

Roach Trip

Game Design Document <version #1>

Liminal Code Studio

Written by

Alejandro Mosquera + Mauricio Pineda + Sebastián Gómez + Sebastián Mira

June/2023

Copyright info, ex. All Work Copyright ©2023

<Studio Logo or Game Related Image>

Index

[Index](#)

[Overview](#)

[Elevator Pitch](#)

[Design Pillars](#)

[<Pillar #1>](#)

[<Pillar #2>](#)

[<Pillar #3>](#)

[Summary](#)

[Brief Description](#)

[Detailed Description](#)

[Theme/Setting/Genre](#)

[Main Objective](#)

[Aesthetics/Dynamics/Mechanics](#)

[Influences](#)

[What Sets This Game Apart?](#)

[Target Audience](#)

[Target Rating](#)

[Gameplay](#)

[Gameplay Summary](#)

[Brief](#)

[Detailed](#)

[Modes](#)

[Victory Conditions](#)

[Core Game Loop](#)

[<Element #1>](#)

[<Element #2>](#)

[<Element #3>](#)

[Core Gameplay Mechanics](#)

[<Mechanic #1>](#)

[Details](#)

[Implementation](#)

[<Mechanic #2>](#)

[Details](#)

[Implementation](#)

[<Mechanic #3>](#)

[Details](#)

Implementation

Story

Brief Summary

Detailed Outline

Characters

Character #1

Character #2

Character #3

Level Design

<Level #1>

<Level #2>

<Level #3>

Conveyance Mechanisms

<Mechanism #1>

Cinematics

<Cinematic #1>

<Cinematic #2>

<Cinematic #3>

Technical

Screens

Title Screen

Game

Inventory

Combat

Options Menu

Credits

Game Engine

Controls

<Button #1> - <Default Binding>

Function #1

Function #2

Function #3

<Button #2> - <Default Binding>

Function #1

Function #2

Function #3

<Button #3> - <Default Binding>

Function #1

Function #2

Function #3

Development

Classes

<Base Class #1>

<Base Class #2>

<Base Class #3>

Visual Art

Style

UI/HUD

Assets Needed

Characters

Terrain/Environment

Objects

Promotional Material

Audio

Style

Music

Sound Effects

Voice Acting

Project Scope

Time Scale

Anticipated Gameplay Time

Cost

Target Platforms

Team

<Team Member #1>

<Team Member #2>

<Team Member #3>

Monetization

Schedule

<Task #1> - <due date>

<sub-feature #1> - <due date if needed>

<sub-feature #2> - <due date if needed>

<sub-feature #3> - <due date if needed>

<Task #2> - <due date>

<sub-feature #1> - <due date if needed>

<sub-feature #2> - <due date if needed>

<sub-feature #3> - <due date if needed>

<Task #3> - <due date>

<sub-feature #1> - <due date if needed>

<sub-feature #2> - <due date if needed>

<sub-feature #3> - <due date if needed>

Version History

V1.0 - <Major Changes>

V1.1 - <Major Changes>

V1.2 - <Major Changes>

Overview

Elevator Pitch

<Short Summary - Can be spoken in less than 60 seconds. Ideally one sentence. Keep this very high concept.>

Ever wonder what would you do if you were in the shoes of a cockroach, in a big house full of dangers? Well, this is your game.

Design Pillars

<Define the finite set of guidelines (generally 3-6 is good) that give your game a cohesive direction. Typically these describe the dynamics that are most central to your game.>

<These should be regularly referenced and revisited to ensure that planning and development is always in line with the initial vision.>

We start from the premise of a familiar space, where normal, everyday things, are now turned into lethal foes.

<Pillar #1>

<description>

We subscribe to the mechanics of a walking simulator, exploration and interaction with the space, although, in order to be close to a “cockroach simulator”, we may include the ability of flying and crawling on walls.

