

# Squash'd Reality

THE SMALLEST INVASION IN THE UNIVERSE



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# 1. DESIGN HISTORY

This section tracks the changes made to the document.

DATE	CHANGES MADE
23/05/2020	Chapters #0, #3, #5, #6, #7
24/05/2020	Completed chapter #2, #5, #4, #8, #9
06/06/2020	Revision chapter #3, #4
07/06/2020	Revision chapter #5, #6
26/06/2020	Modified #3.1, #4.2, added #10
26/06/2020	Added #3.6, #5.4.1, #5.3.6.1/2/3/4/5/6/7/8/9
06/07/2020	Platform puzzle reworked into Dark puzzle
07/07/2020	Added concept arts and storyboard

# 2. VISION STATEMENT

**Squash'd Reality** is a **2.5D party game** for **2 to 4 players**. The gameplay evolves in a **series of rooms** within a Simulated Reality context.

The goal of the game is to **escape your virtual prison** by facing the **challenges** that the evil **alien AI** has prepared for you in a **minigame** format, in order to bring back to life the hero that has already pushed back the enemy alien invasion in the past.

The players will impersonate four characters, who have decided to give it all to try to save Earth from the **Squash's oppression**.

Each one of the characters will not have any advantage over the others in terms of gameplay but will **differ in the appearance and in personality** so that you can grow affection towards them and understand the aliens' oppressive nature from the point of view of the heroes.



## 2.1 Game logline

Prove yourself along with your friends to escape a virtual trap, resurrect the hero of the past, and save humanity from the alien invasion!

## 2.2 Gameplay Synopsis

Most of your time in the game will be spent in trying to solve the challenges that **V.I.S.T.A.**, the mischievous AI, has prepared for you, in order to **regain your freedom** and **bring back to life the fallen hero** with the recently stolen Tardigrades elixir. All the challenges will test your group's **coordination** in different ways: some will force you to **exploit the provided objects** to overcome the obstacles separating you from the room's exit; some will force you to **prepare a recipe** with the right ingredients before the time runs out and everything blows up; others will test your **survival skill** making you face hordes of AntiViruses; lastly, others will test your **organization skills** making you close a circuit in time before everyone is zapped!

We strongly aim to push the player to **coordinate** in order to pass the challenges, as a single weak link in the chain will most probably bring the whole party to **failure**. None of the levels will be solvable by a single player, no matter how skilled he is.

Each of the challenges will though assign a **score** to each one of the players **depending on the actions** they perform - some will grant bonuses, others, like dying, will grant maluses. At the end of the game, an **MVP** will be selected based on the point scored during the whole playthrough.

The players will be rewarded with a **specific key** if they pass a challenge. These keys will be used to open the door that will free them from the virtual trap and, depending on the specific set of keys used, the players will witness a **different ending**.

Throughout the game, you'll find different **clues about the game world** and characters in the form of **collectibles**.

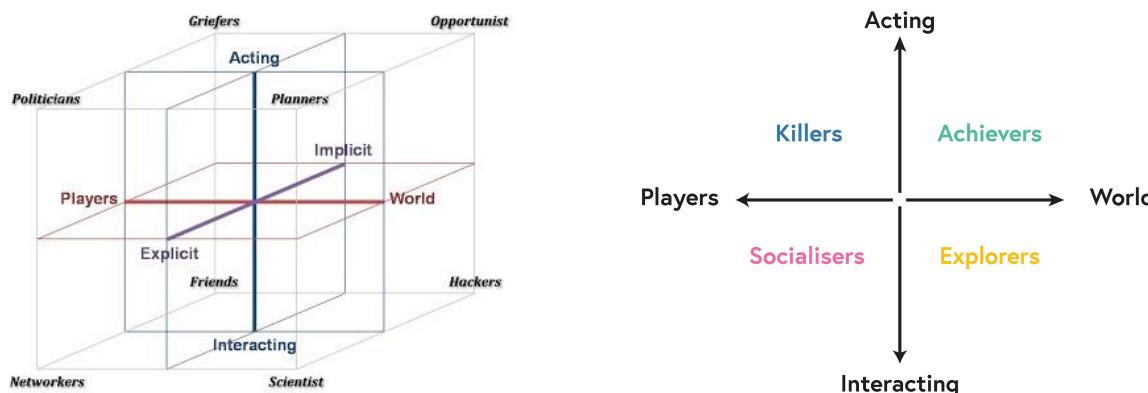
Squash'd Reality is set in a **dystopic future** where **humanity is enslaved** by the alien master race and its only purpose is to serve the invaders. Spaceships orbiting around the planet serve as refining factories for the precious **tardigrades elixir**, far from the human grasp, while the whole alien forces are enjoying their stay on the exploited planet.



## 3. AUDIENCE, PLATFORM, AND MARKETING

### 3.1 Target Audience

In order to better understand the complex dynamics in the game industry and which audiences could be a better target for this game, we're going to break down different statics coming from different sources.



First thing to be analyzed is the **type of player** that will be most suitable for the game. By following Bartle's taxonomy of player types<sup>1</sup>, the whole idea of the game has been built around the **Explorer type**, a kind of player that enjoys discovering new phenomena by exploring and reaching every point of the game. Once the theory furtherly develops in the implicit-explicit sides of each category, it is immediately noticeable how the perfect suiting category for this game is the **Hacker**, who explores by going where "their fancy takes them" and has an intuitive understanding of the virtual world. In addition to that, the game encourages the players to **cooperate and create bonds** in order to succeed, therefore it would be a great fit for all the **Socialisers-Friends** kind of players, who interact with the people they know well already, accepting their quirks and abilities.



[ESA Essential Videogame Industry Facts 2019](#)

<sup>1</sup> <https://platinumpiotr.wordpress.com/2017/11/08/game-theory-bartles-taxonomy-of-player-types/>



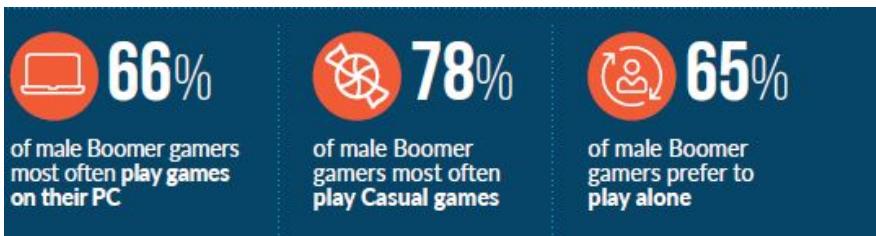
As it is possible to notice, most of the players in the USA prefer **casual and action games** from other genres. This is perfectly fitting the scope of Squash'd as its core components of a **party game and its challenges**.

Furthermore, what we're really interested in is the **age of the players** that this kind of game could be targeting. Given the fact that this is a game with a strong socializing and cooperative feature and with cartoonish models, it would seem a perfect match for a younger audience. Nonetheless, if we give a look into the statistics of average gamers, there's something really interesting worth of notice:



[ESA Essential Videogame Industry Facts 2019](#)

This gives us a better insight on the fact that the game could be **targeting players of almost all ages**. It wouldn't be wise, though, to target the older part of the player base given the fact the pressure that the players have to face and the level of challenges, apart from the high hand-eye coordination required and the adrenalinic overview of the game, could result in a most probable unpleasant experience.



FAVORITE GAMES:



25% of Male Boomers have been video game players for 25+ years

## BOOMER GAMERS (55-64)



FAVORITE GAMES:



22% of Female Boomers have been video game players for 25+ years

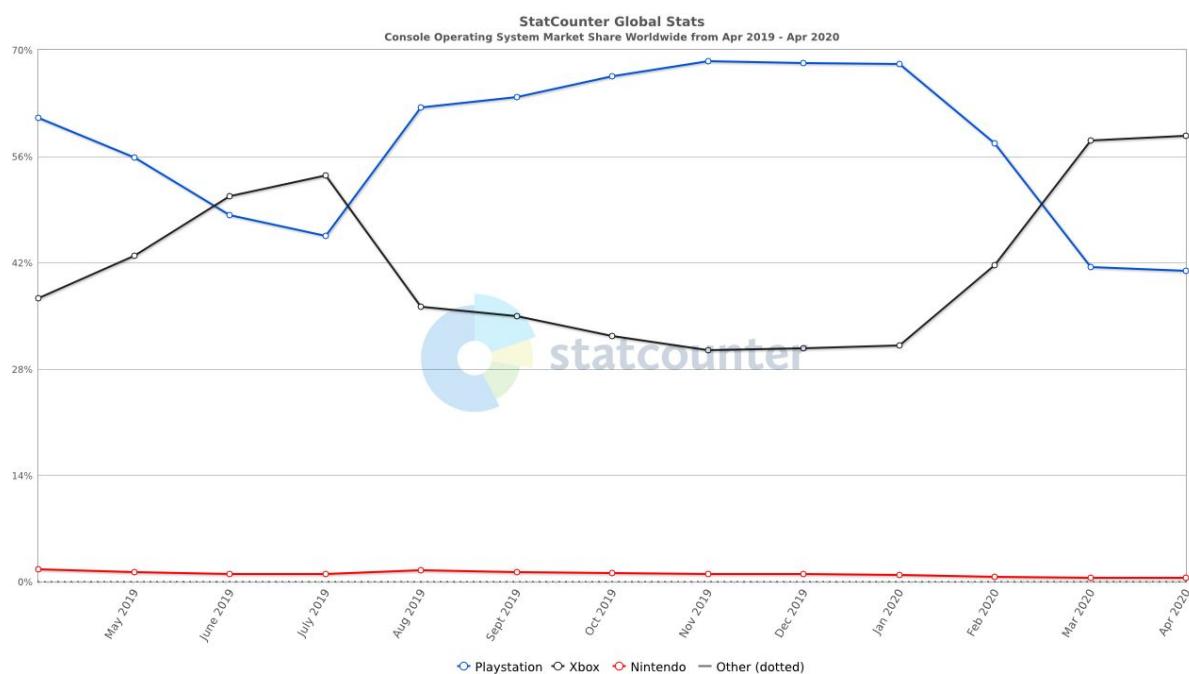
[ESA Essential Videogame Industry Facts 2019](#)

Given the explorative and midcore component of Squash'd Reality, the average age of the players on which the marketing campaign should be focusing on will be suggested to be around **25-30 years old**. The party game and cartoonish nature would also suggest that the range of age could be further extended to be promoted as a family again to be played from parents and children.



## 3.2 Platform

The game genre that has been chosen for Squash'd Reality is *Party Game* with a strong *Action*<sup>2</sup> component as it *emphasizes physical challenges, including hand-eye coordination and reaction-time*. This kind of games is known to be more pleasant to be played with a gamepad, therefore the chosen platforms to be played on are mainly consoles such as XBox and Playstation.

