tiny detail that impoverishes the experience. It is a tricky matter because it can't be to a point where the characters the player has interacted with are the ones that will side with Arthur at the end. But after a lot of hours sharing hundreds of bits and scraps from these characters, it is a shame that their fate is sealed since the very beginning, no matter what the player does. It is true that this would explain how the storyline was handicapped by the existence of RDR, as some characters had to live through this game so it would fit the existent plot.

### 3.6 ARTHUR'S JOURNAL

Arthur's journal is one of the most important sources of information and lore the player has in-game. As the player explores the world and discovers curiosities, meets people and gets into the plotline, Arthur will automatically fill a personal journal with his thoughts, sketches of plants, animals, people and places that catch his eye.

The journal is one of the keys to keep the player connected to Arthur, since it provides a better understanding of the character and how he feels about what the player experiences.

It is a very interesting type of interactive relationship between the already existent narrative and the own narrative that the player creates when playing the game. Arthur's journal will look different for every player because it is filled at the same time as the player keeps completing things in the game. So, for example, a player that does not pick herbs or spend time investigating animals will not have the same sketches and notes than a player that does.



FIG 1. Arthur's journal (Arthur)

And it is because of the connection this journal creates with Arthur, making Arthur's journal pass into John, later on the story, is a great decision. John going through the journal and trying to finish it, feels like the perfect way for him to worship Arthur's figure. Also, it is an excellent script tool to show how

different both main characters are and to help the player to engage better with John, after spending so much time and emotions along the journey with Arthur.



FIG 2. Arthur's journal (John)

## 2) STRUCTURAL AND VISUAL FEATURES

Structural analysis will be centred in how the game has its content organized and presented to the player. Menus and interfaces are the most important aspects in a videogame, since they are something the player will, inevitably, have to interact recurrently through all the gameplay.

### 2.1 MAIN MENU

This menu is the first one the player encounters when the game is started. It has the Title of the game on top-centre screen, an animation that changes every time the menu is on. On bottom-right corner it has the single player or online mode selector. On bottom-right corner, the instructions for the player to go to the next screen.

The menu is pretty simple but, since it has very few elements to interact with, it is difficult to get lost. Also, all the elements are labelled clearly and there are no tricky names or instructions.

4. There's no option to change the settings before starting to play.
5. The player can't choose which save wants to load, the game automatically loads the last saved game.



FIG 3. Main Menu

## 2.2 LOADING SCREEN

The loading screen has an animation that fits the whole screen (see fig 2), with a succession of stills playing. On the bottom-right corner, a little animation of a revolver cylinder indicates the percentage of the loading process. The fact that it is not just a black loading screen, gives information to the player about the state of the software, where it can be seen if the game has blocked or presents any loading problem.



FIG 4. Loading screen

6. The percentage animation only appears when the game has gone through at least a +50% of the loading process.

## 2.2 PAUSE MENU



FIG 5. Pause menu

The pause menu is one of the biggest interfaces in the game. It divides in the following categories:

- **MAP:** contains a detailed map of the playable region. The player has a wide range of information available. It shows the orography and interesting places on the region.
- **HELP:** contains information and tutorials about mechanics. It's structured in a three column display with all the information in the following sub menus:
  - General: general mechanics, events and activities
  - Combat: all related with weaponry (types, usage) and combat mechanics (stealth, covering, groups).
  - Horse: related with horses and horse mechanics and care.
  - Crime: contains information about criminality mechanics, types of crimes, etc.
  - Activities: Adds more sublevels and changes the structure of the menu. It features information about Hunting, Fishing, Poker, Blackjack, Dominoes, Five Finger Fillet.
- **PROGRESS:** This menu contains information about the progress made by the player on specific aspects, such as:



- Story: The menu divides in 6 chapters plus 2 epilogues and all of them follow the same structure. They feature a list of mission names and a badge (bronze, silver, gold) on accuracy completion. Player can also see the checklist of objectives that were required to obtain the gold badge and can replay the mission if needed.
- Compendium: this is an extensive category that features all the information about animals, equipment, gangs, plants, weapons and other collectibles. All the menus have similar structure of 15 illustrated rectangles per page that, once accessed, they feature additional info about every single animal/plant/weapon etc. Two of them, "Cigarette Cards" and "Gangs", feature an additional sublevel. One of them, "Equipment", has a completely different structure, where the illustrated triangles are positioned in a different way, holding the information on the left side of the screen.
- Challenges: divides in different categories and follows a structure that feels like a mix of the default Compendium structure and the "Equipment" one. It has a checklist.
- Total Completion: a list of several requirements to obtain the 100% completion of the game in various disciplines/game mechanics/collectibles.
- **PLAYER:** This menu contains information about the main playable character (Arthur/John) and the horse the player is currently using as Main Horse.
  - Arthur/John: contains subcategories with information (General, Health, Stamina, Dead Eye) divided in a list following the Statistics – Condition – Perk format.
  - Horse: a simplified version of the formerly explained menu.
- **STORY:** Divides in Save Game, Load Game, New Game, Exit game. The Two first menus have a list of all the saves created by the player or the Autosave function.
- **ONLINE:** gives access to the same Online screen that the player can access on the Main Menu.



- **SOCIAL CLUB:** gives access to the Social Club platform by Rockstar.
- **SETTINGS:** Divides in different categories and offers personalization to the player's need. Can access cheats menu from here.

All the menus have excellent visual metaphors, they are clear and won't confuse the player.



FIG 7. Map zoomed in



FIG 6. Map zoomed out

7. The Pause Menu structure is odd. For example, Save/Load options are one of the most important mechanics in a video game and they are not accessible.

8. The Pause Menu labelling isn't accurate enough to help the player identify the content of the menus beforehand

9. Progress submenu doesn't allow to track gameplay features such as overall time played, enemies killed or other useful information about the gameplay.

10. Some of the gameplay information is tracked in Social Club, and it's not obvious to the player that this information can be found there.

11. The placement of "Cheats" submenu in "Settings" with which it doesn't have anything to do.

12. All Save and Load options are contained in the menu "Story" which is a misleading labelling.

13. The 3 column distribution of the information in the Help menu is confusing to read.

14. If the player accidentally enters the Online menu, it doesn't feature a simple mechanism to go back to the Single Player menu, and it's required

to press **OPTIONS** button to close the **Single Player** menu and go back to the game.

**15.** Language can't be changed in **Settings**. It requires to be changed the whole language on the **PS4** system in order to change the menu/HUD language in-game.

**16.** Low level of control customization.

**17.** Can't change the subtitle language in **Settings**. They will appear in the **PS4** and game selected language.

**18.** Despite the game can be made more easy or difficult by changing some settings, it lacks of difficulty setting pre-sets, where the player could select between degrees of difficulty without being forced to go through every single option.

## **2.3 HUD**

HUD<sup>5</sup> in RDR2 is very minimal, yet mostly effective. Mini-map shows on the bottom-left corner and the player can decide which one of the four mini map options (regular/default, a bigger versions of the regular, a compass version with no actual map but only indicating direction and no mini map or compass). The icons for Health, Stamina, Dead Eye, Horse Health and Horse Stamina, wrap around the top of the mini map.

There is a second part to the HUD that is not always visible but can be easily activated by pressing the UP-ARROW in the D-pad. This mechanic makes the mini map appear in expanded form and allows the player to see further information that might be useful to check from time to time (money, honour bar, location, in-game, hour, in-game temperature and bounty [if needed]) but that if it was permanently on-screen it would interfere with gameplay.

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<sup>5</sup> HUD is the acronym for Heads-Up Display, which is defined as “ a transparent or miniaturized display technology that does not require users to shift their gaze from where they are naturally looking”. (Rouse,2013. Par. 1)

Other non-permanent HUD elements are the icons for Health, Stamina, Dead Eye, Horse Health and Horse Stamina levels wrap around the top of the mini map. On the bottom-right corner, the player can find the instructions for actions the character can do. Subtitles have a black semi-transparent stripe beneath them, to improve legibility.



FIG 8. Complete HUD

19. When the player sets the mini map options to “Compass” or “Off” and ends up in a shooting or a confrontation, there are no visible signs on the screen that help the player to identify the direction from where the attack comes from (even if the game notes that choosing those options may increase the difficulty of the game).
20. When the player has a bounty on and wants to check the time or temperature in the non-permanent HUD, the bounty and the location appear first, and the player has to wait for several seconds to be able to see the information required.
21. Subtitles are far too small to be read from a certain distance, considering RDR2 for PS4 or Xbox One can be played in a TV, which normally isn't close to where the player is sitting.

## 2.4 QUICK MENU

Quick Menu is yet another interface that the player is going to need to use a lot. It's based in a wheel system with 8 slots and divided in three different menus,

“Weapon”, “Item” and “Horse”. Each of the menus gives the player easy and quick access to a great amount of objects related with each category. It is very detailed and the visual metaphors are very effective identifying the different objects.

**22.** It is very difficult to select weapons because they are not presented in any particular order, and the further the player goes into the gameplay, the more difficult it gets to select the right one due to the great amount of accumulated different weapons.

**23.** The default weapon selection doesn't make sense because the game selects the newest weapon the player got, which doesn't mean it's a favourite or something the player wants to particularly use.

**24.** Lack of a division between food and drinks in the Item menu, to enhance the easy access to one particular thing the player may need to cover the character necessities.



FIG 9. Weapon quick menu



FIG 10 Object quick menu

## 2.5 CATALOGUES, CREATION AND CUSTOMIZATION MENUS

This three categories have similar structures: Listing of information, names of the products, etc, happens in the left side of the screen, and the visual part happens in the right side.

General store catalogues present a special format in which they imitate real catalogues from the time where the game is set (18<sup>th</sup> century). The order and the structure of the content is quite consistent and logical. (See FIG.13 and 14 on ANNEX 2)

**25.** Visually, the catalogues can be distracting because they mix actual purchasable items with fake decorative commercials.

**26.**Text size in the catalogues can be a bit small for reading in a distance.

**27.** Some default options in Horse Customization and Creation menus are not showing the right information to the player. For example, in the Horse Customization menu, it is really tricky to know how the different saddles affect the horse's health and stamina.