<Pillar #2>

<description>

Avoid, Hide, Survive. You have no means of fighting back, your only option is to escape the danger.

<Pillar #3>

<description>

Summary

Brief Description

<2-3 Paragraphs>

You are a cockroach trying to survive in a new house.

Detailed Description

<4-6 Paragraphs - sum up general gameplay. Set up storyline, environment, visual style, and overall feel. Describe the first 2 minutes after the player hits the start button.>

You found yourself in a new house, everything is strange, and everything is dangerous. You must find a safe place, where you can hide, while avoiding different threats.

The game takes place in a big house, in the middle of a move. Once you hit the start button, you will feel tension and adrenaline.

This 3D game is realistic, but exaggerated, in order to convey the experience of being a cockroach. Things like the light will cause you different effects, like disorientation and low visibility.

Theme/Setting/Genre

<List descriptors about the game in common terms. Cyberpunk, dark, romance, etc. Include Setting information. Does your game take place in an open world?>

The adventure takes place in a closed world, in the form of a house. This will be a game that takes from survival horror, walking simulation and a little adventure.

Main Objective

<What is the goal of the main character?>

Reach a safe place, avoiding the different threats, like predators, humans and... vacuum cleaners?

Aesthetics/Dynamics/Mechanics

<What feelings and forms of engagement are you trying to deliver to the player? How will you invoke those through the gameplay? What underlying rules and systems will you use to achieve the desired gameplay?>

<ex. This is a narrative game. In it, the player should feel lost and desperate. This will be accomplished by having the player explore the terrain without a map as they are constantly

being chased. The lighting will vary depending on how close the monster is to the player so the player will feel like they are blacking out when they get nervous about the monster attacking them.>

The use of the light will be fundamental to achieve the feeling of being a cockroach. Cockroaches are photophobic and this may translate into a game mechanic. This is an interesting turn in the convention of the horror genre, where usually we want to avoid dark places. Here our safe places are in the darkness and the light will distort our perceptions.

Influences

<List other works that inspired this game and explain why in, at most, 1 paragraph. Include sketches, images, quotes, real world references (the greek gods, the civil war), etc. to help paint a picture of the overall idea.>

<Influence #1> Everything

- <Explanation> A highly philosophical game, where you explore the micro and macrocosmos, although the influence is not direct, we want to extract some of the feeling from this game.

<Influence #2> Cockroach simulator

- <Explanation> We discovered this game after we “came up” with the “original” idea of a roach simulator. Although discouraging at first, this game serves as a good example of both mechanics and experiences to implement, avoid and modify.

<Influence #3> It Follows

- <Explanation> We wanted the player to feel anxious and worried about something that is always chasing them. We may explore the concept of the unknown follower, like, some random scene element chasing down the player, slowly and constantly, this something always takes the shape of some random element in the scene.

What Sets This Game Apart?

- <Reason #1> The use of the light, as an obstacle, as something to be avoided.
- <Reason #2> The genre and feeling combination. Even if we want to make a game that from which arises
- <Reason #3>

Target Audience

Our game, called "Roach Trip," is aimed at casual video game players, particularly those who enjoy simulator and exploration games. The target audience consists mainly of young adults

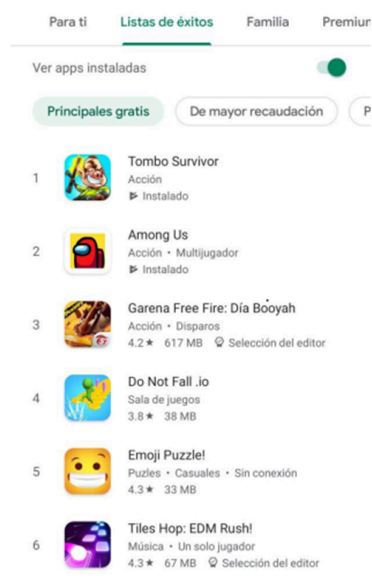
aged 14 to 30, as we have observed through streaming platforms such as Twitch (mainly) and Facebook that people within this age range are more active in this type of games, both female and male players. It is important to have a computer and be ready for an entertaining and relaxing gaming experience.