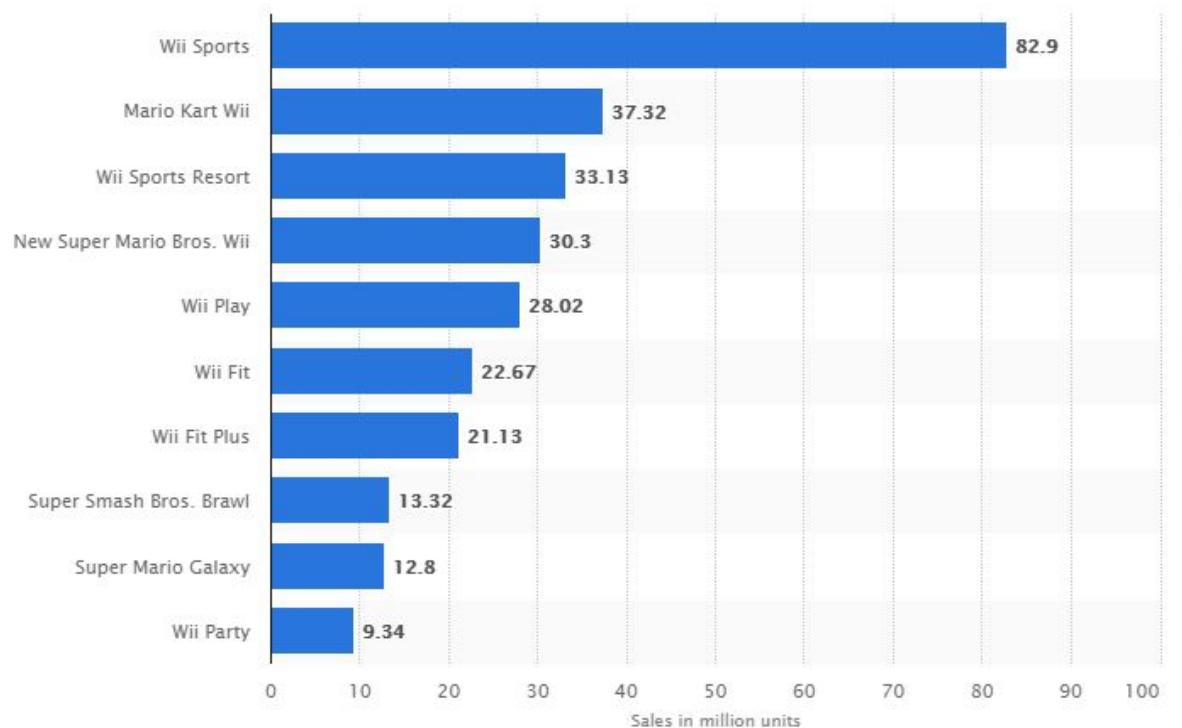


As it can be seen above, in the past couple of years, the XBox shares have been on a constant growth, even overcoming Sony's shares, which means that, at the moment being, the best console to be working on is Microsoft's.

In the next future, a porting to PC might be implemented, in order to widen the player base, but it wouldn't be recommended given the above-mentioned constraint.

Furthermore, as it can be seen below, the same kind of party games are in the top selling leaderboards, which brings additional reason to implement Squash'd Reality on family friendly consoles.

<sup>2</sup> [https://en.wikipedia.org/wiki/Action\\_game](https://en.wikipedia.org/wiki/Action_game)



### 3.3 System requirements

The hardware required to play the game consists in a console for which the game has been developed and, obviously, a gamepad.



### 3.4 Top performers

<p><b>Human fall flat</b></p>  <p>The image shows the title screen for the game "HUMAN Fall Flat". The title is written in large, white, blocky letters. In the background, there's a green, low-poly landscape with floating platforms and various characters from the game.</p>	<p><b>Developer:</b> No Brakes Games <b>Year:</b> 2016 <b>Genre:</b> Platform <b>Gameplay:</b> Singleplayer, Multiplayer <b>Platform:</b> Microsoft Windows, Linux, MacOs, Playstation 4, Xbox One, Nintendo Switch, iOS, Android <b>Downloads:</b> ~ 4 Mln <b>Description:</b> Players play a customizable human stated to have no superhuman abilities. Players can make him grab objects and climb up ledges using both his arms and looking with his head. Each level contains multiple solutions to their unique puzzles.</p>
<p><b>Developer:</b> Hudson Soft (1998-2007), Capcom(Arcade), NDCube (2012-present)</p> <p><b>Year:</b> 1998 (first release)</p> <p><b>Genre:</b> Party</p> <p><b>Gameplay:</b> Multiplayer</p> <p><b>Platform:</b> Nintendo 6, GameCube, Game Boy Advance, Wii, Nintendo DS, Nintendo 3DS, Wii U, Nintendo Switch</p> <p><b>Downloads:</b> ~ 50 Mln</p> <p><b>Description:</b> Up to four local players or computer-controlled characters compete in different minigames.</p>	<p><b>Mario Party Saga</b></p>  <p>The image shows the title screen for "SUPER MARIO PARTY". It features Mario in the foreground, holding a blue controller, with other Mario characters and a large video game controller in the background.</p>
<p><b>Overcooked! 2</b></p>  <p>The image shows the title screen for "OVERCOOKED! 2". It features a yellow food truck with various characters from the game standing around it, set against a backdrop of a night sky with stars and clouds.</p>	<p><b>Developer:</b> Team17 &amp; Ghost Town Games</p> <p><b>Year:</b> 2018</p> <p><b>Genre:</b> Simulation</p> <p><b>Gameplay:</b> Multiplayer</p> <p><b>Platform:</b> Nintendo Switch, Playstation 4, Microsoft Windows, OS X, Linux, Xbox One</p> <p><b>Description:</b> Teams of up to four players cooperatively prepare and cook orders in absurd restaurants.</p>



### 3.5 Feature comparison

The game is born thinking about the kind of player-to-player interactions that can be found in games like **Human fall flat**, which is a great example of the simple actions that our characters will be able to execute like *move around and grab stuff*. This simplicity of movements is what characterizes most of the party games on the market, which mixed with the idea of cooperating with your party in a series of minigames to achieve your goals, creates an exploding mixture, perfect for all the players who love to play with family and friends. The interaction between the players is opposed to what we see in the **Mario Party Saga**, as we want to promote cooperation rather than competition, having an MVP assigned at the end of the game - still based on cooperative skills - as a unique point of clash.

In addition to that, **Overcooked! 2** is another good example of the kind of interaction we'll adopt in our game: the players must coordinate in order to beat the challenge within the time limit; a single weak link in the cooperation chain would bring the whole team to failure. This is a great way for all those mid-core gamers out there to show their abilities on the field while easily playing in their own living room with a *controller*.

We also drew inspiration from **The Binding of Isaac** unique story and gaming techniques that give the perfect referring point when it comes to the whole room system.

*The Binding of Isaac* provides a perfect element for all those exploring-type of players that want to know more about the story behind and explore the whole game from top to bottom. In addition, in our game, the players will be given a choice among three doors to choose among and which new challenge to take part in. The players will be given the possibility to explore different parts of the story by collecting the logs that will randomly spawn throughout the *run* and teach to the teammates the best strategies to face the different challenges.

In conclusion, our game exploits some basic features of the roguelike genre to create interest in all those who seek **more than a one-shot party game experience**, while still not denaturing the **simplicity of it** so to be appealing also to those who just want to have **fun with their friends**.

The game will be a perfect opportunity for players to explore a whole new level of midcore explorative games, giving the chance to each and every player to find their place in the team, allowing multiple players' personality to both clash and get creative when it comes to

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cooperative problem solving and quick thinking. The game will also be providing a robust story, with unique climax and storytelling: it will be possible for the players to discover all the different ways in which the prologue, backstory of each character and the whole story itself will be told, enhancing their desire to uncover all the little unsolved mysteries.

### *3.6 Business Model*

In order to decide the price on the market of our game, we've analyzed our main competitors and their prices on the release date:

- Overcooked 2: 25\$ digital / 40\$ boxed
- Human Fall Flat: 15\$
- Super Mario Party: 50\$

We only take into account the first two games because of their digital delivery price.



## 4. LEGAL ANALYSIS AND LOCALIZATION

### 4.1 Legal Analysis

“Squash’d reality” name is free from copyright.

The prototype will be developed using Unity Pro license.

We are planning to create all our assets or to use one with free license in order to avoid copyright issues.

We reserve the right to purchase external services from third party companies or some assets from the Unity Asset Store.

### 4.2 Localization

The targeting audience of Squash’d Reality would ideally be based in the USA, given the fact that most of the analyzed statistics<sup>3</sup> are taken from that geographic area. The first marketing operations and publication will therefore target this western market.

Given what has been stated above, the first version of the game will be entirely in English. Depending on the success that the game will be receiving, a second release in other parts of the world, with a subsequent translation to the appropriate language would be taken into consideration.

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<sup>3</sup> See [Section #3.1](#)



## 5. GAMEPLAY

### 5.1 Overview

Four brave heroes decide to try to retrieve the mythic tardigrades elixir to resurrect the hero of the past and save humanity from its condition of submission. They though fall in the Squashes' trap and get locked in a simulated reality where they will have to face a set of challenges in order to regain their freedom.

The players have to focus on coordination during the run in order to achieve the different goals of the rooms in the shortest time possible. No health bar is present in the game as the players die with one hit.

There will be no difference between the characters in terms of abilities or special powers. The only difference that might be introduced would be random abilities or power-ups during the challenges.

### 5.2 Gameplay description

The players start off the game by choosing one of the three initial choices that will be given. They will choose one of the three doors that will be marked with a different color coding w.r.t. the difficulty of the room ahead. The game starts whenever half + 1 of the party members enters a room.

As each room will be different from the others, each of them will be having a specific subset of rules, but all of them have a common denominator which is the main challenge: a continuously ticking clock that, when expired, will determine the fate of the players. During any time of the challenge, the players can decide whether to continue with the challenge or go back to the previous room in order to explore more or choose a different path.

Here follows a description of each kind of room, in section 5.3.1 we explain in detail how to solve them:

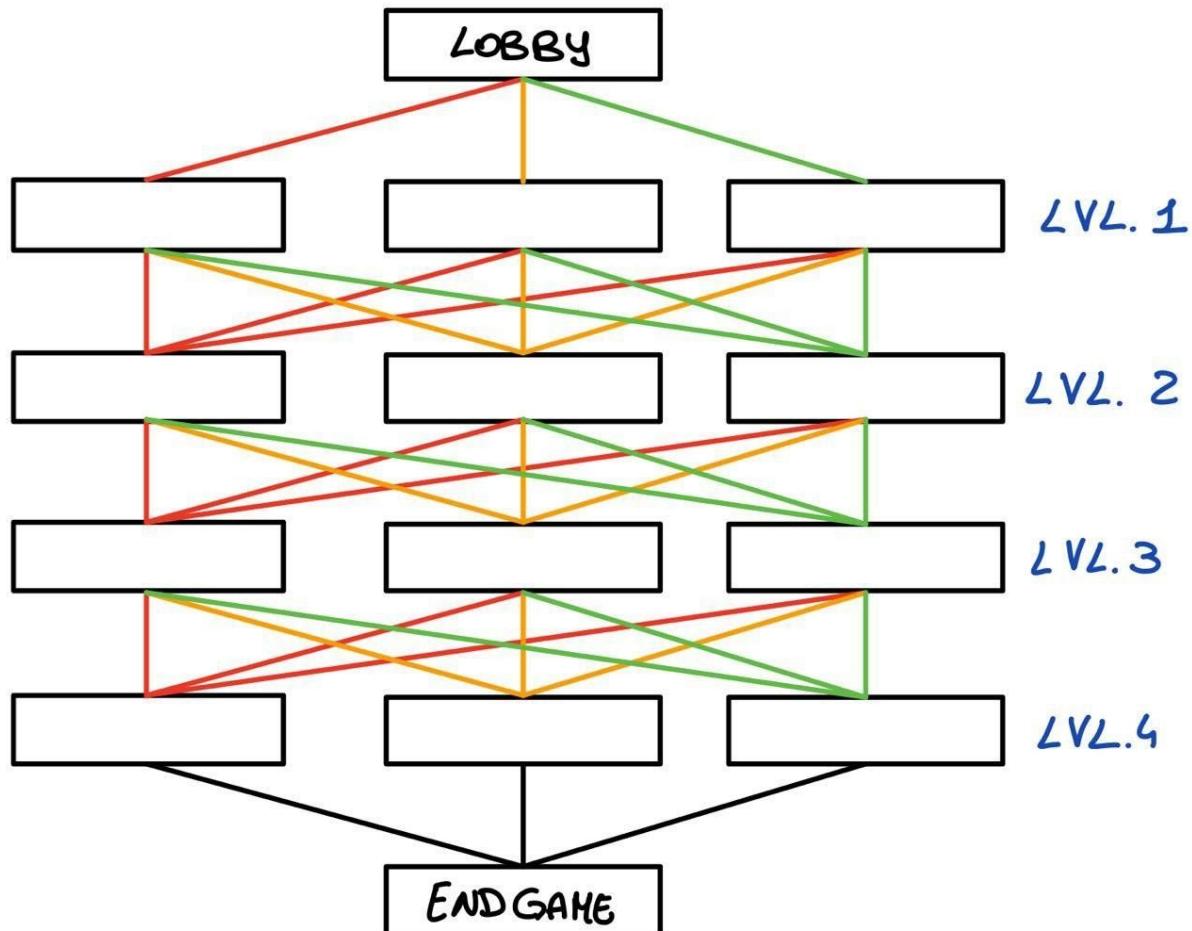
- **Electro pipeline:**  
The players spawn in different locations of the same area and have to find all the pieces required to close the circuit.
- **Dark puzzle:**  
The players have to overcome the obstacles and reach the door in a dark room thanks to the help of their teammates who will light their way .
- **Cooking time:**  
The players have to combine ingredients in order to create the "blasting cannolo" and escape the room.



