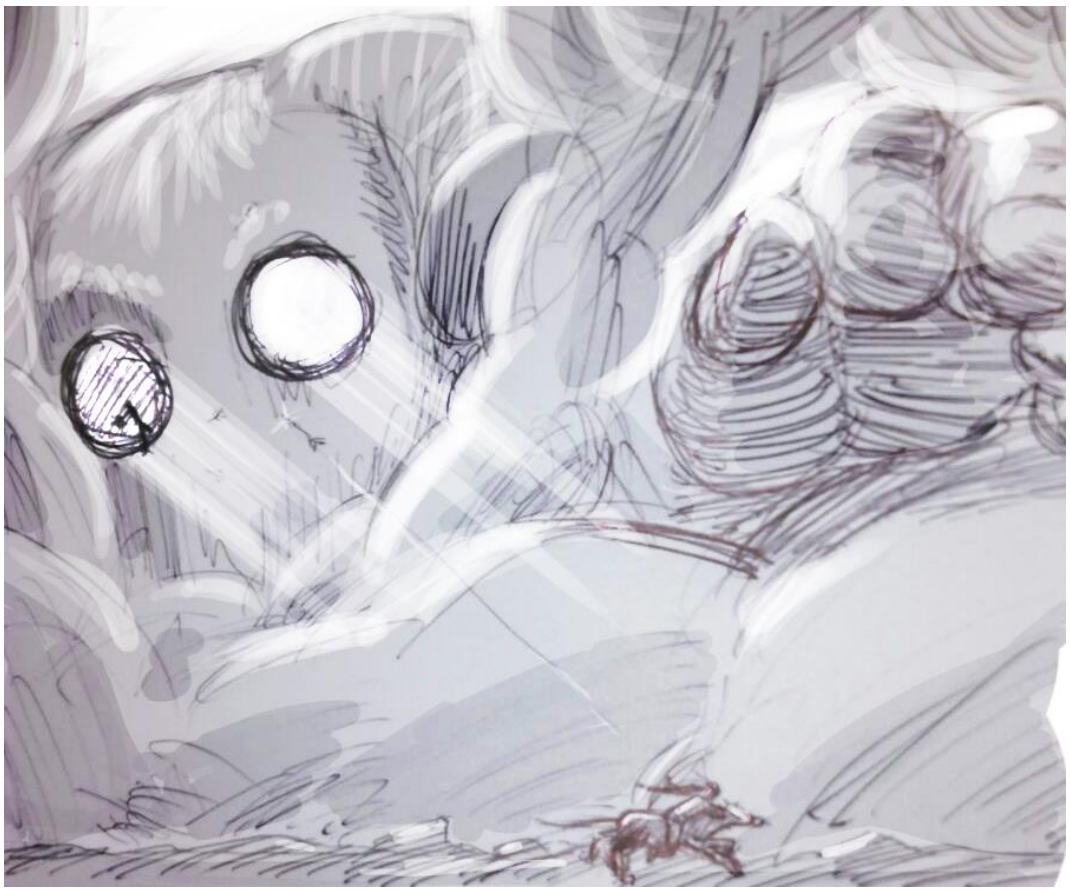

GAME PRODUCTION A1

From Pitching to Requirements

Group 21

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A. Concept

Game Story

Giant monsters have roamed the molded the world for thousands of years. Wherever they go, they bring only destruction. Humanity has lost its place in the world. Their hope? Squandered as they lose hope for some kind of divine intervention.

A warrior returns home, to a horrible sight. His hometown being completely decimated by a gigantic monster. He is to far away to intervene, and only arrives home to see the remnants of his house and last breaths of his family. Having survived, alone, he throws his armor away, armor will not protect him from being crushed. He now looks for the monsters to revenge his family.

Gameplay and Appearance

Inspired in previous known successful games like: **Metalslug** (for sidescrolling and shooting), **Disney's Hercules** (for combination of 2D movement and 3D environments), **Shadow of the Colossus** (for general feel and art style).