The game is focused on the Colombian community primarily, where we can find some games with similar features such as “La fiesta” developed by Rival Arts studio, this game contains missions and is a simulator-type game like The Sims, with the added possibility of exploration.

Another game would be the famous “Tombo Survivor”, although it has a story behind it, as emphasized by its creator, MagroPlay “Este juego se originó como una protesta contra los abusos policiales ocurridos en Colombia en 2020, mostrando esta realidad desde un punto de vista diferente.” (MagroPlay, 2021).

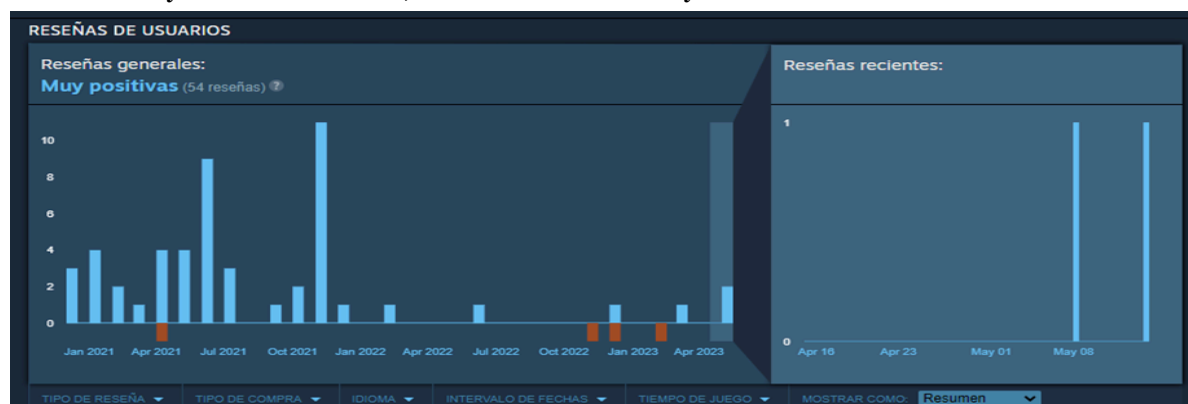
He also added that “El videojuego tuvo un éxito rotundo en Play Store, superando las 500.000 descargas en dos semanas y recibiendo críticas de todo tipo por parte de la comunidad.”.

Estuvo en el top 1 de la PlayStore en Colombia durante este periodo.