- **Trench time:**

The players have to survive different alien waves.

For a better understanding of the structure of a whole run here follows a scheme. It comes without saying that the color coding is pretty standard and each line goes from LVL# to LVL#+1.



When completing each room, the players will be able to make another choice among three different doors as the initial ones and continue on their path until the final room is reached, where the host of the game will be able to choose an ending by selecting the amount of each kind of key.

After the ending cutscene, a leaderboard is shown for a minute to all the players, assigning the MVP trophy and a Bonus Prize.<sup>4</sup> This would give time for the players to choose whether to continue playing or quit the game.<sup>5</sup>

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<sup>4</sup> See [Section #5.3.4.1](#)

<sup>5</sup> See [Section #5.6.1](#)



## 5.2.1 BARTLE'S TYPE REWARDS

In this paragraph, we want to spend a few more words on **Bartle's types** and why the gameplay is especially suited for them.

First of all, **Explorers** will find satisfaction in the **freely explorable map**. The **backtracking** of levels already completed is also a push to retrieve **collectibles** left behind and difficult to reach. Such collectibles will give more insight to the **game lore**, a feature that particularly pleases this Bartle's type.

The forced **cooperation** is something that strongly pleases the **Socializer-Friend** Bartle's type: they will feel accomplished in completing the most hard challenges thanks to the **help of their team**. Also, the possibility of joining existing lobbies to find new players will allow them to find **new skilled friends to socialize with**.

## 5.3 Controls

### 5.3.1 PROCEDURES

Depending on the levels there are different procedures in order to solve the room:

- **Electro pipeline:**
  - The players can freely move in the whole playing area and have to collect the different pieces of the circuit in order to correctly connect them and solve the puzzle;
  - The players do not have to die before completing the task otherwise the game resets and they have to do it all over again;
  - The players must complete the task before the time expires otherwise the game resets and they have to do it all over again;
- **Dark puzzle:**
  - The different parts of a puzzle are laid out in the room (boxes to move, trampolines, etc...) and the players have to move the boxes around, use the resources in the room in order to reach the door;
  - The whole challenge is held in a dark room. The light of players holding an object will go off, so they'll need the help of a player with its hands free to light his way.
  - The players do not have to die before completing the task otherwise the game resets and they have to do it all over again;
  - The players must complete the task before the time expires otherwise the game resets and they have to do it all over again;
- **Cooking time:**
  - The players are divided into four different parts of the room;



- A recipe is shown to all players with the different components to insert in a common area;
- Components of the recipe and exploding bombs will spawn from above and fall in the areas for the players to collect and bring in the central part;
- Once the task is completed, a blasting cannolo appears and one of the players have to pick it up and blast through one of the doors they wish to continue in;
- The players do not have to die before completing the task otherwise the game resets and they have to do it all over again;
- The players must complete the task before the time expires otherwise the game resets and they have to do it all over again;
- **Trench time:**
  - The players can move in only one certain part of the playing area, called "The Trench";
  - The players are equipped with a cannon blast that automatically keeps on firing and can direct the shooting with the appropriate command key;
  - Waves of enemies spawn from the different doors and start running towards the players. The enemies explode on contact with the players dealing damage area;
  - The players do not have to die before completing the task otherwise the game resets and they have to do it all over again;
  - The task ends with the last enemy being killed and the doors opening. No timer is required here.

Levels will **NOT** be generated procedurally, but the single challenges will be placed in a different location at each run, thus creating different paths. After each room, you'll be able to choose between three different trials, each one with a different challenge level. Completing a challenge will drop a key to open the final door.

### 5.3.2 CONTROLS

ACTION	COMMAND (Xbox controller)
Jump	
Interact	



Grab + Push/Move objects	
Move	
Face direction	

### 5.3.3 IN-GAME RESOURCES

#### 5.3.3.1 Weapons

While playing the game, in certain specific rooms (e.g. during the Trench room) the players will be able to use different weapons:

GUN	DAMAGE	HIT TYPE	FIRING TIME
Pistol	Basic	Low spread	Medium
Shotgun	Basic	High spread (4 bullets)	Slow
Assault rifle	Medium	Medium spread	Medium
Sniper rifle	High	Straight	Slow
SMG	Basic	High spread (1 bullet)	High

It is important to notice that the in-game model of the weapon won't differ from one kind or the other as the players will be able to understand which kind they are handling by looking

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at their in-game HUD, which will provide an image of it. Here follows the model of the



weapon, with and without a temporary texturing.

### 5.3.3.2 Power-ups

While playing, a player may find a “power up” and he/she can activate it by walking on it.

The single power-up can be used by one player at a time.

POWER UP	DESCRIPTION	EXPIRING TIME
Spartan Armor	It gives one extra life to the player	None
Marty's Hoverboard	It increases the player's speed	10s
Pogo stick	It increases the player's jump height, but it can't be stopped	10s
Power gloves	They increase the player's strength	Bound to the room
Blue police booth English phone	Increases the remaining time during a room	None

### 5.3.3.3 Varia mission objects and resources

- Pieces of the circuit;

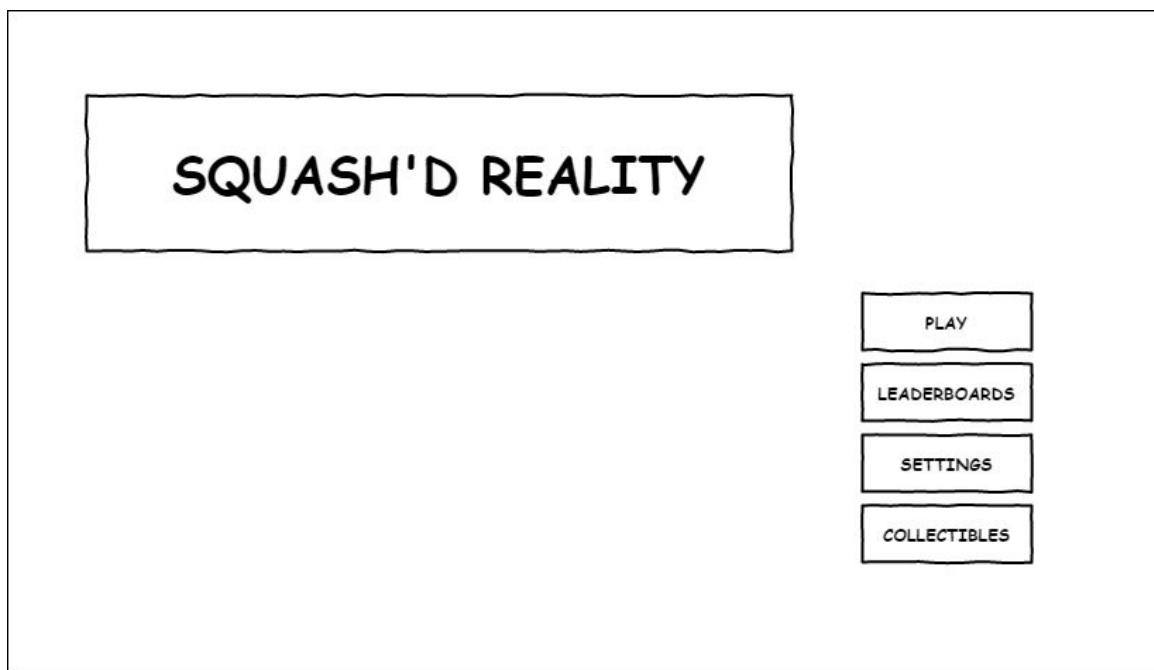
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- Different parts of dark puzzle, like boxes to move or levers;
- Recipe ingredients;
- Intel collectibles;
- Keys of the endings;

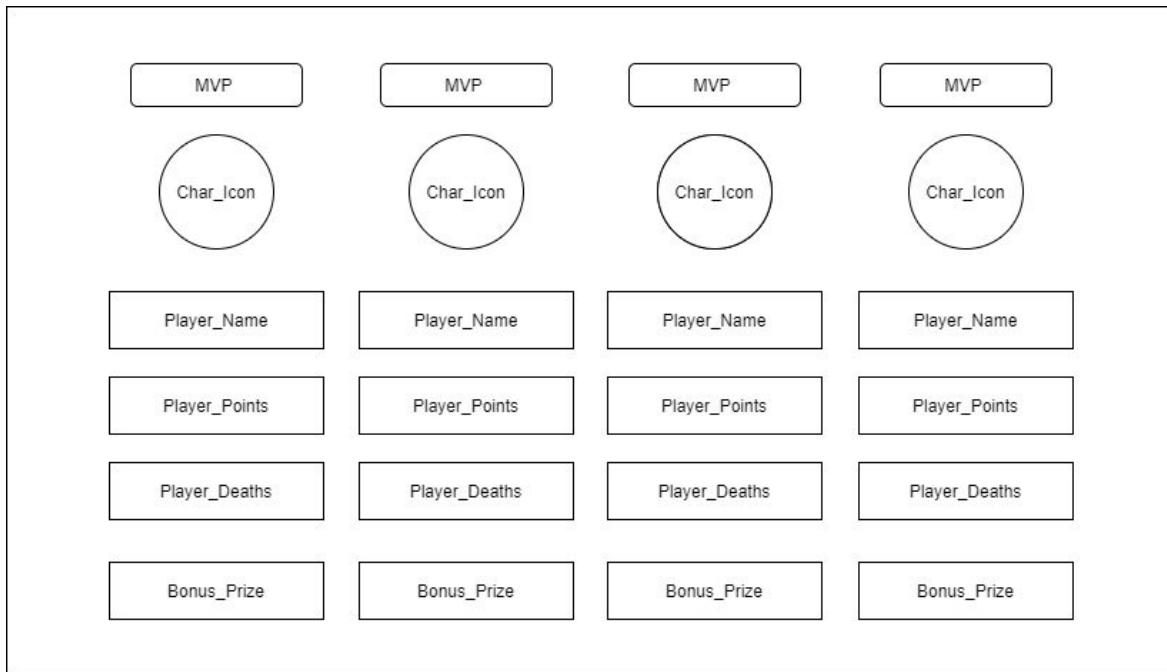
### 5.3.4 INTERFACES

#### 5.3.4.1 Main Menu



#### 5.3.4.2 Leaderboard

This wireframe shows the leaderboard shown after the chosen ending cutscene of each run. The “MVP” tag shown is only one per game, as well as the “Bonus Prize”, which will be assigned to one of the players only.