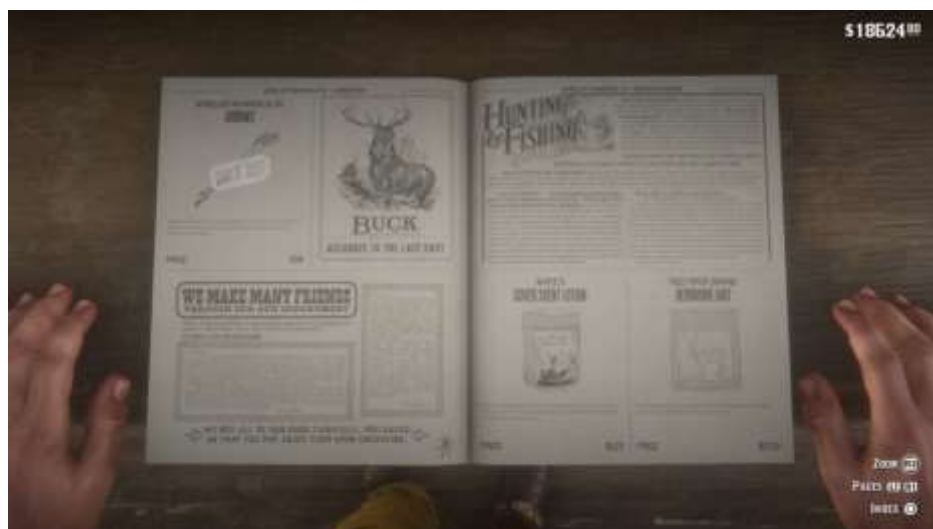


FIG 11. Catalogue

## 2.6 CINEMATIC CAMERA

The cinematic camera is triggered when the player presses and holds the *Touch Pad* on the PS4 controller. It features three different cameras and the “cinematic” view with two classic black bands on the horizontal sides of the screen. Automatic shift is possible in this mode. It is a great way to allow the player to rest and still feel immersed in the game, since it was created to have the same feel as watching film. (See VID.2 on ANNEX 2)

28. Like it happened with some HUD options, the player is unable to predict or foresee if the main character is going to be ambushed, attacked or how far it is still from the objective, since the mini map is disabled.

29. If horse bond is increased while using the cinematic camera, the sound effect that indicates the player that the horse has levelled up doesn't trigger, only the visual mark appears on the top left corner. The sound effect will trigger after the player deactivates the cinematic camera.

30. Sometimes this camera will bug and won't allow the player to automatically follow the trail at trot pace. The horse will automatically speed up to canter, and pressing R1 will not make the horse go any slower.

## 3) MECHANICAL FEATURES

Mechanics analysis will be centred in the correct interaction between the physical actions and decisions of the player with how those actions and decisions translate into the game. RDR2 is a vast game with a lot of complex controls and a big world full of things to do, so it is not difficult to find some details that could be improved.

### 3.1 STATS MECHANICS

Stats in RDR2 can go from level 1 up to level 8 max for the main character, and 1 to 10 for the horse. They have two phases:

- **CORE:** it's refilled with food and drink.
- **BAR:** it's refilled with the pass of time or with tonics and other consumables.

There are three different main stats for the main character and two for the horse.

- **HEALTH:** consumed when the main character is physically hurt by being shot, stabbed, hit or has fallen from a considerable height. Objects like alcohol and cigarettes can consume health. Snake venom consumes health too, and illnesses or a low weight happen to decrease the percentage of maximum health. If the core gets to zero, the character dies. Can be levelled by taking low damage in shootings or drinking special tonics (Valerian Root).
- **STAMINA:** Mainly consumed when running, sprinting, carrying or shooting with a bow. Overweight happens to decrease the maximum percentage of stamina. If the core gets to zero, the character will feel dizzy and faint. Can be levelled up by running or carrying heavy loads for long periods of time, as well as consuming special tonics (Pirate's Rum).
- **DEAD EYE:** It's used as a tracking system for hunting or as a time dilator when shooting. It's consumed when activated when R3+L3 are pressed. Some consumable objects such as cocaine gum can consume Dead Eye core. Can be levelled up by performing good shots without using the mechanic and also consuming special tonics (Ginseng Elixir).
- **HORSE HEALTH:** consumed when the horse suffers from any physical damage. Can be refilled with food or medicine. If the core gets to zero, the horse can be revived or else, it will die. Levelled up by increasing the bonding level with a horse.
- **HORSE STAMINA:** consumed when galloping or climbing steep terrain. Can be refilled with certain foods or tonics. Levelled up by increasing the bonding level with a horse.

There are some consumables than not only will offer a refill of the stats, but they will provide a golden core/bar. When a stat has a golden core or bar, it won't



decrease for a certain period of time. Core refilling follows a consistent logic according to the amount and type of consumables the player uses. (See FIG.15 and 16 on ANNEX 2)

**31.** Unless Health and Stamina, Dead Eye bar does not refill with the pass of time. It requires of consuming tonics or performing headshots without using Dead Eye. This stands between a problem (consistency) and actual logical decision. The way it could be justified would be that Dead Eye represents an ability the character would develop, to be able to shoot precisely.

**32.** Not a single horse can get to level 10 health and stamina because horse stamina and health does only improve when levelling up the bond with the horse (up to 4 levels). The only one that gets closer (8/10 on both stats) is the Arabian. This implies that quantifying health and stamina with 10 levels doesn't make sense if one can't achieve the maximum level.

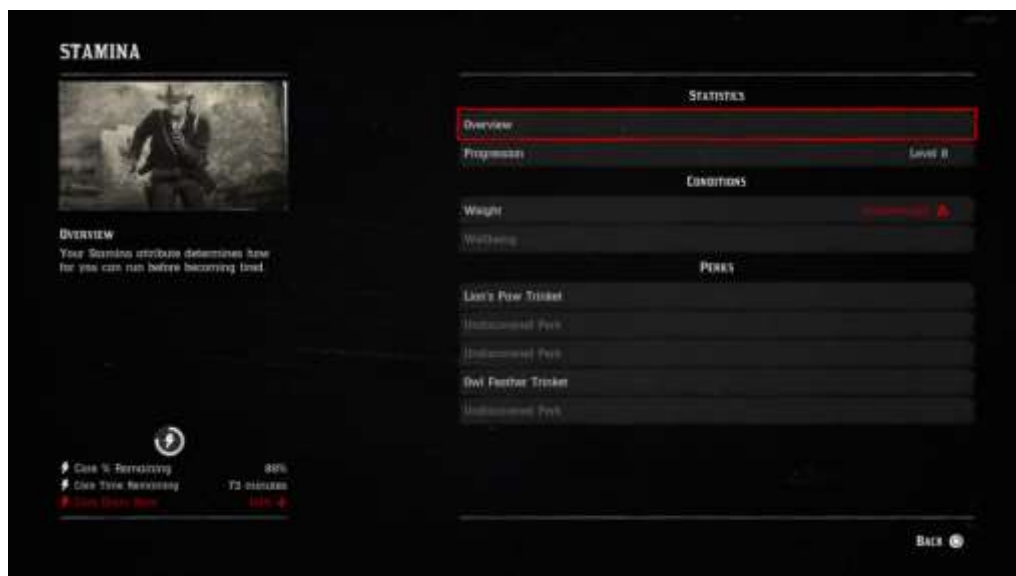


FIG 12. Character Stats

### 3.2 CAMP MECHANICS

Camp logistic is one of the most important parts in the game, because all the people living in the camp depend on how the main character provides for them. Camp is beneficial for the player because allows to have free food, ammo and



medicine if the player takes the effort and time to improve camp facilities and keep the inhabitants happy.

The player can donate animal carcasses for food and decoration, and bring money to keep the reserves full.

Also, Camp is the centre of operations for the player and some secondary missions and events will only trigger there. Camp members will also gift things to Arthur when the player completes a series of requests.

**33.** Decorating the camp is a pointless mechanic, since it doesn't provide better mood or does have any effect on the camp humour in general.

**34.** Apart from the player, the other camp members also put money on the common box to improve the camp, but it's completely unbalanced if the fact that other camp members do similar activities to the main character is considered.

**35.** No access to a stash where the player can leave objects that may hinder the gameplay.

**36.** Can't name custom outfits in order to make them more identifiable later.

**37.** Picking up things from the night table (sometimes other camp members will give objects to Arthur at his night table) or on places where there is more than one action available, it is difficult and it is not well solved. (Allegedly the player can select different actions pressing R1 while standing, but sometimes the wanted option isn't even available).

### **3.3 SURVIVAL MECHANICS**

Survival mechanics feature every mechanic related to the character's survival in the world:

- CRAFTING: This menu is accessible from the bonfires and campfires or from a slot in the quick menu. This allows to cook food and other consumable objects such as ammunition, bait and other objects.
  - FOOD:
    - Canned goods and processed food can't be crafted. They can be bought in the stores, salvaged from bodies or abandoned sites, robbed from houses and found in vaults and saves.
    - Meat can be found in the stores or obtained from hunting.
    - Plants and herbs can be handpicked from the world and used to increase the benefits from meat. Some herbs favour health, others stamina and others dead eye. Certain herbs combined with meat can provide golden cores.
  - HORSE FOOD AND GOODS: Can be crafted with herbs and some hunting scraps.
  - AMMUNITION AND THROWABLE WEAPONS: crafted with hunting scraps. It allows to create specialized ammunition such as arrows to kill big game or really small animals, also tomahawks or improved throwing knives.
- HUNTING AND FISHING: This is the basic form of surviving for the main character and the camp. It also is beneficial to the player because hunting and selling the pelts equals to money and ability to craft clothing and gear Pelts can vary in quality, going from 1 to 3 stars and affecting gameplay, as less than 3 star pelts can't be used to craft any gear or decoration. Also, pelts have different weights and sizes that will create conditioning situations where the horse can't carry more pelts.
- HERB PICKING: As hunting and fishing are the basic ways to obtain food, this mechanic is the basic way to improve the quality (and perks) of the food.
- CAMPING: It allows the character to rest up, refill stats and fast forward time.

- WEIGHT AND HORSE WEIGHT: It's a mechanic that will give perks to both character and horse if maintained in optimal condition, but will affect negatively if they are far too overweight or far too underweight.
- TEMPERATURE: character will need of warm clothes or cool clothes depending on the location.

Most of this mechanics are extremely realistic and don't feel that much repetitive. The crafting menus are kept simple and easy, giving the player the taste of an RPG component.

**38.**Food (or lack of it) doesn't have that much effect on the character's survival. It surely refills the cores and bars, but the character or horse can't die from inanition.

**39.**Hunting some of the animals (specially small ones) is terribly difficult because the physical interactive technology in which this game is based (PS4 controller) , does not allow precise, quick aiming.

**40.**Melee fighting wild animals is unbalanced. The character can fight and get away from a grizzly bear with a knife, but not from a mountain lion (a melee attack to a mountain lion is almost an instant kill).