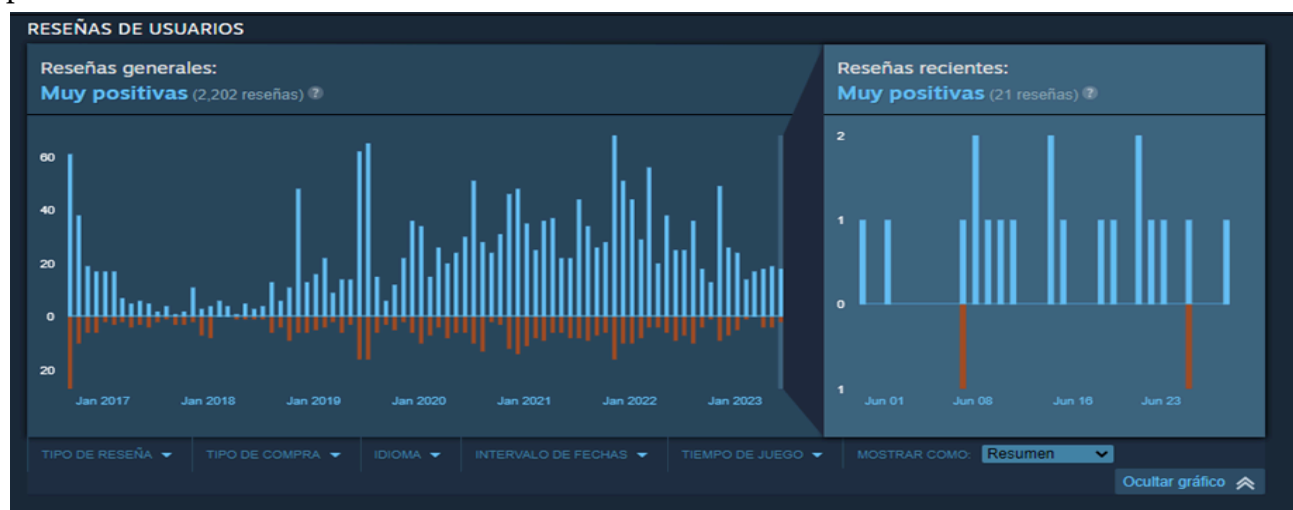


Captura de pantalla de Play Store en septiembre de 2020

It is currently hosted on Steam, where we can visually see its reviews.



Although it is not developed by a Colombian studio, we cannot fail to mention 'Cockroach Simulator' developed by HFM Games, which is the game that can be the most similar to our game. It is currently hosted on Steam, and we can see its reviews graphically, which are very positive.



In an article from Revista Diners, they mention that “en Colombia solo una de cada cinco personas mayores de 12 años expresó haber practicado videojuegos en un rango de un mes, además, estableció que la población que se encuentra entre los 12 y los 25 años es la que más se acerca a los videojuegos, con un 42,3 % del total de jugadores, mientras que solo el 1,3 % de los mayores de 65 años se entretuvo con estos formatos” (Revista Diners, 2022), survey data of DANE.

As we can see, there is a tremendous field of growth in Colombia, which also has its challenges such as internet accessibility in many areas of the country. However, these challenges are being increasingly overcome.

Target Rating

Everyone

Gameplay

Gameplay Summary

Brief

<Write a brief description of the gameplay here. Player's goal, obstacles, tactics required, who/what player controls, number of players, etc.>

Detailed

<Go into detail about the gameplay. Include the mechanics outlined in the [Aesthetics/Dynamics/Mechanics](#) section and how they will work well together. Pictures and written descriptions of a “gameplay minute” might help better tell the story of what the player will be doing in a standard sequence of events; this is similar to an illustrated gameplay loop.>

Modes

<Describe the various modes of your game if there are more than one.>

Victory Conditions

<What does the player need to do to win the game? What is the objective? Is it impacted by things like scoring, time, etc.??>

Core Game Loop

<List the sequence that the player will repeatedly go through when playing. A figure with potentially nested loops may help illustrate this.>

- <Element #1>
- <Element #2>
- <Element #3>

Core Gameplay Mechanics

<List the mechanics outlined in the [Aesthetics/Dynamics/Mechanics](#) section along with any others of note and elaborate on how they will function. Physics, algorithms, leveling up /

achievement systems, health, enemies and their abilities, checkpoints, spells, rewards, multiplayer ranking, etc. If there's combat, maybe note all the weapons and their functions.>
<A diagram showing the "hierarchy of epics" to breakdown the interrelatedness of the various mechanics may be useful.>

<Mechanic #1>

- **Details**
 - <Explain how the mechanic functions in 2 paragraphs or fewer.>
- **Implementation**
 - <Describe how the mechanic works in 2 paragraphs or fewer.>

<Mechanic #2>

- **Details**
 - <Explain how the mechanic functions in 2 paragraphs or fewer.>
- **Implementation**
 - <Describe how the mechanic works in 2 paragraphs or fewer.>

<Mechanic #3>

- **Details**
 - <Explain how the mechanic functions in 2 paragraphs or fewer.>
- **Implementation**
 - <Describe how the mechanic works in 2 paragraphs or fewer.>