### 5.3.4.3 In-game UI

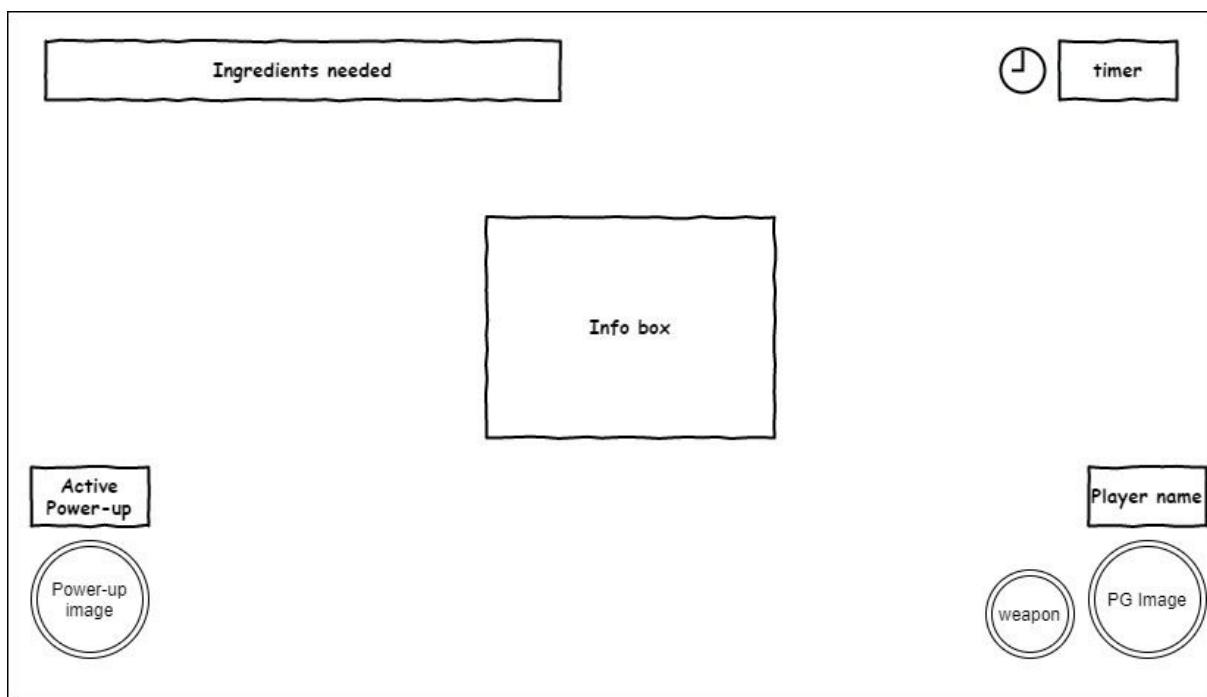
This wireframe shows the in-game UI.

“Ingredients needed” is shown only in cooking time rooms.

“Active Power-up” and “Power-up image” are shown only when a power-up is collected by the player.

“Info box” is a semi-transparent UI element that show text infos if required.

“Weapon” shows an image of the active weapon collected by the player.



### 5.3.5 RULES

- All the players have to survive and complete the levels together;
- Friendly fire is enabled;
- Players start with one life and they can increase it only by one;
- Enemies have only one life with a parametric life from 1 to 4 base hits;
- The player loses one life each successful hit received;
- The level is restarted if one player dies;
- The player can activate the power-up by simply walking on it;
- The player can move or use some objects in the level;
- The game ends when one of the endings is activated.



### 5.3.6 SCORING PARAMETERS

The leaderboard of each run is created out of these elements (follows name of the parameter with its description):

#### 5.3.6.1 General Maluses

- **Death:** how many times did the player die while attempting the challenge?
- **Time out:** how many times did the player run out of time?
- **Friendly Kill:** How many times did the player “accidentally” kill the teammates?

#### 5.3.6.2 General Bonuses

- **Powerup:** how many times did a player pick up a powerup?
- **Collectible:** how many times did a player pick up a collectible?

#### 5.3.6.3 Electro Pipeline Maluses

- **Electrocution:** how many pieces did the player put in the pipeline that resulted in a defeat?

#### 5.3.6.4 Electro Pipeline Bonuses

- **Cable Management:** how many pieces did the player put in the pipeline that resulted in a success?

#### 5.3.6.5 Dark Puzzle Maluses/Bonuses

- As the minigame is strongly cooperative, it's not correct to reward a single player for his actions. There will be no specific bonus/maluses for this specific room - except the general one.

#### 5.3.6.6 Cooking Time Maluses

- **This is not what I ordered!**: how many wrong ingredients did the player put in the cauldron?

#### 5.3.6.7 Cooking Time Bonuses

- **Greet the Chef:** how many correct ingredients did the player put in the cauldron?



### 5.3.6.8 TrenchTime Maluses

- **Friendly Fire:** how many allies did the player shoot to death? Additional to Friendly Kill as, considering the design of the level, a player facing another one while shooting is clearly doing something wrong!

### 5.3.6.9 TrenchTime Bonuses

- **Antivirus:** how many viruses did a player destroy?
- **Professional Sniper:** how many special viruses did a player shoot?

The ending will depend on the keys used to open the door: choosing an “all easy” path will lead to a non-ending while choosing an “all hard” path will lead to the best one (or will it?).

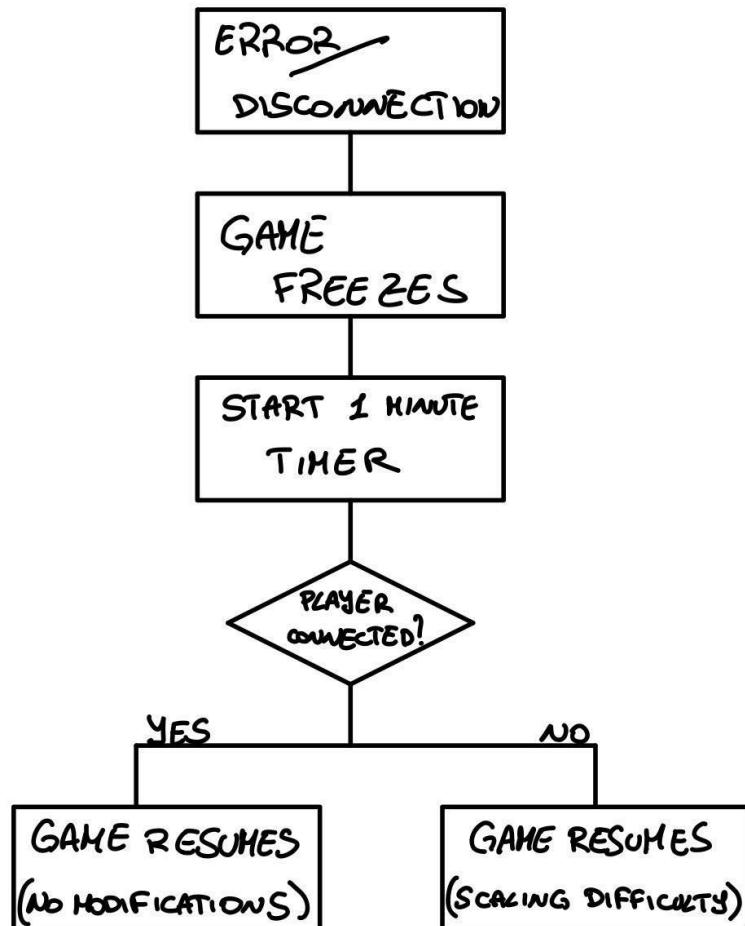
## 5.4 Modes and other features

The game has only a multiplayer mode where a team made of 2,3 or 4 players cooperate in order to achieve the goals of the room and successfully pass the challenges in the shortest time possible.

Some aspects of multilateral competition are though present given the fact that the players, after each room, will receive an evaluation based on various parameters on how they've behaved during the challenge and the level of cooperation they've had; in order to finalize all scores in a final scoreboard and elect an MVP.

### 5.4.1 ERROR/DISCONNECTION HANDLING

When a player, for whatever reason may that be, disconnects or the hosting server is not able to communicate with him/her, the game will be needed to handle this exception. In this case the handling would be as follows:



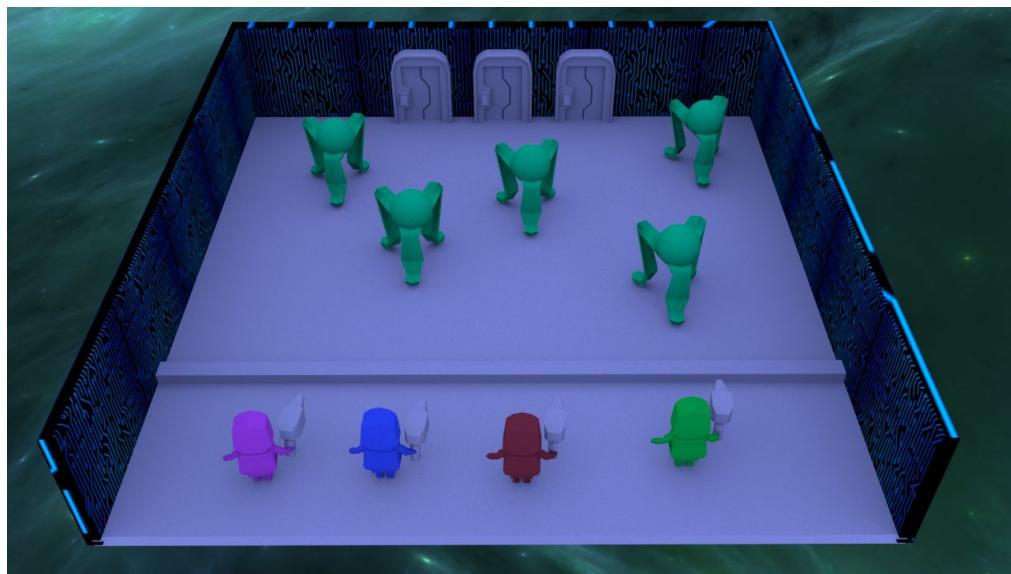
It comes without saying that, once the player is not able to reconnect to the game before the timer expires, the game won't allow him/her to furtherly play in the run. The timer is set to one minute as a placeholder, alpha and beta testing will be the judges whether its duration will be extended or not for the final release.



## 5.5 Levels

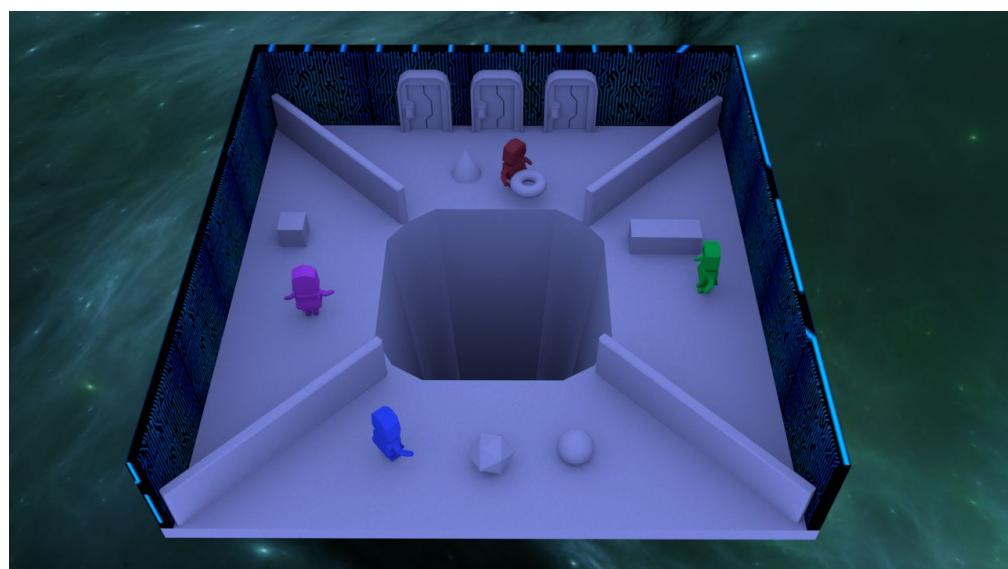
Here follows how some of the levels might look like for a general feeling of the different challenges and how the players will have to cooperate with each other in order to get to the endgame.