**41.**The lack of sleep does not affect the character's gameplay either, it can only help to refill cores.

**42.**The character can't bake/cook food in fireplaces, but can do it in random campfires.

**43.**There's no possibility to carry pelts or hunting scraps in a wagon, they must always be placed on a horse.

**44.**There are certain beds in random houses that can be used to sleep, and others that no. Lacks of consistency or justification.

**45.**Temperature has to be very extreme to diminish health on both horse and character.

**46.** Sometimes, the visual trigger that allows the player to know whether they can pick up and herb or not, is not accurate and the player needs to move the character in order to get it.

### **3.4 QUICK MENU MECHANICS**

This menu has been described in other chapters. It triggers by pressing and maintaining L1, its navigable with the left joystick, and R2/L2 to switch between objects.

**47.**It presents some difficulty when selecting different outfits while riding. It requires to have the horse at a trot pace or slower, but if the outfit doesn't visually change because the horse was going faster than that, it still records as if it had been changed.

**48.**Weapon menu ends up being too cluttered. Through the course of the gameplay, the player can obtain dozens of weapons that will be not disposable.

**49.**Inability to set weapons as favourites/most used to have easy access to them.

**50.**Inconsistent mechanics through the menu. In the weapon sub menu the player only needs to select the weapon slot with the joystick and can release afterwards without the weapon being deselected. In Item and Horse menus, the player needs to hold the joystick in the direction of the wanted item in order to select it.

**51.**Player can't access the cooked food (instead of canned or already prepared) from the quick menu, neither be set as a consumable object. However, the crafted tonics or weapons can be accessed on their respective slots

### **3.5 HORSE MECHANICS**

The horse is the main companion and features several of the most repeated mechanics: Mount/dismount, feed, pat, lead... It all directs the player into establishing a relationship with the horse that is currently selected as main horse. For a horse to be the main horse, it needs to be put the character's saddle. Stables can hold up to 4 horses. There are 3 horse types (work/ war/ racing) sometimes combined depending on the breed. Creating a bond with the horse

helps the player to feel more immersed, to adopt a horse as another main character.

**52.** Horse bond levelling gives some perks on health and stamina and other “perks” such as being able to rear, to perform a piaff, a leg yielding, a reining stop, etc. but these are essentially forgotten during the gameplay and of no real use.

**53.** Horse bond doesn't affect how the horse reacts to the environment. A horse that has been recently bought or broken from the wild will be as scared of predators and shots as a max. bond level horse.

**54.** Horse breed doesn't affect the horse's character and behaviour.

**55.** Falling from a steep terrain is tricky: sometimes it will trigger an automatic jump and nothing will happen even if the step is very high, and other times falling from a tiny step will make the horse fall and be injured.

**56.** Different stables can't hold different horses (so, in total, a player can hold 4 horses at a time) This can be justified with gameplay needs.

**57.** In earlier versions of the game, the player was allowed to keep more than 1 provisional horse, but after the updates it was limited to one main horse and one provisional horse.

**58.** The player can only take one of their horses out the stable at once, so if a second horse is required (for example, a horse can only carry one big pelt on the croup and the pelts can't be carried in wagons, if the player went big game hunting very far from camp, they would require to carry the extra pelt by hand and walk all the way back to camp or the trapper) the player needs to either capture a wild horse or to steal one from someone.

### **3.6 COMBAT AND WEAPON MECHANICS**

The combat and weaponry mechanics are simple: there are firearms such as pistols, revolvers, shotguns and rifles. There are silent weapons like tomahawks, throwing knives and a bow. All previous weapons are aimed with L2 and shot with R2. Also there are other tools like the lasso. The character

can't wear any piece of clothing or armour that will allow to take less damage. The firearms need to be cleaned regularly to keep their stats intact.

Great variety of firearms that will, yet again, help the player to feel the RPG component, to make the game its own. The weaponry is also very realistic. This matter is more extensively addressed by Rob Nelson in an interview he did in May 2018, months before the release, for the Spanish magazine HobbyConsolas<sup>6</sup>.

**59.**Auto aiming does not always point to the closer objective to the aiming point. It often gets stuck, especially with moving animals (birds are very tricky to shoot at).

**60.**A bit of inconsistency when headshots/shots in critical body parts (from enemies to the main character) take the same amount of damage than shots in non-critical parts.

### **3.7 TRAVELLING MECHANICS**

Travelling can be done by horse, mainly, but the game offers "fast travelling" mechanics such as diligences, trains and horse fast travelling (from camp).

**61.**Fast travelling methods are impractical, as they require the player to go to a specific place to fast travel.

**62.** Horse fast travelling isn't available outside of camp.

**63.**Travelling with the cinematic camera is too time consuming.

**64.**Automatic trail following isn't available without the cinematic camera.

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<sup>6</sup> MARTÍNEZ, D. *Red Dead Redemption 2 - Entrevista exclusiva con Rob Nelson de Rockstar* [online] [viewed: 22/11/2019] Available in: <https://www.hobbyconsolas.com/reportajes/red-dead-redemption-2-entrevista-exclusiva-rob-nelson-rockstar-207588>)

### **3.8 HONOR MECHANICS**

Honor is a very gameplay impactful mechanic because it will allow the player to unlock different perks and bonuses depending on if they choose to make Arthur act like a good or a bad man. Honor goes from levels -8 (329 honor points) to 8 (-329 honor points), being -8 low honor (bad) and 8 high honor (good). For example, high honor will earn the player up to 50% discount on every single store. Low honor (bad) will earn the player the ability to loot more objects from bodies.

Positive honor points will be obtained when performing certain actions, such as saving and helping people or being nice to NPCs. Negative honor points will be obtained when performing bad actions such as abandoning civilians in need, killing innocents, robbing or being mean in general.

Honor and selfless/selfish decisions, become vital as the player gets to the end of the game, because it is one particular decision, what triggers the different endings and outcomes for Arthur.

**65.** The main problem with the honor system is that is emasculated until chapter 4, when the player can finally push to maximum and minimum honor levels. So, despite being pretty impactful in the gameplay out of the main storyline, it is not as impactful in the narrative as it would be expected to be.

**66.** It is far too easy to gain and lose honor. It's missing of a more varied range of honor punctuations per action.

**67.** Even though high or low honor will have some impact in how other characters see Arthur, it isn't what triggers the "good" or the "bad" endings. Those are triggered, mainly, by just one decision.

### 3.9 OTHER MECHANICS

**68.**Some main story cinematics will be skippable and others will not.

**69.**Animal skinning/plucking animation can't be skipped.

## 4) PROBLEM TYPE IDENTIFICATION AND CONCLUSION

Though all the analysis, 69 different design problems have been encountered. Not all of them are equally serious and nor they are all of the same type. In this chapter, they will be sorted into each one of the ten different principles of Heuristic evaluation in videogames set by Pinelle, Stach and Wong (2008) that every problem is infringing (some of them may be placed in two categories simultaneously, and then will be accompanied by a letter after the number to indicate they are repeated) Those being the following:

<b>Provide consistent responses to the user's actions.</b>	<b>1, 2, 23, 30a, 31, 32, 33, 37, 38, 40a, 41, 42, 43, 44, 45, 46a, 50, 51a, 52, 56, 58, 60a, 61, 62, 63, 64, 65, 66</b>
<b>Allow users to customize video and audio settings, difficulty and game speed.</b>	<b>4, 5, 15, 17, 18, 21a, 35, 36, 48, 49, 51b, 67</b>
<b>Provide predictable and reasonable behavior for computer controlled units.</b>	<b>3, 34, 40b, 53, 54, 55, 57</b>
<b>Provide unobstructed views that are appropriate for the user's current actions</b>	<b>19, 20, 21b, 28, 29, 30b</b>
<b>Allow users to skip non-playable and frequently repeated content.</b>	<b>68, 69</b>
<b>Provide intuitive and customizable</b>	<b>16</b>



<b>input mappings.</b>	
<b>Provide controls that are easy to manage, and that have an appropriate level of sensitivity and responsiveness.</b>	9, 10, 22, 39, 46b, 47, 59, 60b
<b>Provide instructions, training, and help.</b>	14, 26
<b>Provide visual representations that are easy to interpret and that minimize the need for micromanagement.</b>	6, 7, 8, 11, 12, 13, 24, 25, 27

FIG 13 Problem Identification Chart

RDR2 has almost 50% of its problems recalling on consistency issues, followed by customization. The less crowded categories are mappings, non-playable content and instruction and training. This confirms that, despite the efforts for creating a consistent design that would help the player to feel more immersed, there are still a lot of tiny details that do not make sense when put in perspective with other aspects of the game.

### 3. USER EXPERIENCE TEST

The third main chapter for this project is going to board the whole process of designing and executing a UX test on real users. First of all it is necessary to create user personas in order to have different profiles to search on and to provide better understanding of who could play this game and what to expect in every case. The test will be designed with the hopes of obtaining real data from real users to contrast with the heuristic analysis performed in the previous chapter.

## 1) USER PERSONAS

This sub chapter collects three user personas that would suit a game like Red Dead Redemption, trying to cover as many different types and motivations as possible.

These were created according to VideoGame Project's Player Persona cards, centered on developing a target gamer audience and gaming motivations for each persona.

**NAME:** Khalid Scott**GENDER:** Male**AGE:** 21**EDUCATION:** Graduated from High School**OCUPATION:** Full time Computer Engineering student (OK \$/year)**MARITAL STATUS:** Single

### Motivations:

Khalid is an avid player that has no other hobbies other than gaming, so he likes to spend tons of hours on each videogame. He is very competitive with himself, so he likes to discover all the secrets hidden in videogames, as well as all the trophies. As a full time student that doesn't go out very often, he manages to pull out a lot of free time to dedicate to gaming. He mainly plays on his PS4<sup>7</sup> because he couldn't bring his whole PC setup to the uni dorms.

His favourite game is The Witcher 3: Wild Hunt, so he could say that his favourite type of games are open-world with a lot of side quests and extra content a part from the main storyline. He also enjoys extremely challenging games, but he never plays online.

He usually is aware of all the news in the videogame industry, has knowledge about different studios and their upcoming games. He also tends to buy the only few titles that interest him a year, instead of getting every title from day 0. As he is spending hundreds of hours in every game, he prefers to focus on two or three titles and wait for other less interesting games to be cheaper.

Criteria for selecting games:

- Good completionism challenges.
- RPG and open world components.
- Challenging difficulty.

Frustration with games:

- Too easy or repetitive.
- Obligatory online/multiplayer components
- Boring stories.

<sup>7</sup> PS4 stands for PlayStation 4, the fourth console Sony produced for their PlayStation series.