Story

Brief Summary

<Just hit major events.>

Detailed Outline

<Be thorough! Use bullet points or mind mapping software if need be.>

Characters

Character #1

<Description>

<Include bullet points of features or concept art if possible.>

Character #2

<Description>

<Include bullet points of features or concept art if possible.>

Character #3

<Description>

<Include bullet points of features or concept art if possible.>

Level Design

<If applicable, list out the various levels, biomes, worlds, etc. in your game and detail their attributes both in aesthetic and gameplay terms. Include a written description or flowchart outlining how the player will access the various levels.>

<Level #1>

- Goal: <description>
- Mood/Theme: <description>
- <Objects/Enemies/NPCs/etc.>

<Level #2>

- <Goal>
- <Mood/Theme>
- <Objects/Enemies/NPCs/etc.>

<Level #3>

- <Goal>
- <Mood/Theme>
- <Objects/Enemies/NPCs/etc.>

Conveyance Mechanisms

<List out the various ways information will be conveyed to the player. Ex. A health bar divided into six segments, each segment representing how much health is lost from one hit. Ex. How will the player know certain objects are interactable?>

<Ideally this should include figures.>

<Mechanism #1>

<Mechanism #1>

<Mechanism #1>

Cinematics

<List out any cinematics in the game. Making beat sheets may be helpful.>

<Cinematic #1>

<Cinematic #2>

<Cinematic #3>

Technical

Screens

Title Screen

<Description>

In-Game

<Description>

Inventory

- <Description>

Combat

- <Description>

Options Menu

<Description>

Credits

<Description>

Game Engine

<Note what game engine you will use and explain why.>

Controls

<Note the buttons the game needs to have, their in-game functions, and their default bindings. (ex. Action Button (A) - pick up / put down objects, talk to NPCs, initiate combat, etc.)>

<Figures may be necessary to illustrate how controls work especially for mobile or VR games.>

<Also include things like whether or not the player can change key bindings. Does the game support controllers and/or keyboards?>

<Button #1> - <Default Binding>

Function #1

Function #2

Function #3

<Button #2> - <Default Binding>

Function #1

Function #2

Function #3

<Button #3> - <Default Binding>

Function #1

Function #2

Function #3

Development

Classes

<List out the classes you'll use in bullet point format beginning with base classes and ending with derived classes. (ex. Player, Npc, and Monster might all derive from the Creature class. Going further, Goblin and Bear might both derive from Monster.) For the player and enemies, include core properties such as health, speed, damage, attack rate, and jump height (if applicable) to help paint a picture about their behaviors. >

- <Base Class #1>
 - <Scripts>
 - <Derived Class #1>
 - <Scripts>
 - <Derived Class #2>
 - <Scripts>
 - <Derived Class #3>
 - <Scripts>
- <Base Class #2>
 - <Scripts>
 - <Derived Class #1>
 - <Scripts>
 - <Derived Class #2>
 - <Scripts>
 - <Derived Class #3>
 - <Scripts>
- <Base Class #3>
 - <Scripts>
 - <Derived Class #1>
 - <Scripts>
 - <Derived Class #2>
 - <Scripts>
 - <Derived Class #3>
 - <Scripts>

Visual Art

Style

<Define your art style here. Is your game 2D or 3D. Consider color palettes, graphic style, mood you're trying to convey, camera type (1st/3rd person, top down), lighting, etc. Is your game realistic, cartooney, low poly, abstract? What are the influences? If using pixel art, define things like thick black outlines or smooth curves over sharp angles. Consider visual feedback to convey information to players. (ex. Making a box sparkle to show you can open it.)>

<Use visuals to convey this: sketches and concept art of locations, characters, etc. - Great for getting a sense for what the game will look like and for presenting the idea to stakeholders.>

UI/HUD

<Describe elements such as the user interface, heads up display, and quest selection menu if applicable. Note functionality, options, animations, etc. List out all widgets and their functionality. Ideally this should include concept art, flowcharts, and/or wireframes.>