The game will be a **single player arcade sidescroller**. The player will be able to move in 2D in a 3D space and background, walking around the enemy by moving left or right. The starting menu and other interfaces will be in 2D. It's important for it to have a quick build up for an **epic feel** for every battle, as the stakes get higher and higher, as you have a finite amount of lives and the enemy can defeat you with one hit.

The game will have an ink type **art style** taking away details from the characters, enemy and environment. This will give it more of a mysterious and distant perception, which, in return, will add to the epicness of each fight. **Music** should have a classical and simple tone complementing the style of rest of the game. The **controls** will be extremely simple, letting the player focus on his timing and skill. Movement ("wasd" for Keyboard, left analog for controller), and pointing and firing arrows (point and click with mouse, point and let go with right analog).

Main Objective

Defeat the giant beings that terrorize the human race. This can be achieved by: Firing arrows at the monster's exposed weaknesses, from a distance. Using natural environmental formations. Activating ballistic weapons.

Strategy

The player should find the right timing to stop unavoidable attacks the enemy makes from time to time. Avoid attacks that may reduce all his hp in one hit. Use environment as covers or avoid it as it can be a hazard.

Have a good accuracy to get power ups. Power ups are items randomly positioned in the map, sent by the gods. When picked up they unleash a powerful attack that does heavy damage to the enemy.

Development Specifications

The game will be mainly developed using the game engine **Unity3d**, primarily to **desktop computers** (being possible ported later to mobile).

The art and animation will rely heavily on **Photoshop** and **Spine.**

B. Market Analysis

Our potential target consumer would be Traditional gamers. Their age range is between eighteen to thirty years old. Savvy gamers that already have decent gaming skills and are open for challenging games. They should use the PC as platform to play their videogames and should use Steam, GOG.com, Origin as channels to buy them. We expect them to be players which tend to play for an hour daily.

Humanity's Quest genre is considered as a key feature that can develop interest in nostalgic players that search for games with similar features to arcade action games where they will have to use reflexes and skills to beat enemies where the difficulty gets more unbalanced as you progress in the game. Old school gameplay with modern 2D graphics.

After researching the videogame market we consider that games like Jotun are searching for the same goals. By looking at the critic reviews written the comments that appear constantly are about its memorable boss fights, unique animation and outstanding music and sound effects.

Hyper Light Drifter also offers many features that our game wants to cover. The hard difficulty of the game makes the players bond with the game after having to struggle to win every level. Some reviews from Metacritic emphasize that this game feels more like a memorable experience. To do so we will have to create a outstanding storyline so that the players get attached to the main character and thrill to know how the story will end.

In addition, we searched for games that had drawbacks when they were supposed to be successful like Never Alone by Kisima Ingitchuna. It had many features commented above but the gameplay experience was affected by the controls. They were slow and inaccurate causing players to stress and give up in many puzzle levels even though their difficulty was easy. Due to this flaw the game turned into an average game.

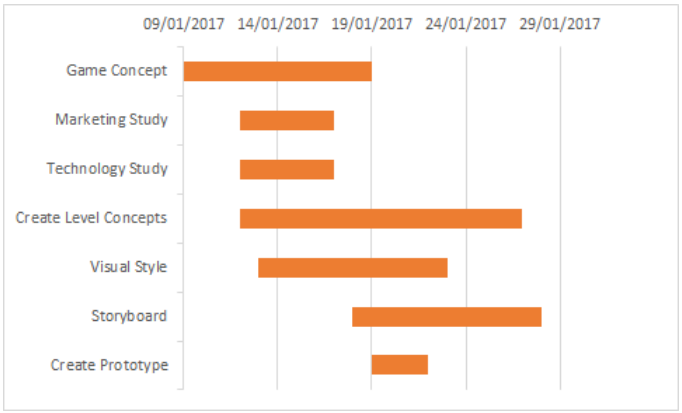
Finally, we would like to talk about Shadow of the Colossus. Even though it was released 2005 and its general gameplay differs from a 2D game our goal is to design a game that has the same effect on players as this best seller of its time. It offered people a good storyline, music, memorable battles that scaled difficulty gradually and an ending that bonded the players and the main character. That's why many gaming websites will always consider it the best game for PS2.