**NAME:** Trevor Baker

**GENDER:** Male

**AGE:** 42

**EDUCATION:** Doctor in History

**OCCUPATION:** University professor (100K \$/year), online Divulgator (12k \$/year)

**MARITAL STATUS:** Divorced

### Motivations:

Trevor started playing videogames when Assassin's Creed came out in 2007, motivated by the historical aspects the series promised. With the years, he started a YouTube channel where he broke down the historical accuracy in all kinds of videogames, leading him to amass a good amount of subscribers as well as completed games. He is able to complement his 9 to 5 job with YouTube and, since he divorced, he also has got more time to spend exploring games and creating new content. He only plays on PS4 since he likes to separate work from leisure, so he only plays in the weekends.

His favourite games are Assassin's Creed: Revelations and he likes games that portray well the historical periods where they are supposed to be set. He doesn't particularly enjoy a fully fantastic or sci-fi game. He doesn't play at very high difficulties or is particularly centred in completing a lot of challenges. He likes to roam the worlds and pay attention to the details.

He is not extensively informed of new titles coming out, but his daughter always updates him on new games he might enjoy. He only buys videogames when something catches his eye .

Criteria for selecting games:

- Real open-world settings
- Difficulty customization
- Historically accurate

Frustration with games:

- Too difficult
- Too time consuming
- Too fantastic or sci-fi worlds.



**NAME:** GIANNA ANIMA

**GENDER:** Female

**AGE:** 26

**EDUCATION:** Graduated in Psychology

**OCCUPATION:** Full time Twitch Streamer ( 70k \$/year)

**MARITAL STATUS:** Married

### Motivations:

Gianna has always played videogames, since she was little, and two years ago she left her job and dedicated fulltime to stream games and doing gaming marathons in her Twitch channel. Since she got married and had a daughter, she has started to play less time consuming games or to even do *speedruns*<sup>8</sup> on some of her favourite games. He mainly plays on PC but she owns every console on the market to be able to stream different platforms and games.

His favourite game is The Legend of Zelda: Ocarina of Time. She loves JRPGs and is also very fond of anime and Japanese culture. She enjoys both long and short games, but sometimes she doesn't have time to play long games. She loves aesthetically pleasing games and sci-fi. She also does a fair amount of multiplayer/online with other streamers for her channel.

She is very into the game industry and she buys hundreds of games a year to play on her streams.

Criteria for selecting games:

- JRPG or Japanese games
- Online games or quick to beat story modes
- Beautiful game art and sceneries.

Frustration with games:

- Too long to beat on stream
- No possibilities to *speedrun* them
- Not fun online modes.

<sup>8</sup> Speedrun: is a term that designates a type of gaming where the player tries to beat the game in the shortest amount of time possible, even if it implies taking shortcuts or taking advantage of game bugs.

## 2) UX TEST DESIGN

This UX test is designed to be centred in the areas of the game that present the biggest problematics, regarding the heuristic evaluation, in order to, in later chapters, be able to extract final conclusions based on both professional and user experiences.

See full structure and detailed questions of the test in Annex.

### **2.1 TEST DESIGN**

#### *2.1.1 PRE-TEST QUESTIONNAIRE*

The pre-test questionnaire part 1 features:

- Name, Gender and Age range.
- Demographics
- Specific knowledge.
- Past experience with videogames

The pre-test questionnaire (only for people who have played videogames):

- Frequency
- Gaming sessions duration
- Type of videogames played
- Platform/s.
- Past experience with RDR2.

#### *2.1.2 TEST TASKS*

This test will be conducted in very specific conditions. It will be performed to 4 participants with different experiences in videogames and RDR2 itself.

Due to logistic and equipment limitations, this test will run in three sessions, two of them with two people at a time, and another one with only one person.

The technical requirements for this test are:

- . **1 PlayStation 4 SLIM version system.**
- . **1 PlayStation 4 controller.**
- . **1 AOC Q3279VWF 31'' monitor (with HDMI connection).**
- . **1 set of Apple EarPods.**
- . **1 Red Dead Redemption copy.**
- . **1 identical saved game on RDR2 (at mid-chapter 3) that will be previously set up and prepared for the test.**
- . **1 recording device (HUAWEI P 30).**

All the users will fill the pre-test and will be explained how the test will work. They will also be explained the basic mechanics they will need for the test but, they will not have access to play the game by themselves before the test. They are allowed to ask the conductor any doubt. They will be provided with a translation of the test, the game will be set in Spanish, and they will be allowed to answer the pre and post-test in Spanish to match the native language of the user. Their hands and voice will be recorded, as well as their screen, during the test.

The test run for such tasks took approximately 15 minutes to finish, but it is not expected for the subjects to finish it in such time. The test is expected to be completed in approximately 35 minutes.

#### *2.1.4 POST-TEST (USABILITY)*

This part of the test will allow to determine if the same problems found in the heuristic evaluation of RDR2 are reflected in the user's experience directly. It also will allow to see if there are problems that are not as severe

as expected or if there are problems that have not been contemplated in the professional analysis of the product.

### 2.1.6 RECORDING PERMIT

The voice and image recording permission is a necessary document when performing this type of tests, and will feature:

- Full Name of the user
- DNI (ID document) of the user.
- Full Name of the test conductor.
- DNI (ID document) of the test conductor.
- Date and Location.

## 3) UX TEST ANALYSIS

The following chart sums up the time every player needed to complete each one of the tasks. The green numbers indicate the fastest time to beat the task, and the red numbers indicate the slowest. In general, the fastest subject was Subject 3, that was the only one who knew well both the platform (PS4) and Red Dead Redemption. The slowest subject was Subject 4, who was familiar with the platform but not with the game.

	Subject 1	Subject 2	Subject 3	Subject 4
TASK 1	6' 30 "	2'	13''	4' 40''
TASK 2	10' 26''	10' 07'	7' 12''	11' 57''
TASK 3	8' 26''	3' 10''	2' 46''	11' 27''
TASK 4	18' 10'	10' 06''	10' 50''	21' 32''
TASK 5	1' 39'	37''	1' 03'	1' 22'
TASK 6	8' 23''	6' 22''	3' 27''	4' 43''
TASK 7	47''	45''	30''	1' 47''

FIG 14 Test run time



In the next sub-chapters, all the four tests will be deeply analysed and complemented with the conductor's observations during the test.

All tests have been documented in video and the links can be found in the Annex. During the written analysis in the following pages, each task will have a time mark for the corresponding video.

### **3.1 SUBJECT 1:**

Gender: Male

**Total time of completion: 54:21**

#### **Pre-test**

He knew Red Dead Redemption 2 before this test, through gameplays and *streamings*<sup>9</sup>, but he hadn't still had the opportunity to play it himself.

**TASK 1 (00:00):** He presented some difficulties to get used to the controls in general, which matches with him stating that he is not familiarized with the PS4 controller. Especially when he had to move the character and the camera at the same time to focus in different functionalities in the game. He needed a bit of guidance from the conductor to get to the object that would allow to complete the task.

**TASK 2 (6:30):** He presented fewer problems than in the first task. In the first part of the task, the conductor observed the player was not following the trail, nor he had marked his destination in the map. He used the mini map to orientate himself in the game.

He presented some problems when trying to find the bow in the circular menu. He used logic to try and find it in the slots for the pistols, that were clearly

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<sup>9</sup> Streaming: According to the Collins Dictionary, it is said of "a method of transmitting data from the internet directly to a user's computer or phone screen without he need to download it". <https://www.collinsdictionary.com/dictionary/english/streaming>

marked as weapon slots. He also had some difficulties on navigating the circular menu and stopping the horse, but not hunting the deer itself.

**TASK 3 (16:56):** He presented difficulties on aiming and shooting the bird while it flew. He tried to shoot a bird that was not flying and was asked by the conductor to shoot one that was flying. Conductor also suggested using Dead Eye to make aiming easier to the player.

**TASK 4: (25:22)** The player accidentally hit the button that stopped recording the game while trying to open the map, in order to complete this task. Since it was taking a very long time, it was directly suggested by the conductor to try and find a train or a diligence to Wallace Station to shorten the time of completion of the test. In the part of the task where he had to ride to Carin Lake, he didn't hurry to get there or tried to use the littlest time possible, in order to enjoy the landscape. He presented some difficulty trying to find the cheats menu. He navigated almost every menu trying to find it, and finally the conductor had to intervene to guide him.

**TASK 5 (43:32):** This was a fairly easy task for him. It took some time to figure out how the circular menu worked.

**TASK 6 (45:11):** In the beginning of this task, he was lost trying to find where the camping tool was. He searched for it in the pause menu instead of the circular menu. He didn't find difficult to cook and create the arrow. To exit the tent, once the character had slept, he didn't use button "O" as the game indicates, but used his joystick forward.

**TASK 7 (53:34):** Doubted between some menus.

### 3.1.1 OBSERVATIONS ON THE SUBJECT:

- In general, he appeared to be lost and out of his comfort zone.
- He struggled with the controller and was very conscious about the physicality of it.

- He had to visually check the buttons he was pressing in many moments of the test, it can be seen in several moments though the test.
- He tried to enjoy the game's visuals as many as he could, despite feeling lost.
- He was careful and approached things calmly.
- He complimented the game's complexity visually and mechanically.
- He complained about the control of the camera and the controller.

### 3.1.2 FEEDBACK FROM THE SUBJECT :

(translated) see the original response in document "SUBJECT 1" pages 10-13:

- He did feel lost at some point of this test.
- He wasn't very familiarized with RDR2 before the test.
- He felt a lot more familiarized with RDR2 after the test.
- He struggled a bit with Tasks 1 and 2.
- He struggled a lot with Task 3.
- He found tasks 4 to 7 fairly easy.
- Things he thought that made his gameplay more difficult: *"The interface has a lot of menus and those are not always obvious. The game doesn't show these options clearly. Also, the platform used (PS4) is not the greatest."*
- Things he thought that made his gameplay easier: *"Auto-aiming, GPS and tracking signals."*
- Something that he enjoyed: *"Impressive level of detail."*
- Something that bothered him: *"Nothing that once one knows how it is done can't be done comfortably. It is more like knowing where everything is and get used to it."*

- Imagined the game like this? *“Yes, but not that much.”*
- Would he consider buying it after playing it for the test: Yes.

### 3.2 SUBJECT 2:

Gender: Male

**Total time of completion: 33:07**

#### Pre-test

He didn't know nor played Red Read Redemption 2 before this test, but he knew the platform and the controller (PS4).

**TASK 1 (00:00):** he was able to quickly adapt to the controls of the game, despite not having played it before. He found the outfits easily and corrected himself when he noticed he hadn't picked the right outfit for cold temperatures. He needed help from the conductor to find the sub menu that allowed him to save the outfit on his horse.