Assets Needed

<For each type of asset, specify: file formats, naming conventions, programs to use, size of asset, etc.>

cucaracha:

<https://sketchfab.com/3d-models/cockroach-cead55b8aa8643d48d67240bad028592#download>

casa:

<https://sketchfab.com/3d-models/5b8c483a744d456e8e35603bf1daeafb>

player + camera controller:

<https://assetstore.unity.com/packages/tools/game-toolkits/character-controller-super-135316>

GlassShader:

<https://github.com/omid3098/Unity-URP-GlassShader>

CardboardBoxes:

<https://sketchfab.com/3d-models/cardboard-box-set-low-poly-5d3d508061e544739e37c685af235684#download>

EmptyShelves:

<https://sketchfab.com/3d-models/game-ready-roller-shutters-fc5f2411ddea4fa19c882e9082f1e173>

Carro:

<https://sketchfab.com/3d-models/lada-3ca82c72c01044cabab5313165c3ca37>

Kitchen:

<https://sketchfab.com/3d-models/kitchen-cabinet-1-bc547563aace4159bb24a5ddb30823d9>

Bathtub:

<https://sketchfab.com/3d-models/bathtub-with-shower-22e187363dd14bc3a3e1b4611830236a>

Toilet:

<https://sketchfab.com/3d-models/toilet-132a8ee2af3a40d39d270fbed3d3666c#download>

Fireplace:

<https://sketchfab.com/3d-models/fireplace-low-poly-d1473f5f384a411f979b99214de9f2a9>

Office:

Lamp:

<https://sketchfab.com/3d-models/lamp-bdf4f1abce7b4440a8a520d568f9ea34>

Towel:

<https://sketchfab.com/3d-models/towel-rail-free-agustin-honnun-3a0a70f412e14b0685848748e0828138>

sink:

<https://sketchfab.com/3d-models/simple-sink-73bda35b6e7a499a80427fc1b049b192>

box:

<https://sketchfab.com/3d-models/lowpoly-cardboard-box-f2b1e7d7d4cc4a699a969a3e0fe8d211>

toiletprops:

<https://sketchfab.com/3d-models/toiletries-foofd952b5c640a1babf7occe5312d79#download>

<https://sketchfab.com/3d-models/toilet-paper-roll-holder-with-cover-9e36f39d4f4c453d8e9a6506bbc7cc70>

plant:

<https://sketchfab.com/3d-models/potted-plant-68c18589dcd248cea012ed4b90284a14>

box tarp:

<https://sketchfab.com/3d-models/cloth-box-tarp-marmoka-9d656ed67c4c4f70944bd47c0811a122>

table:

<https://sketchfab.com/3d-models/wood-table-1-e4adc24ce567426aa457a432fd94cf42>

washing machine:

<https://sketchfab.com/3d-models/washer-dryer-sbs-79e4cdde40034be5be40eb4d9c9c92a2>

workbench:

<https://sketchfab.com/3d-models/work-bench-with-tools-2a4903163d9a45b8af9b05729bae6230>

Characters

- <Character #1> (<animations>)
- <Character #2> (<animations>)
- <Character #3> (<animations>)

Terrain/Environment

- <Terrain #1>
- <Terrain #2>
- <Terrain #3>

Objects

- <Object #1> (<animations>)
- <Object #2> (<animations>)
- <Object #3> (<animations>)

Promotional Material

- <Promo Piece #1>
- <Promo Piece #2>
- <Promo Piece #3>

Audio

Style

<Define the overall mood/tone your audio will help deliver to the player. Silly, grim, realistic, etc. How will you deliver this? Genre, instruments, tempo, key, mood, etc. Include example references.>

<Consider what you want to emphasize to the player through the sound effects.>

Music

<List songs you'll need at various parts of your game or descriptions of the type of song you'll need if you haven't picked a specific song for that part of your game yet. Include where a song will be played and what mood/tone it is helping to set.>