C. Scheduling and budget estimation

1.-Scheduling:

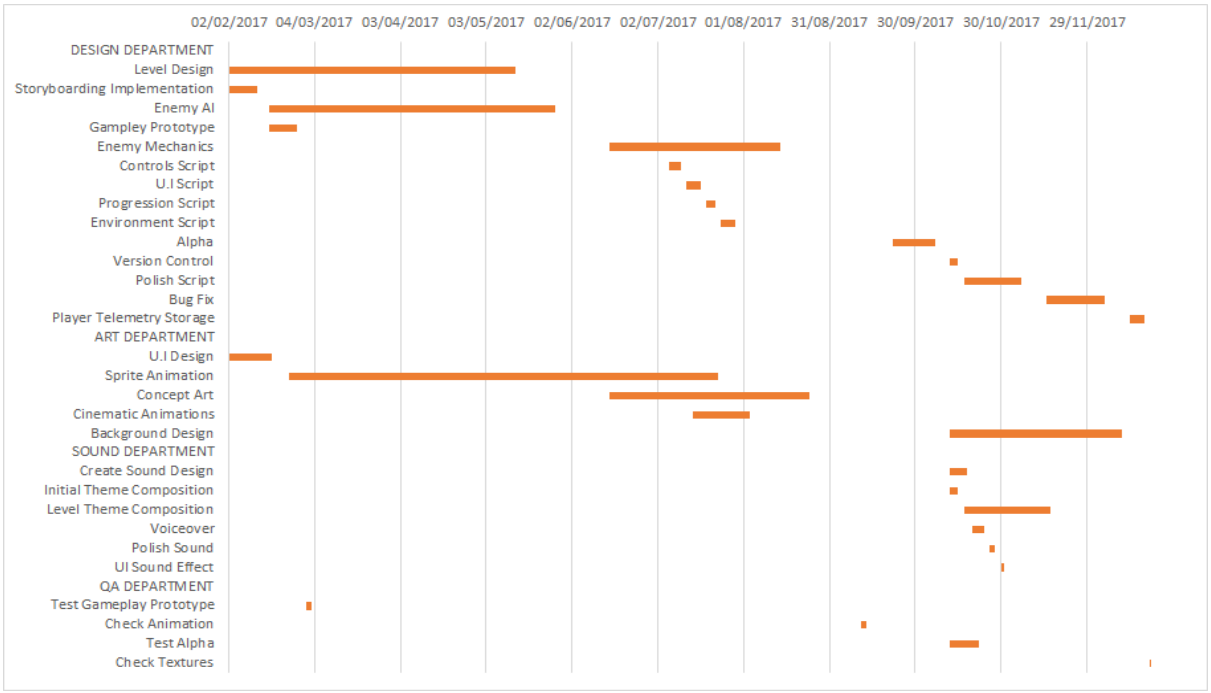
For this project we decided to have a team of ten people. The producer, a lead artist (skilled as a level designer and technical artist) two animators, one lead engineer and a AI engineer. We will also have some help of outsourced personnel: a sound designer, a composer and two testers for the QA of the game. We consider feasible to finish the project in one year, starting from the 09/01/2017 until the 21/12/2017.

Preproduction:



We decided to have a month of preproduction where the team will be working conjointly in the main tasks as the Game Concept and the StoryBoard. Also it is important an analysis of the market and technologies to see what is best for our project.

Production Gantt Diagram:



For the production we decided to set a cyclic schedule. The tasks of the Art and Design Department are ordered in a way so that they can both combine creating

the unique features of every new level and enemy. The times were calculated so that the departments will have time to create 10 levels with distinct enemies. The fact that we want to create a memorable experience of each level means that for each of them, there will be different hazards, enemy mechanics, AI and animations. By having different enemy strategies/attacks and different battlegrounds we can maintain the player hooked to the game being astonished on each level. In addition, the testers will have to work with a game prototype which will have the main mechanics of the game (movement, camera, main character aiming controls, etc).

