Game Design (Draft)

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Group PixelPerfect

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Table of Contents

- 1. Gear
- 2. Players
 - 2.1 Virtual Reality
 - 2.2 Crew Member
- 3. Gameplay
 - 3.1 Goal
 - 3.2 Player gameplay
 - 3.2.1 Virtual Reality
 - 3.2.2 Crew Members
 - 3.2.3 Combined Relation
 - 3.3 Difficulty Level

1. Gear

The game is a unique party game where a few things are required:

- The Virtual Reality (refered to as VR) headset with corresponding controller
- Android Devices

Only one OR is allowed during the game. The one carrying the VR headset is the one that creates a lobby from the main menu and takes the role as captain.

The other players, refered to as crew members, will be using a mobile phone or tablet. With the app on their device they can connect to the lobby of the host, the OR player. For the remainder of the game, the crew members will use the touchscreen of their device to push buttons.

2. Players

The game requires a minimum of 2 players and a maximum of 5 players. Also, there must be at least one Virtual Reality (VR) player in the game and at least one mobile device player.

2.1 Virtual Reality

The VR player is the player that is able to start the game. When game is started the player begins in the main menu where it can select the options: New Game, Options, Exit.

When choosing 'New Game' the VR player gets into a public lobby where it can wait for other players to join the game lobby. When everyone is ready the VR player is able to start the game. Once the game is started the VR player functions as the captain of the spaceship. Further gameplay will be explained in section 3.2.

2.2 Crew Members

The players without the VR, refered to as crew members, use a mobile device. Via an app they can join the lobby after the VR player has created it. The crew members cannot select any option if they are ready, because they can already communicate with the VR player, who should be in the same location.

Before the crew members agree to be ready they should select a role to play in the game. Every role has different kinds of mini-games and communication tasks. The roles that they are able to chose from are:

- Engineer
- Gunner
- Scientist
- Meer

After the crew members chose a role, the VR player is able to start the game. The crew members then get positioned in their working room of choice:

- Engineer in the Engine Room
- Gunner in the Weapons Room
- Scientist in the Lab
- Meer

The crew members can then get instructions from the captain and begin their tasks which will be further explained in section 3.2.

3. Gameplay

The gameplay desides the balance of entertainment between the players. Factors influencing this balance include difficulty, idle time and progress. Having an actual goal is also important and will be discussed here.

3.1 Goal

The goal of the game is to make it to the final planet without losing all the ship's health.

A second goal is about having a highscore. When the final location in the game is reached a highscore will be set. The highscore depends on how much health the spaceship has at the end of the run and on the amount of credits earned.

Credits can be earned throughout the game by the players. The captain can earn credits by completed quests when they arise. The crew members can earn quests by clicking on collectibles at their specific locations. Mini-quests also give credits. The end of the game also gives a list of credits earned by the crew members.

3.2 Player Gameplay

All of the players must use their device to interact with the game. They must all communicate and/or play mini-games.

3.2.1 Virtual Reality

The VR player will be the captain of a spaceship. When the game starts he gets to have a 360° look of the captains cabin. From here the captain will have to monitor the ship's parameters. Whenever there is a notification, a sound will be heared with corrosponding visuals. Different kind of problems will occur in different locations in the cabin. Below is a list of situations that can occur on the ship:

- Fire
- Gas leak
- Plasma leak
- Enemy attack
- Asteroid field
- Meer

Whenever a situation like this occurs a light will burn in the cabin of the captain, but in the case of an enemy an enemy ship will apear outside and captain is able to see this. The captain must monitor all of the lights on his panels or keep his attention to enemies/asteroids. Whenever the captain notices something that should be taken care of he can communicate to his crew members to help him.

Another decision the captain can make is quest paths. Everytime that the ship arrived at a certain location a new quest must be chosen. This is done a two-way choice. The captain can chose 1 of each location whereafter the ship sets course to this destination. The desicion making is done in a fast-pace way where there is no a lot of thinking involved, exceptfor communication with the other members which way to chose. The following locations are likely to occur:

- Planet
- A ship in dire need
- Meteroids
- Meer

The game will have a length of about 10 locations. Having around 1 minute at each location.

3.2.2 Communication

Communication in the game is vital to win the game. Whenever the captain has a situation to solve he/she will council the crew members. The crew members will then have to find the best answer to the problem. The answer involves more interaction between crew member and captain. The crew member might, for example, have to ask for more information about the problem before he can solve it.

3.2.3 Mini-Games

Every role has its own mini-games when a problem is around. The main mini-quests will be highlighted here:

Enemy Attack:

- Visuals: an enemy ship will appear in front of the spaceship.
- Communication: the captain communicates with the Gunner about the situation.
- Task: Draft Idea: The captain states the unique details of the enemy ship to the gunner. The gunner then can decide which ammo type to use according to what kind of enemy ship it is. With it, the captain gives a few coordinates to the gunner which the gunner must accurately follow. If the gunner fails, then damage will be done to ship.

Plasma Leak:

- Visuals: a light flicker in the cockpit.
- Communication: between captain and worker at the specific location.
- Task: *Draft Idea*: The engineer/mechanic must play a game on their mobile device in which they reconnect some broken pipes in a certain order. When re-activating the flow of plasma, the ship will have an electrical failure if the order of pipes was incorrect.

Gas Leak:

- Visuals: a light flicker in the cockpit.
- Communication: between captain and worker at the specific location.
- Task: TBD

Asteroid Field:

- Visuals: an asteroid field appears.
- Communication: between captain and workers
- Task: Draft Idea: Captain's job is to move the ship to dodge the asteroids. If the ship is hit, the captain will be notified of where the impact was, as well as how long until the impact site becomes too hard to repair. The workers need to repair the damage before time runs out. Bonus awarded if ship suffered no hits.

Fire:

- Visuals: fire flickers showing where the fire is.
- Communication between captain and worker at the specific location.
- Task: *Draft Idea*: Crew members must pass fire hose along their phones and avoid a small obstacle on each of their devices. If one person fails, the others must play longer. If all fail, instant failure due to ship explosion.

3.2.4 Idle time

The Idle time in the game is defined as time between mini-quests and communication. The captain should almost have no idle time whatsoever. The crew members, however, dont always have a task to carry out.

This problem gets solved by introducing collectibles and mini-tasks. Every location gets his own sort of collectibles. When picked up by a crew member, it gives a certain amount of credits.

3.3 Difficulty Level

The difficulty level of the game can be defined in a few different ways.

Some may find the game more difficult, because of the communication that is required between players. Some groups are better at this and find it not that difficult.

Another abstract way of difficulty is the highscore of the game. Eventually a highscore will be hard to beat.

The two-way choices the captain must make in order to route to the final location give a lot quests that involve extra communication between players. Each of these quests will have their own relative difficulty level.