- <Song #1>
- <Song #2>
- <Song #3>

Sound Effects

<List sound effects, how/where they will trigger, and any other details.>

- <Sound Effect #1>
- <Sound Effect #2>
- <Sound Effect #3>

Voice Acting

<Consider which, if any, characters will have spoken dialogue. What type of voice and emotions will be needed for each character?>

Project Scope

Time Scale

<How long will the game take to make? Will there be beta releases or DLC? Use the [schedule](#) as a guide.>

Anticipated Gameplay Time

<How long do you expect players to take completing the game?>

Cost

<How much will the game cost to make?>

<Include a breakdown of all costs such as paying team members, licenses, hardware, etc.>

Target Platforms

<List platforms you plan on releasing the game for and the minimum specs required to play the game.>

Team

<Team Member #1>

- <Role>
- <List things like cost to employ this team member here.>

<Team Member #2>

- <Role>
- <List things like cost to employ this team member here.>

<Team Member #3>

- <Role>
- <List things like cost to employ this team member here.>

Monetization

Our main focus of monetization will be through in:

- Donations: We are open to accepting donations that can help cover development expenses and/or invest in future updates.

Objectives:

- Number of impressions on distribution platforms such as itch.io: Aim to reach at least 250 impressions in the first two months after its release.
- Achieve 400 downloads in the first three months after launch.
- Promote an active community of players, with at least 200 registered users in the first month and an average of 50 daily active users in the first six months.
- Gameplay time per session: Expect between 10-15 minutes of gameplay per session, with a couple of sessions per day.

The aforementioned objectives will be supported by organic marketing strategies.

Organic marketing:

As mentioned earlier, since we won't be using paid advertising, we will rely on "organic marketing," which is based on a long-range group of actions and strategies that seek to make you or your products and services known without relying on paid media.

To achieve these numbers, we will primarily leverage our social circle on platforms such as Facebook, Twitter, and Instagram, where we will share our game for the necessary duration to generate an active flow of marketing.

Furthermore, we will utilize our connections within gaming communities, whether it's through a game, streamer, influencer, or groups on platforms/apps like Discord, Twitch, Facebook, Telegram, and WhatsApp, to share our game.

We do not rule out the option of entering platforms such as VRChat or other role-playing and fantasy gaming communities like Discord.

Action plan for acquiring testers:

As for testers, we will primarily focus on our closest social circle, as mentioned in the previous point. However, we will also take the following into account:

- Collaborate with local small streamers to have them test the game on their channels and generate exposure among their local audience.
- Invite local players to participate in supervised gameplay sessions and conduct follow-up surveys to gather data on their gameplay time per session and obtain feedback on session duration and satisfaction.
- Reach out to and collaborate with local role-playing and fantasy gaming communities to invite their members to test the game and provide valuable feedback.

Schedule

<This is essentially your ordered checklist for when to make what feature or complete a task such as technical goals, DLC plans, raising funds, release date, marketing goals, etc.>

<Break the large tasks down into small easy-to-tackle problems. Include realistic dates to keep yourself on track. Remember to first work on what you need for your minimum viable product.>

<Task #1> - <due date>

<sub-feature #1> - <due date if needed>

<sub-feature #2> - <due date if needed>

<sub-feature #3> - <due date if needed>

<Task #2> - <due date>

<sub-feature #1> - <due date if needed>

<sub-feature #2> - <due date if needed>

<sub-feature #3> - <due date if needed>

<Task #3> - <due date>

<sub-feature #1> - <due date if needed>

<sub-feature #2> - <due date if needed>

<sub-feature #3> - <due date if needed>

Version History

A record of major changes made to this document.

V1.0 - <Major Changes>

- <Details>

V1.1 - <Major Changes>

- <Details>

V1.2 - <Major Changes>

- <Details>