**TASK 2: (2:00)** This was the most difficult task for him and it was not fully completed. He experienced a lot of problems to aim with the bow while riding or moving in general. He was instructed by the conductor to hunt a rabbit/hare instead of a white tail deer in order to keep his test more agile.

He also presented some problems when trying to find the bow in the circular menu. He used logic to try and find it in the slots for the pistols, that were clearly marked as weapon slots. He also had some difficulties on navigating the circular menu and stopping the horse, but not hunting the deer itself.

**TASK 3 (12:07) :** He still had some problems shooting the bird, but completed the task very quickly.

**TASK 4 (15:07)** : He tried to get to the designated point as quickly as possible. He also found the cheats menu way quicker than any of the other subjects and used the logic to find it, which resulted in a good choice.

**TASK 5 (25:23)**: Very easily solved task.

**TASK 6 (26:00)**: He did actually find the camping option fairly easily, but he encountered a problem with an event going on in the game, that would not allow him to camp in the area. He, finally, was instructed by the conductor to leave the area and try to camp in a further spot.

**TASK 7 (32:22)**: Doubted between some menus.

### 3.2.1 OBSERVATIONS ON THE SUBJECT:

- In general, it was obvious that he had some experience with the platform, since he felt comfortable holding the controller and did a lot of actions instinctively.
- He struggled with the mechanics of the game, because he stated he is not used to this kind of videogames.
- He could not complete the task of hunting a deer and was very easily frustrated by it.
- He did not pay much attention to the visuals of the game.
- He was more of an aggressive player, despite he followed the roads, but tried to do everything as quick as possible.
- He didn't compliment nor complain about almost anything of the game, only about not finding the deer and the automatic aiming.
- He got distracted by a phone call and several text messages during the test and preferred to answer at the moment.

### 3.2.2 FEEDBACK FROM THE SUBJECT:

(translated) see the original response in document "SUBJECT 2" pages 10-13:

- He did not feel lost at some point of this test.
- He wasn't familiarized at all with RDR2 before the test.
- He felt a bit more familiarized with RDR2 after the test.
- He struggled a lot with Task 2.
- He found all other tasks fairly easy.
  
- Things he thought that made his gameplay more difficult: *"It was very difficult for me to hunt the deer because I wasn't fluent with the part of aiming and shooting in movement. Also, when I had to set the campfire, I didn't understand why I couldn't set the camp."*
  
- Things he thought that made his gameplay easier: *"The game responded very well to what I was trying to do, especially the part of the horse."*
  
- Something that he enjoyed: *"Being able to call the horse over and the great amount of things to do. It was very realistic."*
  
- Something that bothered him: *"That I was unable to find deer, because I couldn't see them while I was riding"*
  
- Imagined the game like this? *"No, I thought it was a shooter"*
  
- Would he consider buying it after playing it for the test: No.

### 3.3 SUBJECT 3:

Gender: Female

**Total time of completion: 26:01**

#### Pre-test

She was very familiar with the PS4 system and Red Dead redemption, despite she hadn't played the game in a while.

**TASK 1 (00:00):** No problems during this task. Adjusted to the requirements perfectly and completed it in optimal time.

**TASK 2: (00:13)** She struggled a bit with finding deer to hunt, but she did remember a lot of the mechanics that would allow her to find deer easily in the game. She had a failed attempt first, but quickly solved it. She did part of the third task during this one.

**TASK 3 (7:25) :** She did not complete this task in order, but presented no remarkable problems during it. She used Dead Eye and aimed correctly.

**TASK 4: (10:11) :** She did try to get as soon as possible to the lake, but she didn't know there was a cheats menu so she struggled a bit to find it.

**TASK 5 (21:01):** Very easily solved task.

**TASK 6 (22:04):** Easily solved task.

**TASK 7 (25:31):** She, surprisingly, did struggle with finding where to save the game, because she allegedly didn't remember where it was.

### 3.3.1 OBSERVATIONS ON THE SUBJECT:

- Her knowledge on RDR2 and the platform was by far the most extensive and this translated into much quicker and expected reactions.
- She did not struggle, in general, with anything related to mechanics, but did fail to complete the seventh task without error.
- She skipped the order on tasks 2 and 3, which is not inherently bad, because she optimised her time.
- She was surprised to see there was a cheats menu she didn't know that existed before.
- Her way of playing was not aggressive as the other subject. She was more or less careful depending on the situation, probably because of her experience.
- She also was the one who struggled the most to use the circular menu, making her having to repeat some actions more than once. Probably because of how mechanic and instinctive her actions were.
- She didn't compliment nor complain about almost anything of the game, just expressed that she had not played in a long time and that's why she failed to find the save menu at first.

### 3.3.2 FEEDBACK FROM THE SUBJECT :

(translated) see the original response in document "SUBJECT 3" pages 10-13:

- She did feel lost at some point of this test.
- She was completely familiarized with RDR2 before the test.
- She felt completely familiarized with RDR2 after the test.
- She did not struggle with any task, specially, but the easiest for her were Tasks 1 and 5
- Things he thought that made his gameplay more difficult: *"Actions like camping are mixed with objects like weapons or food"*
- Things he thought that made his gameplay easier: *"Dead Eye, and how easy the "GPS" makes it to move though the map"*



- Something that she enjoyed: *“Yes, everything in the game looks very realistic and full of detail.”*
- Something that bothered her: *“Nothing.”*
- Something that was not mentioned in the test but bothered her? *“The control of the horse, for me it’s not precise enough.”*
- Did this test discover something she didn’t know about the game: Yes.

### 3.4 SUBJECT 4:

Gender: Female

**Total time of completion: 57:28**

#### Pre-test

She was familiar with the PS4 system and was the subject with the vastest experience in videogames, but not with Red Dead Redemption 2.

**TASK 1 (00:00):** She presented some problems with this first task because she verbally expressed that she expected it to work differently as it works in this game.

**TASK 2: (4:40)** She struggled a lot to find the deer. She required help from the conductor, who indicated where she could find the deer and answered other questions related to hunting. Despite the conductor remarked it was not necessary to take the whole deer, she insisted.

**TASK 3 (16:53) :** She did try several weapons and took her time to find the right one to shoot the bird from the sky.

**TASK 4: (28:04) :** The conductor suggested to use the cinematic camera since she asked if there was other ways to travel. She struggled to find the way to

activate it. She did also struggle to find the “cheats” menu, except she used her previous knowledge in games to direct her search and narrow her options.

**TASK 5 (49:36):** She did not present problems in this task.

**TASK 6 (50:58):** She felt very lost and couldn't find the way to plant the camp. The conductor had to help. She also took her time to find a good spot.

**TASK 7 (25:31):** She had no idea how to save the game, but actually used the help menu (didn't solve anything for her), before going through several menus until she found the right option

#### 3.4.1 OBSERVATIONS ON THE SUBJECT:

- Her vast knowledge in other videogames actually became a handicap for her.
- She did use her logic and knowledge in other videogames to try and perform actions in the game. She struggled a lot with mechanics.
- She paid a lot of attention to detail, realism in the animations and the visual aspects of the game.
- She felt frustrated in many moments of the test.
- Her style of gaming is very slow paced, with a lot of roaming, usually found in people who play a lot of RPGs and games that require a lot of exploration and hours to complete.
- She complained several times about the mechanics.
- She didn't compliment anything verbally.

#### 3.4.2 FEEDBACK FROM THE SUBJECT

(translated) see the original response in document “SUBJECT 4” pages 10-13:

- She did feel lost at some point of this test.
- She wasn't familiarized at all with RDR2 before the test.
- She didn't feel much more familiarized with RDR2 after the test.
- She struggled a bit with Tasks 2 and 6.
- She struggled a lot with Tasks 1,3,4 and 7.
- She found task 5 fairly easy.
  
- Things he thought that made his gameplay more difficult: *"In a general line, in videogames there are some actions that correspond to specific buttons and, when those change, it takes time for the player to adapt. There were also a lot of basic menus (like the save menu) that usually are very accessible since they are main functions of the game, but in this case, those menus were submenus in other menus, so it was difficult to know what they did only by their name (for example, the save menu is a submenu in the story menu). The help menu, where the tutorials are supposed to be, omits a lot of information about commands and how to use them, as well as basic functions of the game (for example, the cinematic mode to travel long distances is omitted, and take for granted that the player is going to use Autosave mode)."*
  
- Things he thought that made his gameplay easier: *"Task 5 was a bit easier to do because I tried buttons in other tasks and I found that button while I was looking for others"*
  
- Something that she enjoyed: *"The visuals are beautiful, I like how the snow was made, not only on texture but also how the character sinks into it when he walks over it. What caught my eye, not in a good way, was that when you use the train to move, the horse spawned in the middle of the rails, so it was run over by the train."*
  
- Something that bothered her: *"CONTROLS ARE NOT INTUITIVE. It's very difficult to know how to do the tasks because there is no way to check the buttons. To navigate the majority of menus I had to keep pressing the button, which made much more uncomfortable to use"*

*others (Like maintaining L1 and having to use L2 or R2). Also the buttons that were indicated in the lower part of the screen were all circled in white, but that doesn't indicate if you have to just press once or maintain it pressed to do the action, and once you maintain it, you don't know if it's only to activate the action or you have to keep it pressed while doing the action (because there's the two types)."*

- Imagined the game like this? *"Visually yes, because I had seen some videos, but I didn't imagine the controls would feel so not-fluid."*
- Would he consider buying it after playing it for the test: *No.*
- Comment: *"Horse faces don't look very nice, they have very bulging eyes."*

#### 4) CONCLUSIONS ON USABILITY FROM THE USERS' PERSPECTIVE

In general, all the subjects experienced struggle at some point. Beyond mastery and gaming experience (which made tasks 2 and 3 easier), the most clear and notable struggle was with tasks 1 and 7, when trying to find the way to save the game.

The only one who did not struggle with the first task was the only person who had actually played the game before. The other three found it fairly difficult to complete correctly. This task should not take more than 10 to 15 seconds, and for the most of them took, more than two minutes and up to six minutes and a half.

Task 7, being reflective of such an important mechanic in videogames, should not take more than 10 seconds between opening the pause menu, selecting the history menu and finding the empty spot to save the game. But, it took more than 30 seconds to all of the subjects, and up to almost two minutes to the slowest.

In general, it was observed that aiming and hunting can be tedious and tiring for the player, which can also lead to frustration if the player intends to complete the game fully.

There was no explicit complain about this, but they all needed a lot of time to manage and change weapons.

## **4. IMMERSION TEST**

The fourth main chapter for this project goes over the immersion test performed along the UX test. It included questions to measure the base level of immersion of the subjects, and compare it to the level of immersion achieved while playing the game, following the guidelines set by Norman (2010). This will allow the quantification of the immersion the subjects were experiencing, in the shape of a graphic scale.