The next step is also critical for the genre of the game, music has been the key for many games of this genre to turn them successful. For that reason, we didn't want to design the music until the game's levels were completed. We think that the composer will have a better vision of how to compose the music for every level if he has the whole story and levels presented to him. On the other hand, the QA Department will also be active again, this time to test the animations, textures and finally the alpha of the game.

2.-Budget Estimation:

The overall cost of the project are 711752€. We would need a budget approval of at least 60% of the budget. The money arranged would be used for paying the people working on the project, overhead costs and buying the material necessary to develop the videogame. In order to develop a game with unique features we need the best software to the date to provide an exceptional character animation and smooth game controls. Below you will find a more extensive distribution of the budget for the personnel, overhead costs, and the material.

-Personnel budget distribution:

Production Personnel	Number	Monthly Rate(€)	# of Months	Cost(€)
Producer	1	8000	12	96000
Art Personnel				
nnical Artist & Level designer	1	12000	12	144000
Animator	2	8000	7	112000
Engineering Personnel				
Lead Engineer	1	12000	12	144000
AI Engineer	1	8000	12	96000
Sound Personnel				
Sound Designer	1	6000	1	6000
Composer	1	6000	2	12000
QA Personnel				
Testers	2	6000	4	48000
GRAND TOTAL	**10**			**658000**

-Hardware, Software and external budget distribution:

Hardware	Number	Rate(€)	Cost(€)
Computers	8	3000	24000
Graphic Cards	8	300	2400
Controllers	5	100	500
Software			
Unity	3	1500	4500
Photoshop	2	600	1200
Spine Professional	3	299	897
External Vendors			
Voiceover	1	5	5
Music	1	50	50
Other			
Travel	2	1000	2000
Food	8	500	4000
Shipping	2	200	400
GRAND TOTAL			**39952**

-Overhead budget distribution:

Overhead Costs	Monthly Rate(€)	# of Months	Cost(€)
Office space rent	500	12	6000
Insurance	200	12	2400
Water tax	250	12	3000
Electricity tax	200	12	2400
GRAND TOTAL			**13800**

D. Risk Analysis

While analyzing the risks the project development may face, 6 main risks were found.

First we addressed what the risks are and then we discussed how they could be prevented, controlled or treated.

They are presented as follows, from most influential to least:

Investment-budget (Organizational)

What would happen in case no investment or sufficient budget is established? This could result in major cutbacks or project pause. The possibility of a project pause represents, logically, the greatest threat of all risks.

Hardware failure (Technical-technology)

What would happen in case of hardware failure during development? Loss of valuable data, severe schedule setback. As it can possibly severely damage the project development, temporarily or not, this represents a greater threat.

Communication (Project Management)

What would happen if the team does not fully understand each other or doesn't enjoy working together? Misunderstandings in work and features can lead to the need of reworking and reschedule due to setbacks. The working environment is an important thing to maintain, especially with a small team (like that of the project), for it will work and be close to each other for a year of development. It's very important that the members have a good relationship to make it easier to discuss issues and convey ideas.

Low response in market (External)

What would happen if the market does not receive the project as expected? Major financial loss and discredit. This may affect future works and make clients (investors or players) lose interest. This can only be addressed with market studies.

Time-schedule (Project management-control)

What would happen if the schedule falls behind? Loss of budget, loss of credibility. This could affect the opinion of clients. But it is manageable in real time.

Art Implementation, programming, gameplay (Technical-quality)

What would happen if the subcontractors fail to deliver their task or schedule? Schedule setbacks, need for new subcontractor, redelegating of internal work. This could overload the developers and review the budget, resulting in minor schedule setbacks.