### 5.5.1 TRENCH TIME



Not actual in-game

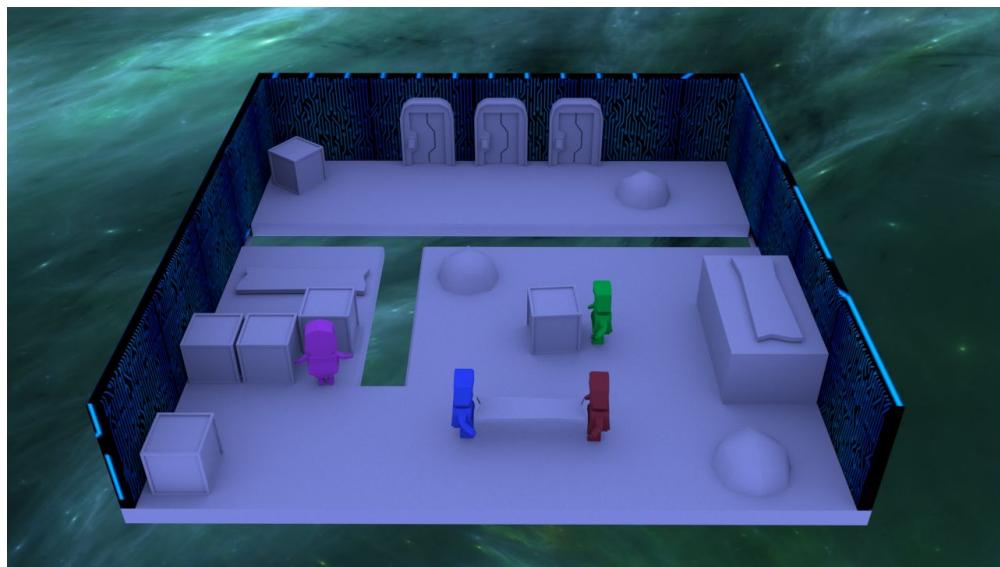
### 5.5.2 COOKING TIME





Not actual in-game

### 5.5.3 DARK PUZZLE



Not actual in-game

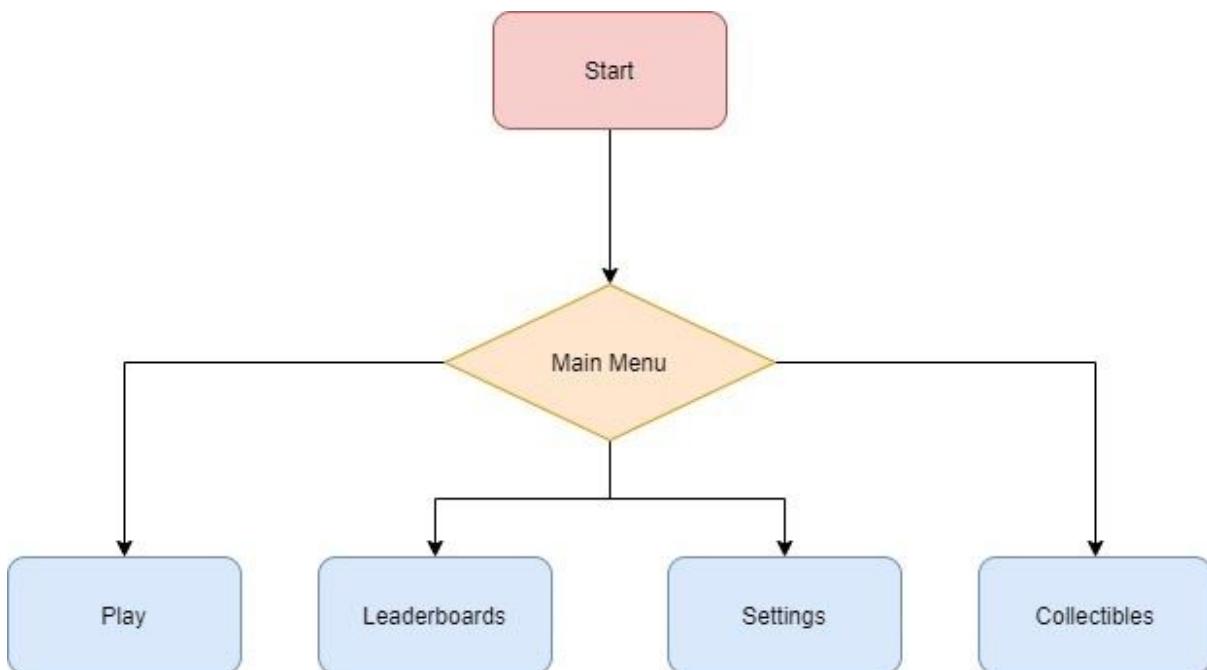


## 5.6 Flowchart

### 5.6.1 MAIN MENU

The main menu is the first menu window the player will see after starting the game.

There are four buttons: Play, Leaderboards, Settings, Collectibles.



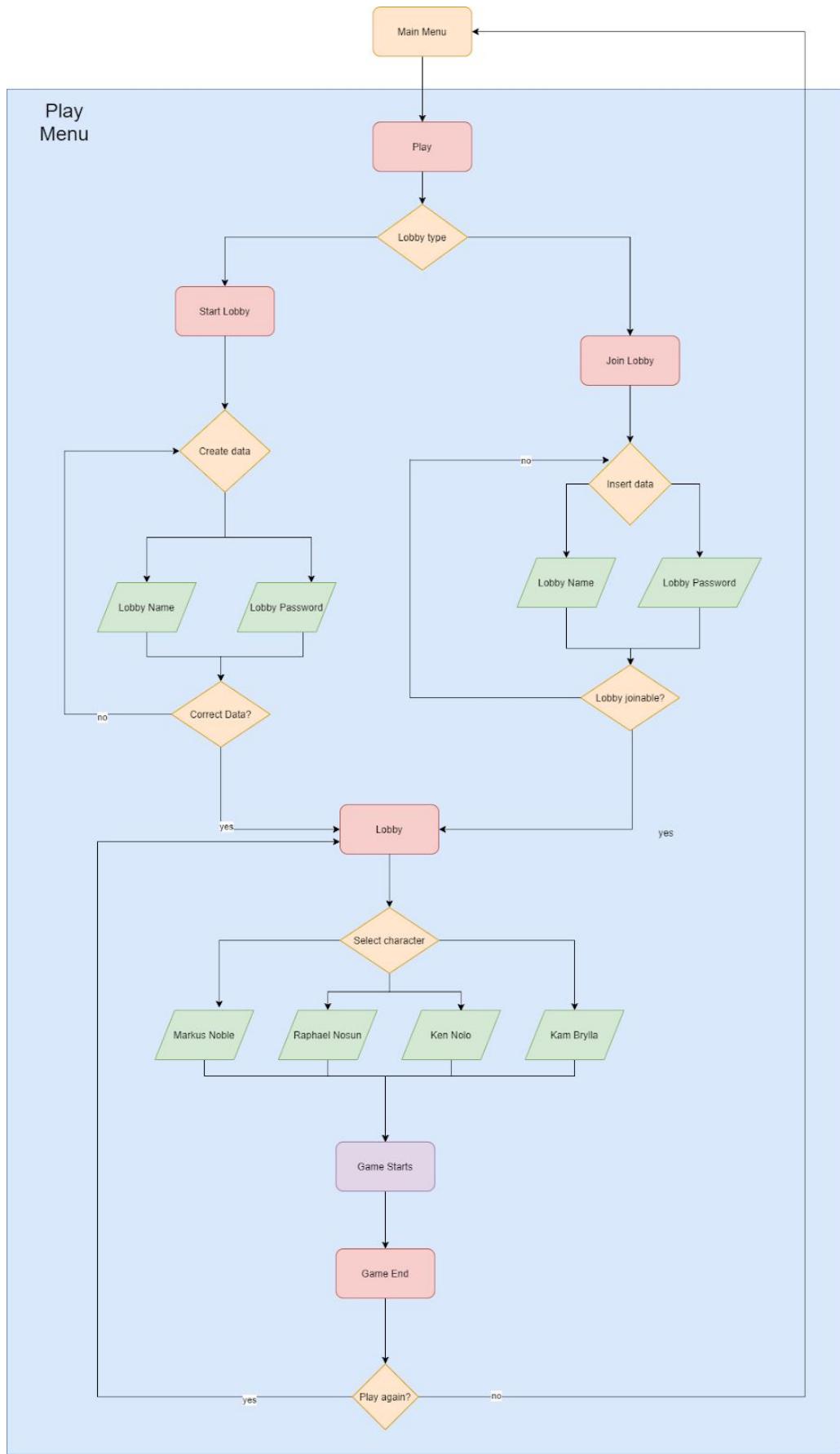
### 5.6.2 PLAY MENU

In the play menu the player can decide whether to create or join a lobby.

In the first case the player creates the lobby name and password.

In the second case the player inserts a friend's lobby name and password.

After that they are in the lobby and they have to choose the character to play, and then the game starts.

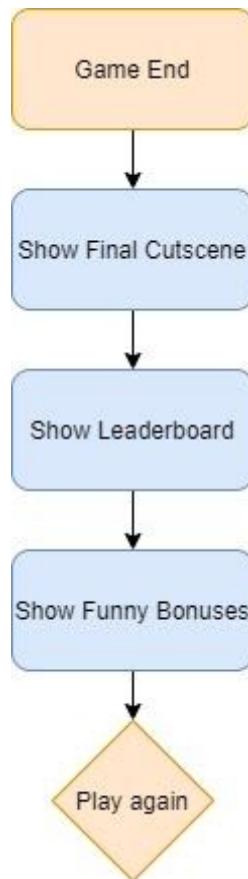


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### 5.6.3 GAME END

This graph represents how the game ends.





## 6. GAME CHARACTERS

### 6.1 Characters design

All characters will have the same stats and the same characteristics, in order to bring equality to the party game type.

### 6.2 Types

#### 6.2.1 PCs

- **Markus Nobel:** the sassy h4ck3r

Heir of the Nobel family, once the holder of the famous prize, loves to brag about it. Back in the days he decided to support the Squash tyranny hoping to fall in DoesBreez'yo's grace and restore the name of his family. When he saw his requests rejected by the tyrant, he became disillusioned with the regime and fled from his duties choosing to hack his family name out of the invaders' propaganda. After a training based on typo insertion and mustache drawing in propaganda billboards he decided to pass to a larger scale attack: hack the propaganda HQ to replace every billboard with one of his family. Sadly his attack goes south pretty fast, as he's soon discovered and held captive.



- **Raphael Nosun:** the prankster cleric

Orphaned when he was just a child, he was taken in custody by the clerics of the Squash New Church. Despite his love for wisdom, he loves even more to joke and prank everyone



around him. One day, though, he pulled the clerics' strings too hard: during a function he dressed himself as a sasquatch exclaiming "I'm the almighty Sas-squash! Yield before my magnificent fur!". The clerics didn't enjoy the prank as he expected. They called the authorities who imprisoned him for blasphemy.



- **Ken Nolo:** the kind hearted giant

Born and raised in the last sicilian bakery family, he became DoesBreez'yo's personal baker after proving himself to be the only one capable of baking the glorious Cannolo of Tardigrades. His kind heart was though not satisfied with the famine situation suffered by the population, so he habitually sneaked leftovers from the tyrant's kitchen. Unfortunately he was discovered and put in jail not only for his charitable action, but also for wasting precious tardigrades supplies.