### **1) TEST DESIGN**

See complete test content in Annex.

#### **1.1 PRE-TEST QUESTIONNAIRE**

This part of the test attempts to position each subject in their own level of immersion through some questions. It features 20 questions that will evaluate the factors susceptible to immersion (TV, videogames, daydreaming) and the abilities that retain immersion (Dual tasking, focusing and alertness). The average for each category will be calculated, as well as the total average for each subject.

The analysis of this part will be focused in how videogame experience affects these factors. This will be addressed in depth in the next chapter.

#### **1.2 POST-TEST QUESTIONNAIRE**

This part of the test follows the guidelines set by Norman (2010) and will go over 5 principal aspects of immersion:

- Visual presence
- Auditory presence
- Sense of control
- Awareness of the interface
- Awareness of the real world

These aspects will help build a graphic for every subject, in order to compare and analyse them.

## 2) PRE-TEST ANALYSIS

### 2.1 SUBJECT 1

According to the responses given by this subject on the pre-test:

- Daydreaming (+): He shows a great capacity (4/5) to daydream.
- Media / Videogame Involvement (+): He shows moderate capacity (3.25/5) usually feels involved in the plot of a film or a videogame, but not that much with the characters. He doesn't find difficult to separate fictional events from reality.
- Ability to dual task (-): He exhibits moderate ability (3.3/5) to dual task.
- Ability to focus (-): He exhibits a moderate capacity (3.2/5) to control his focus, especially high when he does activities he likes.
- Ability to maintain Alertness (-): He exhibits great levels of ability (4.5/5) to maintain alertness, even when he is playing videogames or doing something really interesting.

Average positive factors: 3.625

Average negative factors: 3.667

We could say this subject is, objectively, less prone to feel immersed in videogames, since the average for positive factors is inferior to the negative factors. On another note, his average notes are very similar, so he could or

could not experience deep immersion depending on the kind of product he is facing.

## **2.2 SUBJECT 2**

According to the responses given by this subject on the pre-test:

- Daydreaming (+): He shows low capacity (2.5/5) to daydream.
- Media / Videogame Involvement (+): He shows low capacity to get involved (2.5/5). He doesn't really feel involved with characters nor plotlines, but not that much with the characters. He doesn't find difficult to separate fictional events from reality.
- Ability to dual task (-): He high ability (4.3/5) to dual task.
- Ability to focus (-): He exhibits a moderate capacity (3.1/5) to control his focus.
- Ability to maintain Alertness (-): He exhibits low levels of ability (1.5/5) to maintain alertness, even when nothing is distracting him.

Average positive factors: 2.5

Average negative factors: 2.96

We could say this subject is less prone to feel immersed in videogames, since the average for positive factors is inferior to the negative factors. He has pretty low rating in the positive factors, but at the same time, he does also have very low rates in the negative ones, so this could mean he could feel immersed easily if the game is able to abstract him enough from reality.

## **2.3 SUBJECT 3**

According to the responses given by this subject on the pre-test:

- Daydreaming (+): She shows high capacity (4/5) to daydream.
- Media / Videogame Involvement (+): He shows very high capacity to get involved (5/5). She does feel involved with both characters and plotlines, as well as dreams about those.
- Ability to dual task (-): She shows moderate ability (3.6/5) to dual task.

- Ability to focus (-): He exhibits a moderate capacity (3.3/5) to control her focus.
- Ability to maintain Alertness (-): She exhibits low levels of ability (2.5/5) to maintain alertness, even when nothing is distracting her.

Average positive factors: 4.5

Average negative factors: 3.133

We could say this subject is very prone to feel immersed in videogames, since the average of positive factors is way superior to the negative ones.

## **2.4 SUBJECT 4**

According to the responses given by this subject on the pre-test:

- Daydreaming (+): She shows high capacity (4/5) to daydream.
- Media / Videogame Involvement (+): He shows low capacity to get involved (2.5/5). She does not feel involved with characters, but kind of does with plotlines.
- Ability to dual task (-): She shows moderate ability (3/5) to dual task.
- Ability to focus (-): He exhibits a high capacity (4/5) to control her focus.
- Ability to maintain Alertness (-): She exhibits moderate levels of ability (3.5/5) to maintain alertness.

Average positive factors: 3.25

Average negative factors: 3.5

We could say this subject is not so prone to feel that much immersed in videogames, since the average of positive factors is inferior to the negative ones. This case is similar to the first one, except here there is a bit more of difference. The level of immersion will depend on how easily the game engages with the person in matters of interest, or previous experiences.

## **2.5 GRAPHICS**



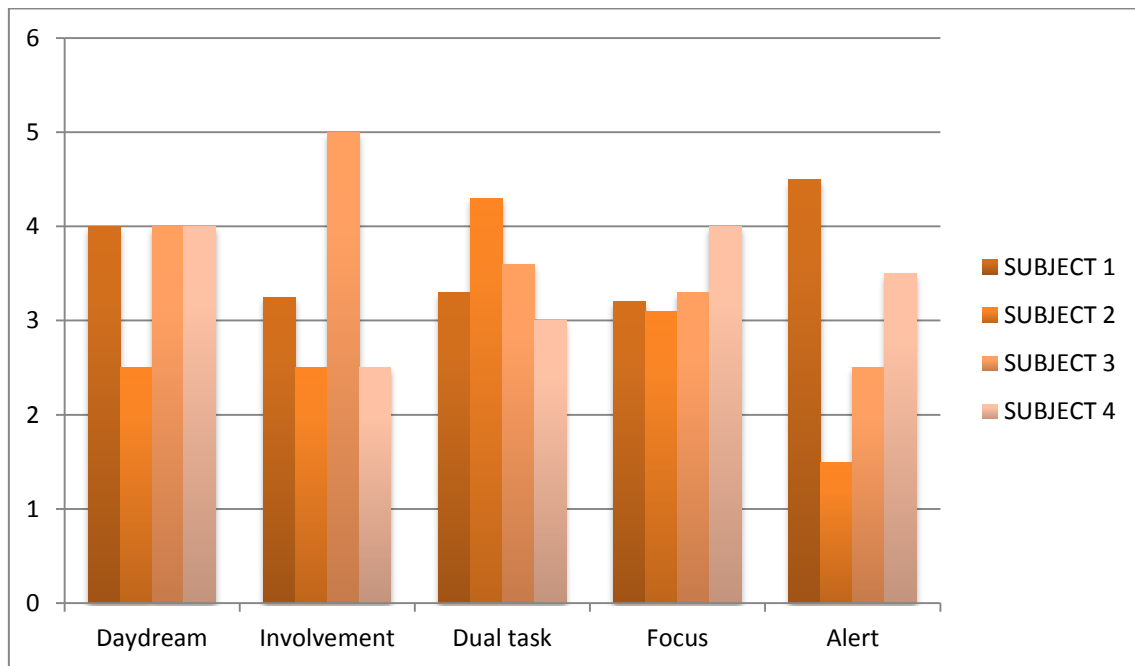


FIG 15 pre-test itemisation

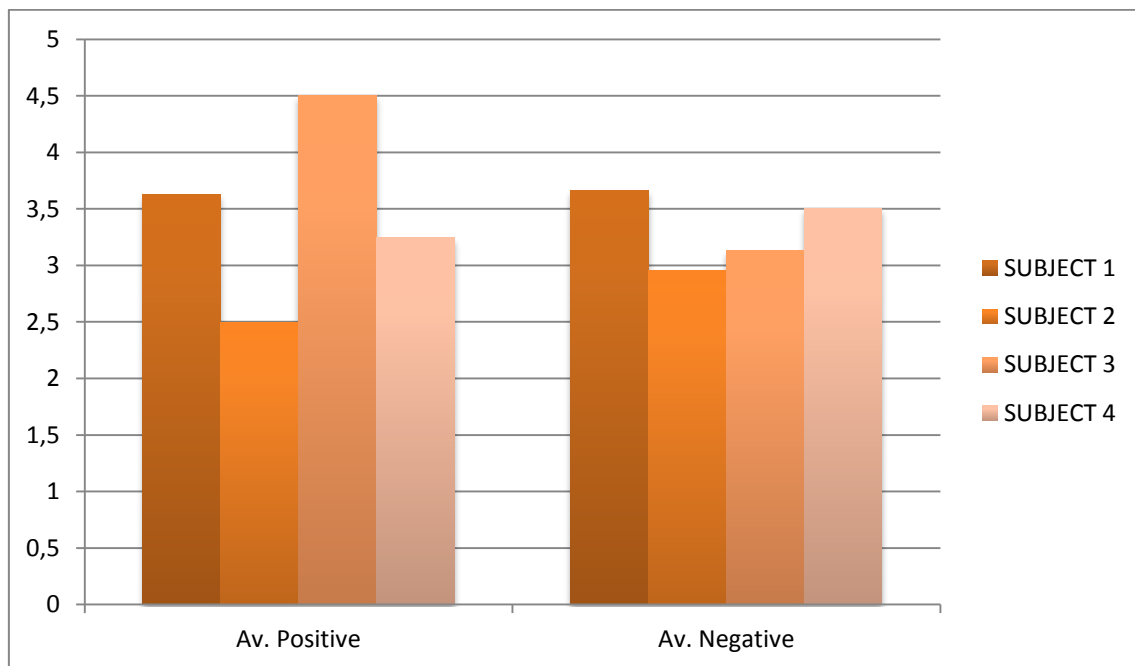


FIG 16 pre-test average positives and negatives.

These graphics showcase the itemisation of the average marks per specific category and the total average comparison, for positive and negative aspects.

### 3) POST-TEST ANALYSIS

#### 3.1 SUBJECT 1

According to the responses given by this subject on the post-test:

- Visual presence(+):Had a great visual experience (5/5)
- Auditory presence(+):Had a great experience with audio (5/5)
- Sensory engagement(+):Had an average connection with the game (3.3/5)
- Sense of control(+):Had a fairly high sense of control with the game (3.5/5)
- Awareness of the interface(-): Was slightly aware of the interface (2.5/5)
- Awareness of the real world(-): Was very much aware of the real world (3.3/5)

Average positive factors: 4.15

Average negative factors: 2.9

We could say this subject was mostly immersed in the videogame, since his average notes for all the positive factors happen to be very high and negative factors happen to be considerably lower.