Outsourcing (External-subcontractors)

What would happen if the subcontractors fail deliver their task or schedule? Schedule setbacks, need for new subcontractor, re-delegating work internally. This could overload the developers and review the budget, resulting in minor schedule setbacks.

General major issues that do not pose an impending threat on the project:

In the Technical area, the Complexity, Technology and Performance are not given special attention because the game concept does not call for the need of special hardware, software or powerful processing capabilities.

Risk Control:

In case of lack of investment budget, and schedule delays, the following measures may be taken to minimize repercussions:

- Bootstrapping (no payment to founders),
- Cut of needed employees and centralization of tasks (instead of delegation),
- More Outsourcing (Animation, voiceover, music, sound effects, writing, localization),
- Cutting game features of low priority and high cost.
- Segment project into a smaller game with less features.
- Publishing early beta versions to capture attention and possible investment.

Anticipating possible risks, the following can be done for their prevention:

- Have a consistent idea of market acceptance of the game genre, and competitors to show investors how the project is worthwhile (possibly preventing lack of investment).
- Adopt walking skeleton style of development. Develop in small iterations and approval cycles, making the game maintain scalability of its functionalities (in means to prevent problems with art implementations, programing and gameplay).
- Version control of the project builds in a local and remote repository. (This will prevent big losses in case of hardware failure or game breaking bugs).

How to reply and manage risks when they occur:

In case of a low market response- If the current desktop game concept has a low acceptance from market, port to mobile as a more casual game to help broaden the appeal. The game's simplicity would give the necessary flexibility to do so.

In case of scheduling or implementation problems. Prioritize task and features during implementation. Improve chances of finishing the game with a fuller status, within budget and time.

In case of a major hardware or game breaking bug in the current build of development. Revert to latest working version stored online or in local servers.

E. Requirements

1.-User Stories:

- **Player:**
  - As a player I want smooth controls so that it doesn't add difficulty to an unforgiving game.
  - As a player I want simple controls so that it doesn't add difficulty to an unforgiving game.
  - As a player I want realistic backgrounds to feel immersed in the game.
  - As a player I want fluid animations to feel immersed in a 3D world.
  - As a player I want 3D sound effects to feel immersed in the game.
  - As a player I want background music for every level so I feel immersed in the game.
  - As a player I want to have an enemy health so I can acknowledge my progression during the battle.
  - As a play I want to "dash" so I can dodge the enemy's attacks.
  - As a player I want the movement of the character to be affected by inertia so I feel immersed in the game.
  - As a player I want an interesting story to feel the stakes of each level.
  - As a player I want a developed main character to feel empathy for him.
  - As a player I want a player health bar to know if I can risk getting hit by the enemy.
  - As a player I want to battle enemies in different environments so they keep me on my feet.
  - As a player I want 3 lives so I have a chance to get skilled.
  - As a player I want a way to win lives so I can continue playing.
  - As a player I want unlimited arrows so I can focus completely on my aiming skills.
  - As a player I want visual triggers to know the location of a power up.
  - As a player I want different enemies to keep me interested in the game.
  - As a player I want customizable controls so that I can adapt the gameplay to my own.
  - As a player I want my time to be recorded so I can play multiple times challenging myself.
  - As a player I want a point system so I can play multiple times challenging myself.
  - As a player I want a memorable ending so I feel fulfilled when I end the game.
  - As a player I want my controls to emulate the weapon I'm using.
  - As a player I want hazards in the battlefield so that the level's difficulty will raise.
  - As a player I want a highscore table with 100 places to keep track of my best times.
  - As a player I want a free battle mode, where I can choose which monster to fight separately of the main story.
  - As a player I want to unlock monsters in free battle with my progression through the main game, so that I feel rewarded.