- **Kam Brylla:** the charming artist

Chief of the Squash Propaganda Department and alcoholic because the dissatisfaction this brought to her artistic spirit. Unable to stop her creativity, she found shelter for her art in the needs of the resistance. She took part in art competitions which fed the rebels' minds

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and, of course, made anti-propaganda posters for them. Discovered in the worst timing ever while drunkenly painting a sacrilegious picture of DoesBreez'yo french kissing a Tardigrade, she was locked up for iconoclasm.



## 6.2.2 NPCs

The NPCs of Squash'd Reality are mainly accessories to the story more than actual “gameplay modifiers”. Apart from the Squashes that, from time to time, will affect the playing area, the other NPCs will be used for guidance through the game and story-telling.

- **Squashes**

This advanced alien race has been thriving and expanding their knowledge and influence across the galaxy for generations. Their greatness and fame are, though, the fruit of a horrible massacre: for centuries they've been enslaving, breeding, and killing thousands of thousands of poor innocent Tardigrades. After years of mindless slaughter, they've finally depleted and exterminated all Tardigrades' colonies throughout the galaxy, forcing the advanced alien race to start a hideous search exploration on other planets.

Health	Movement	Attack type	Attack damage
N/A	N/A	N/A	N/A

- **AntiVirus**

Automatic defenses of the Simulated Reality our characters are imprisoned in. They're programmed to blindly charge the invaders and literally blow it up. Their strength is in their conspicuous number and their kamikaze AoE attack. Shoot 'em up before it's too late!

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Health	Movement	Attack type	Attack damage
20	Follows player	Exploding	30

- **Salma O'Moore**

Heir of a long ancestry of warriors, the hero of all humanity started in his young years his training for the moment in which to prove his worthiness to the whole world. During the first Squash wave of invasion, O'Moore single-handedly defeated a whole battalion with his bare hands, gifting humanity the very first victory against the aliens. Long he awaited this moment, the fame that came with it and the mediatic power he acquired throughout the globe. He has officially become the hero and everyone is counting on a second victory when another wave of invasion threatens humanity. The battle rages on the mountains, but the aliens learned their lesson and focused all the fire on O'Moore, killing him instantly where he stood.

Health	Movement	Attack type	Attack damage
N/A	N/A	N/A	N/A

- **V.I.S.T.A. (Very Important Squashes' Tardigrades Acquirement)**

V.I.S.T.A, as the name suggests, is an A.I. designed to identify and acquire the tardigrades from the various planets of the world.

It is also in charge of the automatic defenses of the space ships.

It guides the party through the different rooms mocking them for their unsuitability.

It also makes a great coffee.

Health	Movement	Attack type	Attack damage
N/A	N/A	N/A	N/A



# 7. STORY

## 7.1 Synopsis

In a world torn by an **alien invasion**, four brave heroes have to breach the mothership to retrieve the **elixir of resurrection** made with **Tardigrades** and **bring back to life the hero** that managed to hold the invaders off in a first attack several years back. It's just when they finally obtain the potion that their **troubles begin**: they're **trapped into a simulated reality** and the only way out of it seems through the **series of challenges** in front of them.

## 7.2 Complete story

Our **four valorous humans** gathered all their courage and decided to give it all, no matter the cost! They had to **obtain a magical elixir** and try to **revive the hero of the past**, so that the oppression would end and so that all those **poor ugly tardigrades would stop being slaughtered!** With their brains full of plans, their hearts filled with bravery, and their stomachs upside down, they finally found the opportunity to try and solve it all: stealing an enemy spaceship to reach the orbiting Mother Ship, where the elixir is held.

As they approached it, surprisingly nothing happened. No defenses, no resistance, no scary laser cannons. Also, the mothership looked suspiciously empty: this was too easy. Even the sign on the walls flashing "revive elixir" pointing in the right direction looked difficult to trust. But there was no time to overthink: they were there, with the fluid in their reach! They finally saw it: a tiny bottle suspended in the air, at hand reach. But as **Kam Brylla** squeezed it with her hand, the room started glitching... **It was a Trap!**

Our four heroes are now stuck in a **simulated reality**. The only way out seems through a series of **variegated challenges of growing difficulty**, which comes out are even quite **fun (except for the part where they die)!** It almost looks like a **game!**

## 7.3 Backstory

Our journey starts in the future, in the year 2250. The human race has made some wonderful steps ahead in all fields of the topic: humanitarian, technological, medical, and even philosophical. There was one place where they didn't look though, the stars!

From the sky came the **aliens**, a more than advanced race which relied on their own survival and technological advancements on the most precious resources in the universe: the Tardigrades. The Tardigrades are micro-animals able to resist (and exist) in all kinds of environments and are able to do wonders if connected with the proper technology and

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studies. The aliens have been harvesting the Tardigrades for centuries, erasing their existence from the galaxy, apart from the Earth, which is now the richest planet, therefore making it a tactical target for the **aliens**.

Although amazingly powerful, the Squashes' first try to conquer Earth was unsuccessful thanks to the effort of the **valorous paladin Salma O'Moore** who single-handedly managed to defeat the commanders of the enemy army **forcing them to fly**.

One century later, without a suited hero, humanity has finally been reduced to slavery. Mere instruments to find and gather as many **tardigrades** as possible: tiny hideous creatures, but the only known species capable of **surviving in the void of space**. As **DoesBreez'yo**, the leader of the space invaders, proudly said during the usual propaganda routine: "**tardigrades were the last ingredient to manipulate life!** Now that we have it, **we'll be beyond death itself!**" and pouring a pinkish paste on a fellow's corpse, maniacally laughed when it **raised from the underworld**.

What humanity doesn't know is that Salma O'Moore, actually, was a Squash with a mysterious plan.

## 7.4 Narrative devices

Part of the backstory will be told during the introductory sequence in order to provide a clear explanation of the world where our characters live.

During the exploration, the players may have access to terminals which contain lore about the world and the Squashes.

V.I.S.T.A. really likes to talk and sometimes will give our player some useful information about the Squashes, or maybe not.

## 7.5 Endings

### Ending 1 (Hard ending):

The party accomplishes its mission and revives the hero of the past. The hero tells them the truth: he actually is the first alien arrived on the planet many years before and the whole mission on the ship has been a test for the Squashes to understand the real potential of humanity and if any human could be exploited. The response surprises our heroes: humanity has proven to be too smart and it must be destroyed because Squashes can't use them as simple slaves. Markus, Raphael, Ken and Kam are saved but earth explodes, the Squashes acquire the Tardigrades and run off to a new planet.



### **Ending 2 (Medium ending):**

The party is successful in its mission, is able to jump off the mothership and revive the hero. The hero arises from the tomb, opens its mouth to speak, but a weird rebooting animation starts. V.I.S.T.A. talking to Salma without being spotted by the heroes says: "These humans may be too smart, we need further investigations".

### **Ending 3 (Easy ending):**

The party gets to the bottom of the ship, ready to get off, but V.I.S.T.A. announces to them that their effort hasn't been enough to qualify them as worthy of escaping the virtual reality and reboots the whole simulation in order to let them start over.

## 8. THE GAME WORLD

"Squash'd reality" world is our Earth in 2350 conquered by an evil alien race named "Squashes". Humanity is now enslaved and used as a mere instrument to find and gather as many tardigrades as possible.

The game is set on a Squashes' spaceship simulated reality room.

All the rooms are designed by a mischievous I.A, V.I.S.T.A in order to test our four heroes.

Players can visit the already completed rooms whenever they want.



## 9. MEDIA LIST

Here follows a list of the needed assets that will be needed to be created for a 1.0 version of the final game.

### 9.1 Interface assets

Name	Description
Menu buttons	The buttons used in the Main Menu and In-Game Menu
Main font	The font used throughout the whole game, from in-game UI to menus

### 9.2 Environment assets

Name	Description
Room	Challenges room made of walls and floor
Platforms	Platforms used in <i>Dark Puzzle</i> <sup>6</sup>
Planks	Planks used in <i>Dark Puzzle</i>
Barrels	Barrels used in <i>Dark Puzzle</i>
Buttons/Levers	Buttons and Levers used in <i>Dark Puzzle</i>
Cauldron	Cauldron used in <i>Cooking Time</i> <sup>7</sup>
Ingredients	Ingredients used in <i>Cooking Time</i>

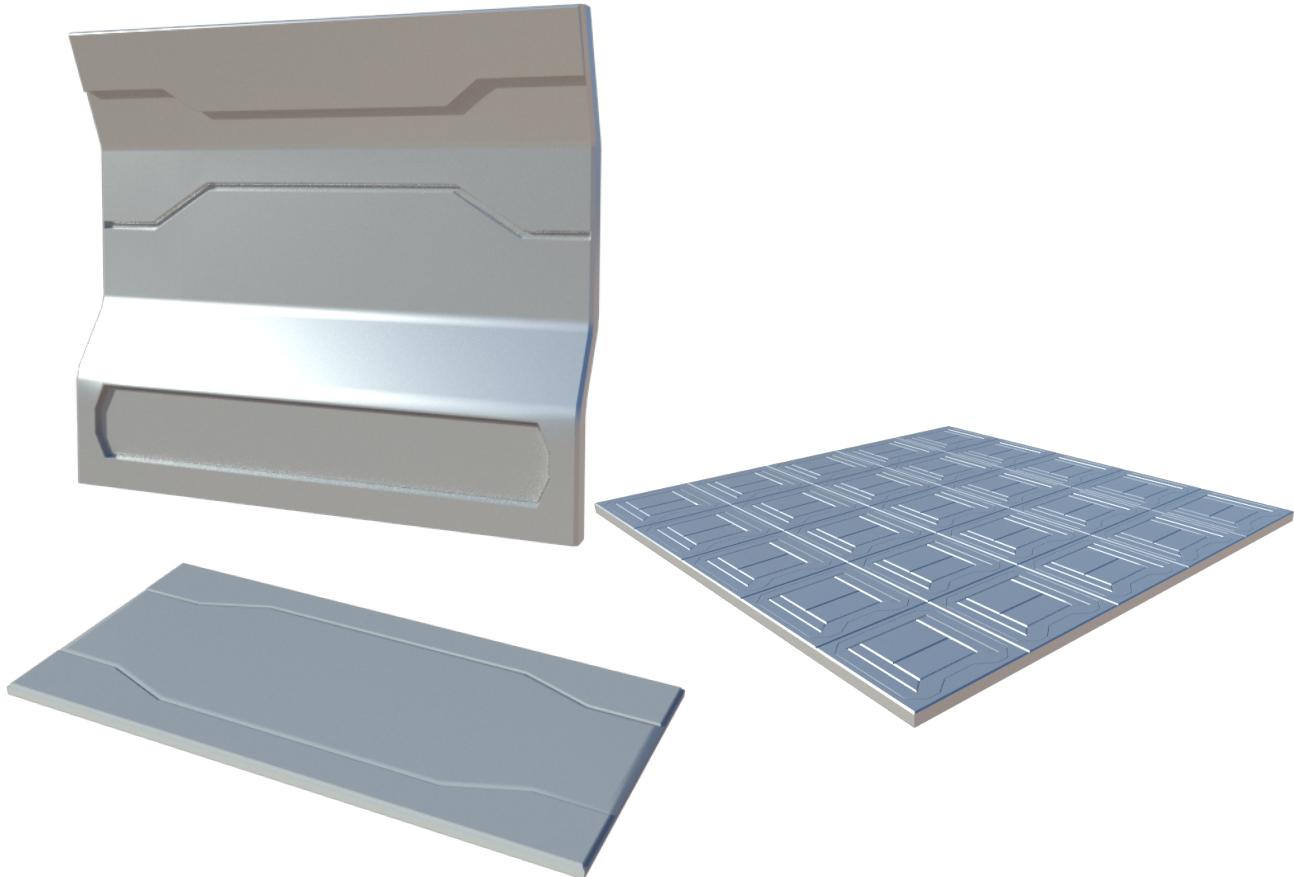
<sup>6</sup> See [Section #5.2](#)