#### 3.2 SUBJECT 2

According to the responses given by this subject on the post-test:

- Visual presence(+):Had a very nice visual experience (4/5)
- Auditory presence(+):Had a great experience with audio (5/5)
- Sensory engagement(+):Had an a great sensory connection with the game (4.6/5)
- Sense of control(+):Had a high sense of control with the game (4.5/5)

- Awareness of the interface(-): Was mostly not aware of the interface (1.5/5)
- Awareness of the real world(-): Was not very aware of the real world (2.6/5)

Average positive factors: 4.5  
Average negative factors: 2.05

We could say this subject was deeply immersed in the videogame, since his average notes for all the positive factors happen to be very high and negative factors happen to be quite low in comparison.

### **3.3 SUBJECT 3**

According to the responses given by this subject on the post-test:

- Visual presence(+): Had an outstanding experience (5/5)
- Auditory presence(+): Had an outstanding experience with audio (5/5)
- Sensory engagement(+): Had an outstanding sensory connection with the game (5/5)
- Sense of control(+): Had an outstanding sense of control with the game (5/5)
- Awareness of the interface(-): Was quite aware of the interface (3/5)
- Awareness of the real world(-): Was almost not aware of the real world (1.3/5)

Average positive factors: 5  
Average negative factors: 2.15

We could say this subject was deeply immersed in the videogame, since her average notes for all the positive factors happen to be at the maximum level of engagement. In any case, the negative factors still stand out a bit, considering the 3/5 in the awareness of the interface.

### 3.4 SUBJECT 4

According to the responses given by this subject on the post-test:

- Visual presence(+):Had an a very nice visual experience (3.5/5)
- Auditory presence(+):Had a great experience with audio (4/5)
- Sensory engagement(+):Had a poor sensory connection with the game(2.6/5)
- Sense of control(+):Had poor sense of control with the game (2/5)
- Awareness of the interface(-): Was not really aware of the interface (1/5)
- Awareness of the real world(-): Was not really aware of the real world (2.6/5)

Average positive factors: 3.025

Average negative factors: 1.8

We could say this subject was immersed in the videogame, but not at the level of the other participants. She also has the lower rate on the negative factors, but in general, her positive experience was much less notable.

### 3.5 GRAPHICS

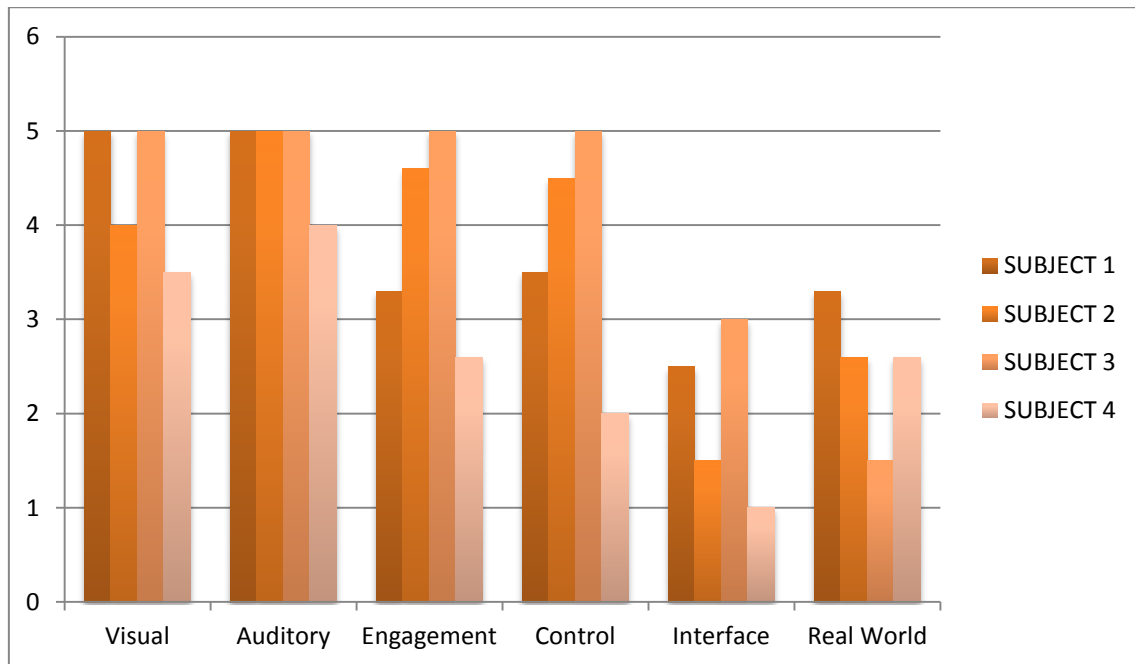


FIG 17 post-test itemisation

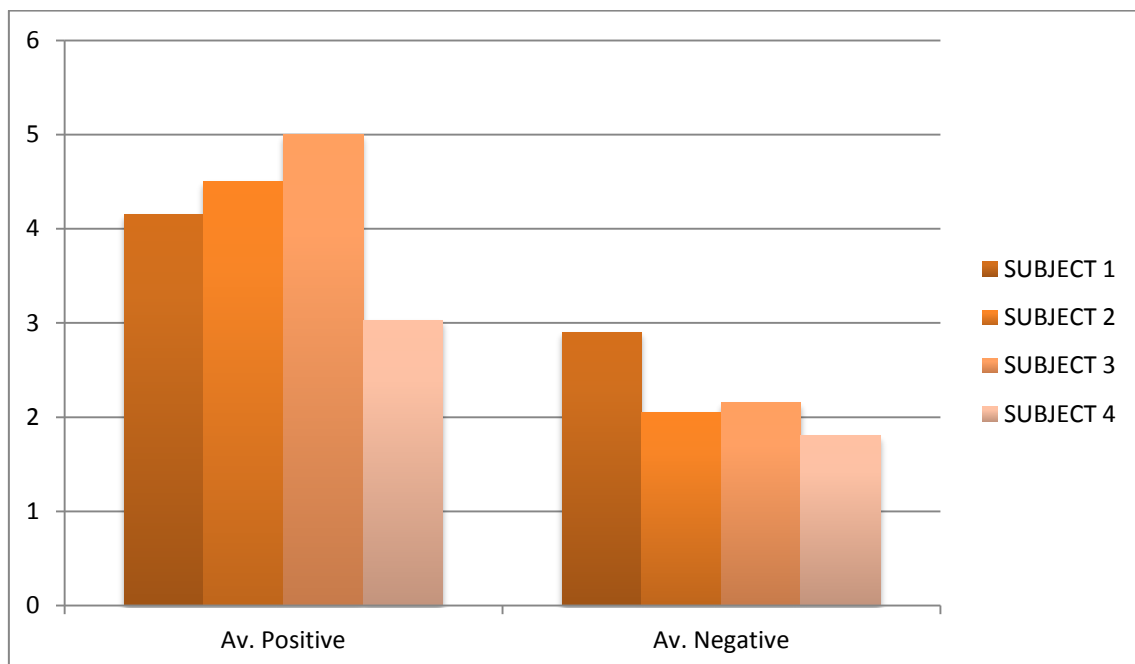


FIG 18 post-test average positives and negatives

These graphics showcase the itemisation of the average marks per specific category and the total average comparison, for positive and negative aspects.

#### 4) CONCLUSIONS ON IMMERSION

Taking in account that the default level of immersion for three of the four subjects indicated that they were less prone to be immersed than other people, it is surprisingly good to see that the four of them have achieved a certain level of immersion, and no one has remained in a zone where the line between being or not being immersed was diffuse.

Subject number 2 was not that likely to become as immersed considering his pre-test but his positive average in the post-test was one of the highest.

For Subject number 4 it was expected to be the less immersed of the four, and not only it has been exactly as expected, but also she was considerably less immersed than the other three subjects.

Subject number 5 has, and was expected, to be the most immersed and she did feel completely connected to the game in the most positive way.

## 4. FINAL CONCLUSIONS

At this point I feel I can answer the question I made myself even before I even thought of doing this project: Are the good, great things in Red Dead Redemption 2 outshined by its problems? After all the work done and all the details analysed, I would say: No, they aren't.

The good things in in this videogame outshine the dozens of design problems I've seen it has, and I believe it is like this, because it is able to trap the player into the world and, eventually, the minor inconveniences that the slightly problematic design can cause are forgotten. As one of the subjects for the test said, it is a world so full on detail. And that plays in its favour, because you don't know how much you will enjoy it until you try it.

With the user tests I've been able to see that most of the problems I went over and over again during my gameplays or during the analysis for this project, become insignificant to the player that faces the game for the first time. Because these problems become *problems* once you know what they are, and why they are problematic or not optimal.

Also, the user tests have helped me confirm that this game's biggest problem is the interfaces such as pause menu, and the division of sub menus. As well as it discovered other problems I didn't encounter like the visual metaphors for the instructions not being clear enough.

With the immersion test I could see how people who are naturally less predisposed to feel immersed in videogames, based on their experiences and beliefs, can also feel very immersed in a videogame like this, despite not being their genre of choice. I was also surprised to see that a person who hadn't played RDR2 before was able to complete the test in optimal time. I expected another more experienced in videogames person to be quicker, and it happened exactly the opposite.

Still regarding the immersion test, I have also noticed how exigent are some users with the products in order to feel immersed and comfortable playing them.

And, to answer the title of this project: Are UX Design and the capability of immersion related? I would say definitely yes. Designing an experience such as this game is a very difficult task and it doesn't have to be perfect to be enjoyable. Does this mean that if Rockstar solved all the tiny little problems I found in the heuristic evaluation it would improve even more the experience? Absolutely. But RDR2 has demonstrated that a product can be flawed and still give an overall good/excellent experience to the players, even when even they can tell that something is wrong with how the game presents the information to them.

To sum up, I'd like to insist in something I consider very important for UX/UI designers and developers: We should never forget that, no matter how many tests we run, the real test will always be when it comes out and people run and try it in their homes.

This project, with all its surprises, has helped me understand that just because something works as it is, it doesn't mean we cannot make it work even better.



**ANNEX 1: TESTS**

In this Annex you can find the links to the videos and pdf documents on the full test for each one of the subjects.

**VIDEOS**

SUBJECT 1: <https://youtu.be/P8DR8mBeNEA>

SUBJECT 2: <https://youtu.be/1osEWI89yz0>

SUBJECT 3: <https://youtu.be/7NjR2BfgNj4>

SUBJECT 4: <https://youtu.be/aAFpnz4qi5M>

**PDF**

[https://drive.google.com/drive/folders/1CKYLhQ7HvFWgnjXRCawpWCR\\_hb1iOKsp?usp=sharing](https://drive.google.com/drive/folders/1CKYLhQ7HvFWgnjXRCawpWCR_hb1iOKsp?usp=sharing)

## ANNEX 2: TRANSLATED TESTS

In this Annex you can find the translation of the full UX / IMMERSION TEST and the tasks:

### USER EXPERIENCE AND IMMERSION TEST FOR RED DEAD REDEMPTION 2 TASKS

Complete the seven tasks described below, in the indicated order:

1. You are in camp. Go to Arthur's tent, **create** or **choose** an **outfit suitable for cold temperatures** and **store it in your horse**.
2. **Ride your horse** to the designated marker (In Mattock Pond, north-east of camp) and **hunt, with bow and arrows**, one of the following animals:
  - a. White-tail Deer (male or female)
  - b. Boar (male or female).