- **Develop Team:**
    - As a developer I want tools to change the game's lives so I can test the game unlimitedly.
    - As an animator I need the appropriate licenses to use the most effective software for the work needed.
    - As a technical Artists, I need the appropriate licenses to use the most effective software for the work needed.
    - As a developer I need the appropriate licenses to use the most effective software for the work needed.
    - As a developer I want a there to be a repository for version control.
    - As a music compositor I want to have the whole game concept, so that I can have a better insight of the feel to portray.
    - As a developer I want a there to be a repository for version and project security.

- **Producer:**
    - As the producer I want a schedule of the project development, to keep track of the project's progression.
    - As the producer I want to be able to delegate tasks in the development team.
- **Investor:**
    - As the investor I want a tool to keep up with the project general progression.
    - As the investor I want to be able to get marketable material from the team, monthly.
    - As the investor I want to get access to early access prototypes, to understand how the project is being conceptualized.
    - As the investor I want to get access to early access prototypes, to be able to possibly market it.

2.-User Stories expected for Sprint 1

Considering that the first Sprint would be the first month of development. We decided to complete the next block of user stories.

In the first block we have chosen the user stories that will be applied constantly in all Sprints as they are requirements that need to be granted for each level of the game to maintain the immersion and interest of the player in the game.

- As a player I want fluid animations to feel immersed in a 3D world.
- As a player I want an interesting story to feel the stakes of each level.
- As a player I want a developed main character to feel empathy for him.
- As a player I want to battle enemies in different environments so they keep me on my feet.
- As a player I want different enemies to keep interest in the game.

As we have commented many times before the animation is one of the key features to make this game successful. Good animations for the environment, the main character and the enemies can make the user feel inside the game, they add realism and can guarantee a full immersion in the virtual world developed. In addition, the storyline of the game has to evoke intrigue to the player in order to keep him thrilled so that he needs to continue playing to know what will happen next. Finally, the main character has to evoke emotions to the player. The player

has to feel connected to the main character if we want him to feel empathy for him. This will raise the importance of the player for making the character succeed in his quest. Finally, we want to have unique enemy battles in battlegrounds with different environments. Each time the player faces a new enemy in a new background he will have to develop a new strategy to beat the level.

There should be a second group of user stories for the first Sprint that take into consideration all the material needed in order to start developing the game.

- As a technical Artists, I need the appropriate licenses to use the most effective software for the work needed.
- As a developer I need the appropriate licenses to use the most effective software for the work needed.

The next group of user stories are those that we consider trivial for the first Sprint, which consists in developing the first Gameplay Prototype.

- As a player I want my controls to emulate the weapon I'm using to feel more immersed.
- As a play I want to "dash" so I can dodge the enemies' attacks.
- As a player I want the movement of the character to be affected by inertia so I feel immersed in the game.

First of all, one of the unique features that we want to develop for this game is to create an aiming control system that when the player uses it will feel as he was drawing a bow. This will give realism to the game and will affect the player's strategy to attack as many things can affect the shots accuracy and power. Furthermore, we also want to combine the next two user stories to help the player dodge attacks but also it will add arduousness whilst dashing due to the inertia effect.

Any other user stories above which aren't underlined in green are supposed to form part of the backlog of the videogames production.

3.-Non-trivial Stories:

The user stories chosen reflect non-trivial stories that will be present throughout the whole development.

- As a player I want smooth controls so that it doesn't add difficulty to an unforgiving game.

In a typical arcade difficulty game, the player can feel frustrated when he loses. But that frustration can be aimed at the game if the fault was from the controls, and not the player's fault.

- As a player I want simple controls so that it doesn't add difficulty to an unforgiving game.

For a difficult game, it can be hard to adapt to the gameplay if the controls are complex and many. So it would make sense to have a small number and very simplified controls, as this would raise the learning curve, and also the game engagement. This user story can be even more valuable for players to continue playing the game after a long pause.

- As a player I want the movement of the character to be affected by inertia so I feel immersed in the game.

The addition of inertia to the character's movement (for example when stopping the horse's movement after a sprint) adds to the familiarity of the gameplay, as the player will instinctively relate to game rules.

- As a player I want 3 lives so I have a chance to get skilled.