<sup>7</sup> See [Section #5.2](#)



Circuit pieces	Circuit pieces used in <i>Electro Pipeline</i> <sup>8</sup>
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In order to provide a more visual effect of what the environment assets might look like, here follows some previews:



### 9.3 Resources assets

Name	Description
Pistol model	Image and model of pistol used in <i>Trench Time</i> <sup>9</sup>

<sup>8</sup> See [Section #5.2](#)

<sup>9</sup> See [Section #5.3.3.1](#)



Shotgun model	Image and model of shotgun used in <i>Trench Time</i>
Assault rifle model	Image and model of assault rifle used in <i>Trench Time</i>
Sniper rifle model	Image and model of sniper rifle used in <i>Trench Time</i>
SMG model	Image and model of SMG used in <i>Trench Time</i>
Spartan armor powerup model	Image and model of Spartan Armor power up <sup>10</sup>
Marty's Hoverboard	Image and model of Marty's Hoverboard power up
Pogo stick	Image and model of Pogo stick power up
Power gloves	Image and model of Power gloves power up
Blue English police phone booth	Image and model of Blue English police phone booth power up
Intel terminal	Model of the terminal used in rooms for acquiring intel
Ending keys	Image of the ending keys

## 9.4 Characters

### 9.4.1 MODELS

Name	Description
Markus Nobel	PC model <sup>11</sup>

<sup>10</sup> See [Section #5.3.3.2](#)

<sup>11</sup> See [Section #6.2.1](#)



Raphael Nosun	PC Model
Ken Nolo	PC Model
Kam Brylla	PC Model
AntiVirus	NPC Model <sup>12</sup>

## 9.4.2 ANIMATIONS

Name	Description
Walking	Animation to apply to the four PCs
Jumping	Animation to apply to the four PCs
Dying	Animation to apply to the four PCs
Picking up	Animation to apply to the four PCs
Exploding	Animation to apply to the AntiVirus

## 9.5 Sound

### 9.5.1 SOUND EFFECTS

Name	Description
Walking steps	Walking steps to apply to the four PCs

---

<sup>12</sup> See [Section #6.2.2](#)



Death sound	Death sound to apply to the four PCs
Exploding sound	Sound to apply to the AntiViruses

### 9.5.2 VOICES

Name	Description
V.I.S.T.A. voice lines	Interacting voice lines to trigger
Markus Nobel voice lines	Interacting voice lines to trigger randomly
Raphael Nosun voice lines	Interacting voice lines to trigger randomly
Ken Nolo voice lines	Interacting voice lines to trigger randomly
Kam Brylla voice lines	Interacting voice lines to trigger randomly

### 9.5.3 MUSIC

Name	Description
Main Menu background music	Music played throughout the main menu

## 10. PROTOTYPE

Here follows a brief description of the prototype that will be presented at the given deadline. The prototype takes into consideration the development required time and the availability of the team members.



The players will be able to create a lobby and allow their friends to join in said lobby. Once the game starts, the players will be allowed in the waiting room<sup>13</sup> where they can start getting a general feeling of the controls for the challenges to come. Whenever ready, the players can enter one of the rooms in front of them and try out the different challenges. Each room will contain a piece of story in the form of collectibles that will bring the players more and more into the story, allowing them to have a taste of the mysteries that lie behind the Squash'd invasion.

The game won't have the structure that the open beta will have<sup>14</sup>, therefore the different endings, the final leaderboard and the increasing difficulty won't be available. All of this will be done in order to allow the players to feel what the final feeling of the product would be like.

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<sup>13</sup> See [Section #5.2](#)

<sup>14</sup> See [Section #5.2](#)

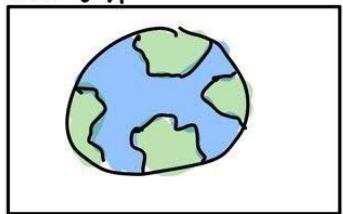


## 11. STORYBOARD

### 11.1 Intro

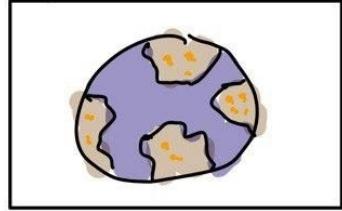
Here follow the storyboard for the intro of the game:

SHOT LA



- Fader-in from black
- Joyous and prosperous Earth appears
- Opp screen voice: "For milleniac  
the human race lived on Earth,  
creating life and exploring the nearby  
stars, but..."
- Full screen splash & transition to SHOT LB

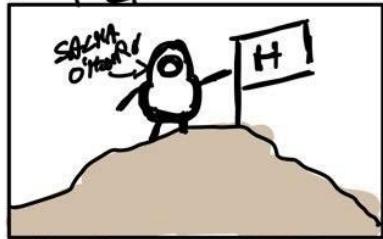
SHOT LB



- Earth now appears destroyed  
with fires all over the continent, water  
is polluted
- Opp-screen voice: "During year  
2250, when the human race was on the  
so called "Modern Golden Age," an alien  
race invaded the planet almost  
bringing the humans and their advanced  
technology to the brink of extinction."
- Transition to SHOT 2

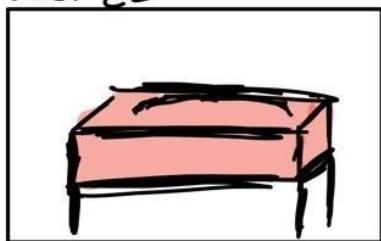


SHOT 2A



- Saline O'Moore appears on a hill, victorious while planting the human flag.
- Off screen voice: "Would that be the end? Obviously not. Fortunately, a hero emerged from the human ranks: Saline O'Moore. The hero managed to lead the resisting humans to a glorious battle, which ended with the defeat of the aliens.
- Transition to 2B

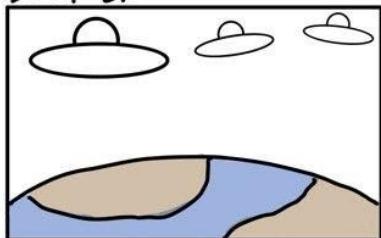
SHOT 2B



- Saline O'Moore now lies in a coffin during its funeral
- Off screen voice: "Human's freedom didn't come without a horrible price to pay. Before leaving Earth, the aliens managed to fire a blast towards O'Moore, that now rests in peace for eternity..."
- Fast forward to 3A.



SHOT 3A

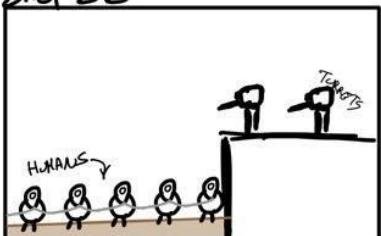


- Alien ships coming back to Earth for a second invasion.

Off screen voice: "A few years later, when the alien invasion was just a far memory, the aliens came back. Knowing that the human hero was just resting in his grave."

• Full screen flesh to SHOT 3B

SHOT 3B



- Humans are enslaved and brought in prisons designed by the aliens

• Off screen voice: "Aliens hated humanity, defined them as a plague. They started to lock everyone up, establishing a dictatorship. And it is here, in one of these prisons, that our four heroes met...."

• transition to HA



SHOT 4A



- Focus on Markus Hobbel that is writing a hacking script on his laptop
- Off screen voice: "Markus Hobbel, a hacker with a zassy attitude?"
- Transition to shot 4B, Hobbel's square is frozen

SHOT 4B



- Focus on Raphael Neun, who's reading the Bible in his church
- Off screen voice: "Raphael Neun, a cleric who devoted his life to God and proaks"
- Transition to shot 4C, Neun's square is frozen

SHOT 4C



- Focus on Ken Nolo, who's barking for DoesBreez' yo's
- Off screen voice: "Ken Nolo, an exceptional barker with a heart probably too kind"
- Transition to shot 4D, Ken Nolo's square is frozen

SHOT 4D



- Focus on Kalm Brille, who's painting a mocking poster
- Off screen voice: "And Kalm Brille, a modern Banksy, whose artistic side is not appreciated by the aliens"
- Transition to shot 5A

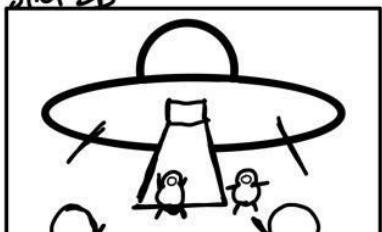


SHOT SA



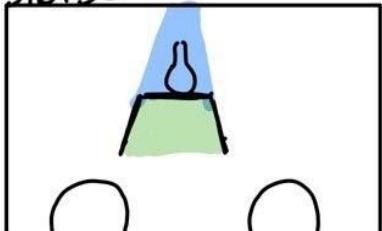
- Ken Nola whispering to Raphael Nasen
- Off screen voice: "While locked up, the heroes wanted to know of an elixir held by the Squash'd that could bring life the dead."
- Transition to SB

SHOT SB



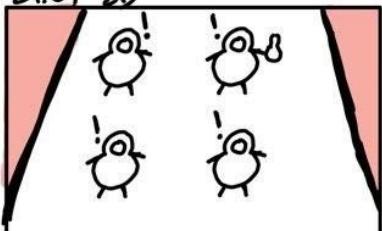
- Our four heroes are in front of the mothership while boarding it.
- Off screen voice: "So, without further ado, they decided to board the ship and steal the elixir, in order to bring back to life Salvo O' Moore and send back the aliens once again".
- Transition to SC

SHOT SC



- Heroes are now in front of the elixir ready to steal it.
- Off screen voice: "they managed to infiltrate the ship, probably it was too easy, but the important thing was that the elixir was there! Just to be grabbed! They stole it and started their way back to the entrance, but..."
- Transition to SD

SHOT SD



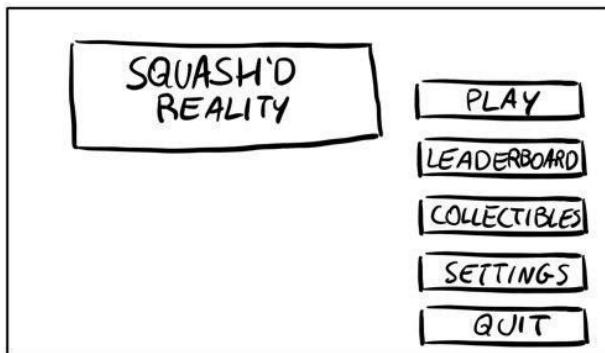
- Our four heroes are caught with the elixir and trapped in the virtual room. Arms are going off.
- Off screen voice: "Just when they thought they made it, the alarms went off and the reality where they were standing in started to fade and change. The automated security system trapped them, so the fate of humanity was, once again, at risk".
- Fade to black.



## 11.2 In-game

Here follows the in-game storyboard:

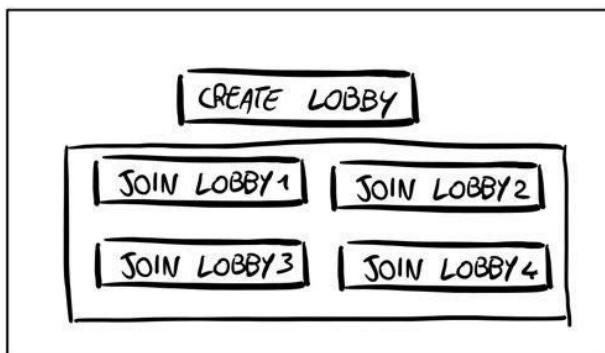
MAIN MENU



The main menu is the first menu window the player will see after starting the game.