Try to hit it in the head or neck (not required). Then skin it and store the pelt in your horse.
3. Shoot a **flying bird** with the weapon of your choice and collect two units of **Common Bulrush**, near the shore of the pond. note: you might want to use the Dead Eye ability).
4. **Equip Arthur** with the outfit you stored in your horse before and get to the marker in Caim Lake. Look for an **inscription on the frozen surface** of the lake and write those words in the **"Cheats" menu**. Note: You can use any type of transportation to get as soon as possible to your destination.
5. **Feed, brush and pat** your horse.
6. Look for a suitable **place to camp** and spend the night. In the campfire, **cook** something for dinner that will **completely refill all your cores** and create a small game arrow. Make Arthur rest for **at least 8 hours** and **disassemble the camp** once he wakes up.
7. Save your progress in an **EMPTY** save slot. Do NOT overwrite any of the pre-existing saves.

## USER EXPERIENCE AND IMMERSION TEST FOR RED DEAD REDEMPTION 2

# PRE-TEST PART 1

- Complete name:

- Gender:

Masculine

Feminine

Non-Binary

- Age:

18-24

25-35

36-45

>45

- Educational Level:

Elementary Education

Secondary Education

Further Education

Higher Education

University/Bachelor Degree

Post-Graduate Studies

- Occupation:

Student

Worker

Working Student

Unemployed

- Have you ever played videogames?

Yes

No

## USER EXPERIENCE AND IMMERSION TEST FOR RED DEAD REDEMPTION 2

### PRE-TEST PART 2

- If the answer is yes, how often do you play?
  - Very Occasionally (less than 10 times a year)
  - Occasionally (Twice a month)
  - Frequently (Every week)
  - Every day
- For how long can one of your gaming sessions go?
  - Less than 1 hour
  - 1 to 2 hours
  - 2 to 4 hours
  - More than 4 hours
- What kind of games you use to play?
  - FPS (Call of Duty, Battlefield)
  - RPG (Mass Effect, Final Fantasy)
  - Adventure/Action (Assassin's Creed, Uncharted)
  - Puzzles (Portal, Firewatch)
  - Simulators (Los Sims, Euro Truck Simulator)
  - Visual Novel (Life is Strange, The Wolf Among Us)
  - Strategy (Civilization, Tropico)
  - Horror (Outlast, Day By Daylight)
  - MMORPG (World of Warcraft, Elder Scrolls Online)
  - Online Multiplayer (League of Legends, Fortnite)
  - Other: \_\_\_\_\_
- What kind of games you use to play?

PC	Nintendo Switch
PS4	3DS/PSVITA/PSP or any other portable console
X-Box	Other: _____
- Have you played Red Dead redemption 2 before?
  - Yes
  - No, but I have watcher gameplays or streamings
  - No

## USER EXPERIENCE AND IMMERSION TEST FOR RED DEAD REDEMPTION 2

# IMMERSION PRE-TEST

- When you need to do an obligatory task (studies/work) ¿Do you feel very absorbed by it, to the point where you forget to do other things you need to do?

Hardly

Easily

1 2 3 4 5

- When you play videogames ¿Do you feel very absorbed by it, to the point where you forget to do other things you need to do?

Hardly

Easily

1 2 3 4 5

- Is it difficult that someone or something catches your attention while you are watching a film, TV or playing videogames?

Very difficult

Very easy

1 2 3 4 5

- Is it difficult that someone or something catches your attention while you are reading a book?

Very difficult

Very easy

1 2 3 4 5

- Is it difficult you to text on your phone and walk at the same time?

Very difficult

Very easy

1 2 3 4 5

- Do you feel distracted by your environment while you play videogames ?

Hardly

Easily

1 2 3 4 5

- How conscious and alert are you about your environment right now?

Not alert

Very alert

1 2 3 4 5

- How conscious and alert do you think you would be while you play a very intense game or you are watching a very interesting film?

Not alert

Very alert

1 2 3 4 5

PG. 3 OF 9

## USER EXPERIENCE AND IMMERSION TEST FOR RED DEAD REDEMPTION 2

# IMMERSION PRE-TEST

- How easily can you have a fluent conversation with other people while you watch a film, TV or play videogames?

With difficulty

With ease

1 2 3 4 5

- ¿Do you usually feel involved with the plot of a film, TVshow or videogame?

Hardly

Easily

1 2 3 4 5

- How difficult do you think it would be for you to empathize with a character from a TVshow, film or videogame while you have a conversation with other people?

Very difficult

Very easy

1 2 3 4 5

- How often do you feel you can relate situations from your real life with the ones that a fictional character (in a film, videogame or TV show) experiences?

Never

Very often

1 2 3 4 5

- How often do you feel so involved in what's happening in a videogame or a film, that you find difficult to separate it from reality?

Never

Very often

1 2 3 4 5

- How often do you daydream?

Never

Very often

1 2 3 4 5

- How often do you get lost in your thoughts, staring at nothing?

Never

Very often

1 2 3 4 5

- How often do you dream with fictional things, situations or characters from videogames, TV shows and films?

Never

Very often

1 2 3 4 5

PG. 4 OF 9

## USER EXPERIENCE AND IMMERSION TEST FOR RED DEAD REDEMPTION 2

# IMMERSION PRE-TEST

- How easily can you concentrate in tasks you despise or find boring?

With difficulty

1      2      3      4      5

With ease

- How long does it take for the sensation of satisfaction after completing a task you despise or find boring to go away?

Very short time

1      2      3      4      5

A long time

- How easily can you concentrate in tasks you like to do?

With difficulty

1      2      3      4      5

With ease

- How long does it take for the sensation of satisfaction after completing a task you like (like completing a videogame) to go away?

Very short time

1      2      3      4      5

A long time

## USER EXPERIENCE AND IMMERSION TEST FOR RED DEAD REDEMPTION 2

# USABILITY POST-TEST

- Have you felt lost at some point of this test?

Yes

No

- How familiar were you with Red dead Redemption 2 before this test?

Very little

1

2

3

4

5

A lot

- How familiar do you feel with Red Dead Redmeption 2 after this test?

Very little

1

2

3

4

5

A lot

- How easy was to complete TASK 1 for you?

Very difficult

1

2

3

4

5

Very easy

- How easy was to complete TASK 2 for you ?

Very difficult

1

2

3

4

5

Very easy

- How easy was to complete TASK 3 for you?

Very difficult

1

2

3

4

5

Very easy

- How easy was to complete TASK 4 for you ?

Very difficult

1

2

3

4

5

Very easy

- How easy was to complete TASK 5 for you ?

Very difficult

1

2

3

4

5

Very easy



## USER EXPERIENCE AND IMMERSION TEST FOR RED DEAD REDEMPTION 2

# USABILITY POST-TEST

- How easy was to complete TASK 6 for you ?

Very difficult

1 2 3 4 5

Very easy

- How easy was to complete TASK 7 for you ?

Very difficult

1 2 3 4 5

Very easy

- Discuss what do you think that made it difficult for you to complete the tasks you found harder to complete, in terms of how the game responded to what you were trying to do.

- Discuss what do you think that made it easy for you to complete the tasks you found easier to complete, in terms of how the game responded to what you were trying to do.

- Is there anything in the game you have particularly enjoyed?

- Is there anything in the game that bothered you to a point where it affected negatively to your experience?

### IF YOU HAVE NOT PLAYED RDR2 BEFORE:

- Did you imagine the game like this?

- Has this test awakened your curiosity about the game to the point you would consider buying it?

Yes

No

Maybe

### IF YOU HAD PLAYED RDR2 BEFORE:

- Is there something bothering about RDR2 that you have encountered in your own gameplay and it's not reflected in this test?

- Has this test shown you any aspect about RDR2 that you didn't know before?

Yes

No

## USER EXPERIENCE AND IMMERSION TEST FOR RED DEAD REDEMPTION 2

# IMMERSION POST-TEST

- Have you felt capable to control everything that was happening in the game?

Very little

1 2 3 4 5

A lot

- Did your actions in the game feel natural to you?

Very little

1 2 3 4 5

A lot

- Did you feel your senses connected to the game for most of the time you have played?

Very little

1 2 3 4 5

A lot

- How naturally do you think you have moved through the game?

Very little

1 2 3 4 5

A lot

- How conscious were you about what was happening in your surroundings, in the real world?

Very unconscious

1 2 3 4 5

Very conscious

- How convincing was the feeling of the objects moving through the virtual space?

Not convincing  
enough

1 2 3 4 5

Very convincing

- How easy was for you to identify sounds in the game?

Very difficult

1 2 3 4 5

Very easy

- How easy was for you to locate sounds in the game?

Very difficult

1 2 3 4 5

Very easy

PG. 8 OF 9

## USER EXPERIENCE AND IMMERSION TEST FOR RED DEAD REDEMPTION 2

# IMMERSION POST-TEST

- With how much detail have you been able to analyze the objects in the game?

Very little detail

1

2

3

4

5

A lot of detail

- How quick have you adapted to the gaming experience?

Hardly

1

2

3

4

5

very easily

- Has the interface bothered you at some point?

Very little

1

2

3

4

5

A lot

- Have you felt the interface or its different parts were confusing or not corresponding to the names displayed in every part?

Very little

1

2

3

4

5

A lot

- How conscious were you about what was happening in your surroundings, in the real world?

Very little

1

2

3

4

5

A lot

- Any comment?

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**ANNEX 4: VITA**

My name is Alba Gil Gago and I've always lived in Barcelona which is, to me, the most beautiful city in the entire world.

Technology was a big part of my life since I was a child and I love learning and trying new things. That's why I decided to study this degree. I wanted something that would allow me to grow and to continue learning, even after finishing the studies themselves.

I consider myself a person of many interests, and my mind never rests. I love science, history, politics. Even astrology. But I've always been passionate about art, literature, videogames and dressage. Every single one of these things has been extremely important into shaping who I am today.

Right now I'm in a time of change. Of finding who I am, and who I want to be. And that would not be possible without every person I've crossed paths with and has taught me a lesson.

Thank you, to all of you. To the ones that stayed, to the ones that left, and to the ones that are no more.