In an arcade game with pattern based challenges, it is important for the player to be able to fail and learn from his mistakes.

- As a player I want my controls to emulate the weapon I'm using.

With already simple controls, if they become related to the bow and arrow the main character uses, the gameplay will become more immersive and more memorable.

- As a developer I want tools to change the game's lives so I can test the game unlimitedly.

When developing the game, certain gameplay functions will only be in the way of development, so it's important to have a number of tools, cheats to easily traverse the game.

- As the investor I want to get access to early access prototypes, to be able to possibly market it.

With a prototype, or other acceptable version of gameplay, it may be easier to collect more investment, as other investors will be able to presence a more concise project or concept. It may also be used to tease the public, creating an amount of hype.

F. Appendix

We include the WBS used to create the Gantt graph for the assignment.

Tasks	Priority	Duration	Start Date	Finish Date	Resource
Preproduction					
Game Concept	10	10	09/01/2017	20/01/2017	Team
Marketing Study	5	5	12/01/2017	18/01/2017	Producer
Technology Study	1	5	12/01/2017	18/01/2017	2 Developers
Create Level Concepts	5	15	12/01/2017	01/02/2017	Lead Artist
Visual Style	7	10	13/01/2017	26/01/2017	Lead Artist, 2 Animators
Storyboard	5	10	18/01/2017	31/01/2017	Team
Create Prototype	7	3	19/01/2017	23/01/2017	2 Developers
Production					
DESIGN DEPARTMENT					
Level Design	10	100	02/02/2017	14/06/2017	Lead Developer, Lead Artist
Storyboarding Implementation	4	10	02/02/2017	15/02/2017	AI Developer
Enemy AI	5	100	16/02/2017	05/07/2017	AI Developer
Gampley Prototype	10	10	16/02/2017	28/02/2017	Lead Developer, Lead Artist
Enemy Mechanics	7	60	15/06/2017	21/09/2017	Lead Developer
Controls Script	4	4	06/07/2017	11/07/2017	AI Developer
U.I Script	1	5	12/07/2017	18/07/2017	AI Developer
Progression Script	1	3	19/07/2017	21/07/2017	AI Developer
Environment Script	3	5	24/07/2017	26/07/2017	AI Developer
Alpha	10	15	22/09/2017	11/10/2017	Lead Developer, Lead Artist
Version Control	5	3	12/10/2017	16/10/2017	Lead Developer
Polish Script	8	20	17/10/2017	14/11/2017	2 Developers
Bug Fix	7	20	15/11/2017	13/12/2017	2 Developers, Lead Artist
Player Telemetry Storage	2	5	14/12/2017	20/12/2017	2 Developers, Lead Artist
ART DEPARTMENT					
U.I Design	2	15	02/02/2017	22/02/2017	2 Animators
Sprite Animation	10	150	23/02/2017	13/07/2017	2 Animators
Concept Art	7	70	15/06/2017	20/09/2017	Lead Artist
Cinematic Animations	2	20	14/07/2017	10/09/2017	2 Animators
Background Design	6	60	12/10/2017	20/12/2017	Lead Artist
SOUND DEPARTMENT					
Create Sound Design	6	6	12/10/2017	19/10/2017	Sound Designer
Initial Theme Composition	4	3	12/10/2017	16/10/2017	Composer
Level Theme Composition	6	30	17/10/2017	28/11/2017	Composer
Voiceover	1	4	20/10/2017	25/10/2017	Sound Designer

Polish Sound	2	2	26/10/2017	27/10/2017	Sound Designer
UI Sound Effect	2	1	30/10/2017	30/10/2017	Sound Designer
QA DEPARTMENT					
Test Gameplay Prototype	5	2	01/03/2017	02/03/2017	2 Testers
Check Animation	20	2	11/09/2017	12/09/2017	2 Testers
Test Alpha	10	10	12/10/2017	25/10/2017	2 Testers
Check Textures	10	1	21/12/2017	21/12/2017	2 Testers