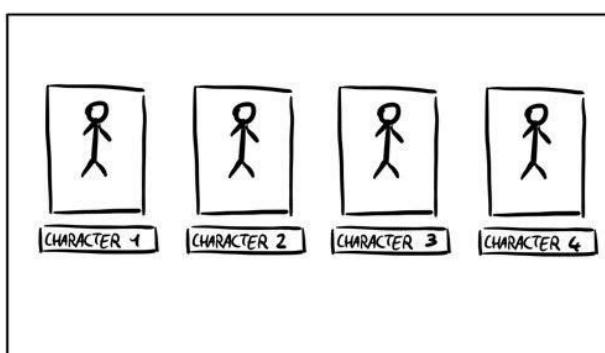
The player selects "Play" in order to reach Lobby Selection

LOBBY SELECTION



Here the player can create or join a pre-existent lobby.

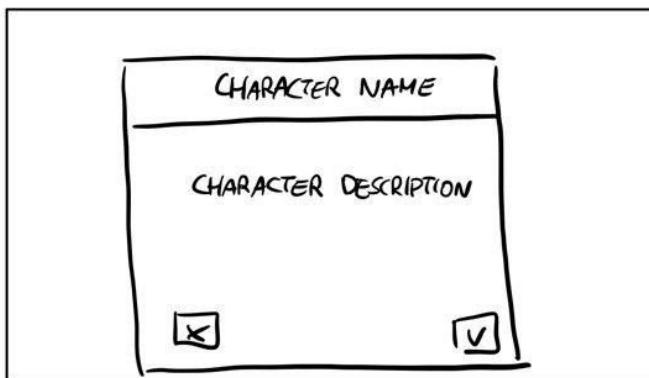
CHARACTERS SELECTION



Here the player select the characters he/she wants to play

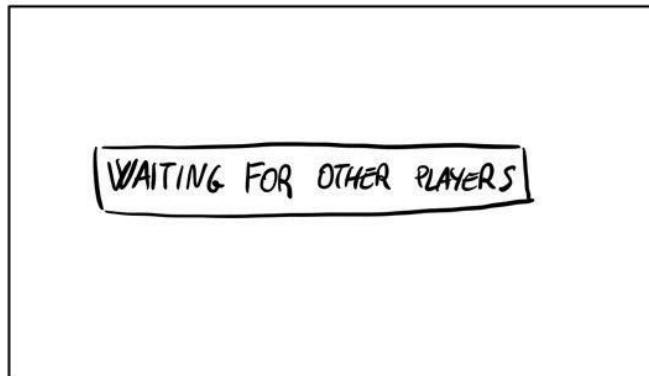


### CHARACTERS SELECTION - CHARACTER DESCRIPTION



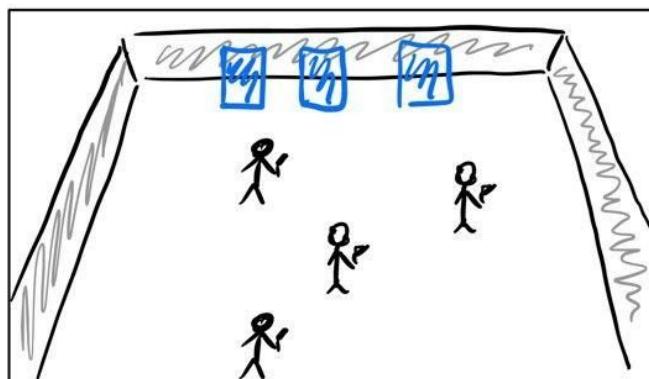
The player is shown the description of the character and can select it or not.

### CHARACTERS SELECTION - WAITING FOR OTHER PLAYERS



The player must wait for everyone to choose

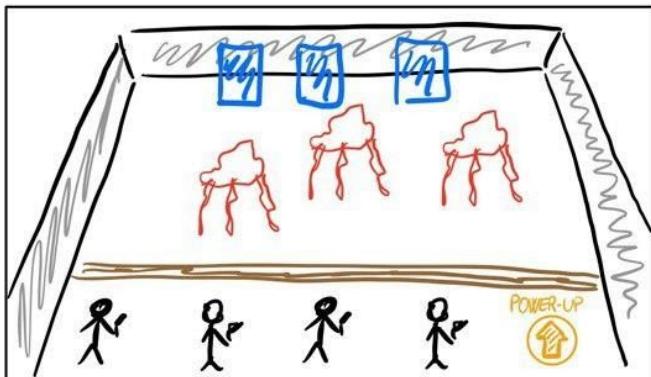
### LOBBY - WAITING ROOM



In this waiting room the players can start getting a general feeling of the controls for the challenges to come. Whenever ready, the players can start the challenges by entering the blue door.

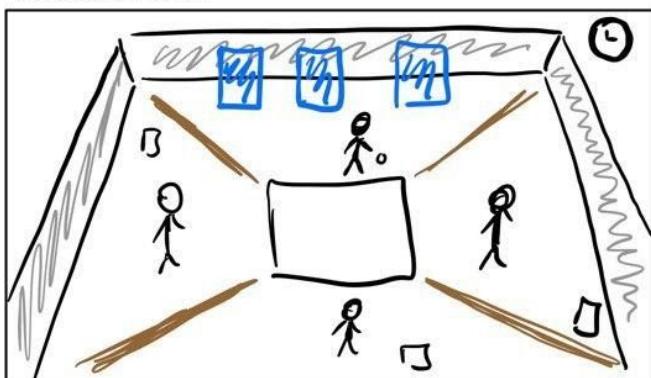


### TRENCH TIME



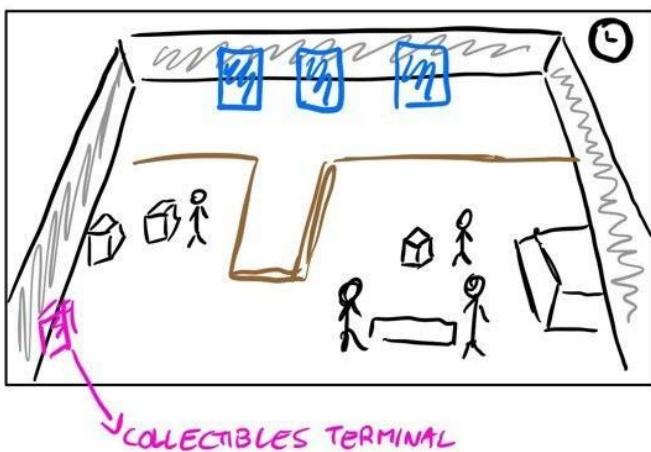
In this room the players have to survive different alien waves.

### COOKING TIME



The players have to combine ingredients in order to create the "blasting cannolo" and escape the room.

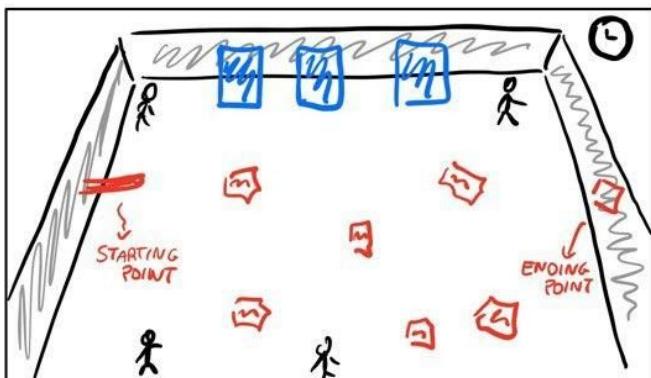
### DARK PUZZLE



The players have to overcome the obstacles and reach the door in a dark room thanks to the help of their teammates who will light their way.



### ELECTRO PIPELINE



The players will spawn in different locations of the same area and have to find all the pieces required to close the circuit.

### TIME ENDED



If the players can't complete the challenges in time "Time ended" is shown.

### LEADERBOARD

MVP			
Icon	Icon	Icon	Icon
Name	Name	Name	Name
Points	Points	Points	Points
Deaths	Deaths	Deaths	Deaths
Prize	Prize	Prize	Prize

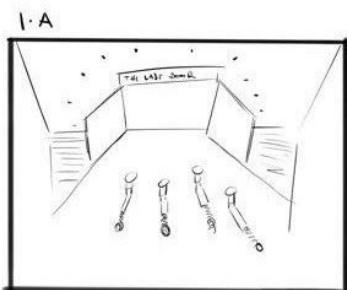
If the players have correctly completed the challenges a leaderboard is shown for a minute, assigning the MVP trophy and a Bonus Prize.



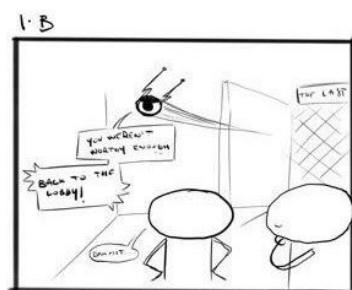
## 11.3 Ending

Here follows the story board for two of the possible endings<sup>15</sup>:

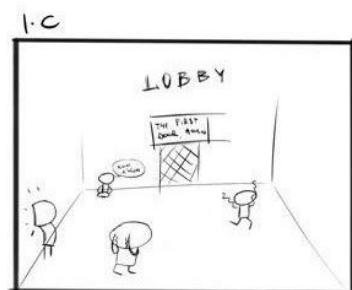
### 11.3.1 EASY ENDING



THE FOUR HEROES FINALLY  
OPEN THE DOOR LEADING  
TO THEIR FREEDOM



BUT V.I.S.T.A. BLASTS OUT OF  
IT, SAYING THE LAST WORDS  
THEY WANTED TO HEAR ...



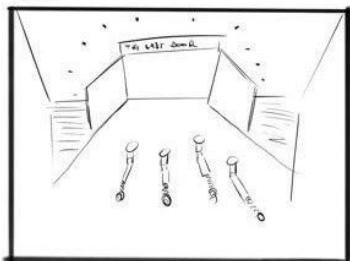
THE HEROES ARE THEN  
BROUGHT BACK TO THE  
LOBBY TO BE TESTED  
AGAIN (AND AGAIN, AND  
AGAIN...)

<sup>15</sup> See [Section #7.5](#)



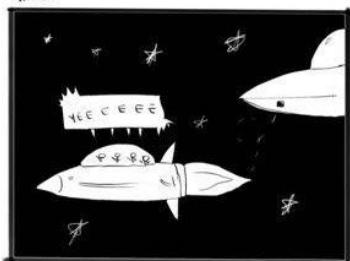
### 11.3.2 MEDIUM ENDING

11.A



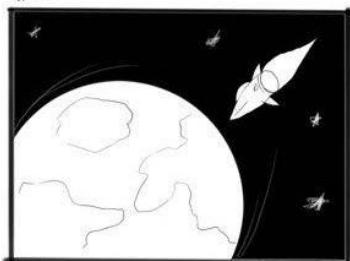
THE FOUR HEROES FINALLY  
OPEN THE DOOR LEADING  
TO THEIR FREEDOM

11.B



THEY MANAGE TO ESCAPE  
FROM THE MOTHER SHIP

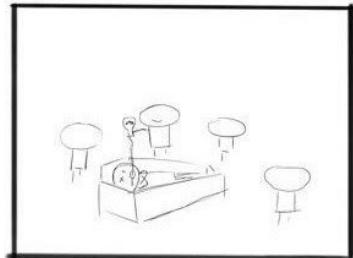
11.C



AND THEY GO BACK TO  
PLANET EARTH

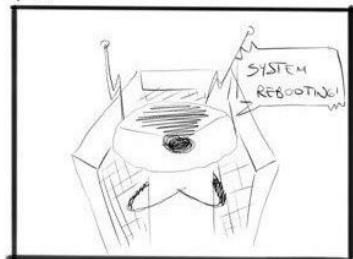


II-D



THE HEROES FINALLY GIVE  
THE ELIXIR TO THE FALLEN  
HERO...

II-E



... BUT AS SOON AS HE  
WAKES UP, A FAMILIAR  
VOICE SHOUTS OUT

II-F



... AND THEY'RE YET  
AGAIN BROUGHT BACK  
TO THE LOBBY