Maze Hunter DEMO (no story) ROQ

Game Design Document

Version 0.5 (Ago 1st, 2022)

# Overview

## Concept

1. **Pitch:** You play as a bounty hunter trapped into an altern dimension and must get to the end to gain a great treasure and go back to where you came from.
2. **Genre**: A 3D top-view adventure puzzle maze (Similar structure as Pacman type of maze) and is based on levels

## Style

* Low poly mixed with another type of resolution (voxel or even Paper Mario style), depends on the assets founded and on the game development
* 3D with a top-down view with perspective tracking the player
* Fast paced with increasing difficulty and introducing to new mechanics along the way to add variety to the gameplay.

## Features

1. **Main mechanics:**  
   \* Main mechanics: Move around in a maze, jumping   
   \* Powerups: Dash, Shields, Weapons, invisibility, speedup, inverted controls
2. **Scope:** Small game type of game with a projection of finishing demo in 2 months or so. Just as a prove of concept. Destined to put in portfolio and show to public

## Targeting

1. **Platforms:** No platform desired but, it´s going to be planned to develop in pc controls (It can change in the future)
2. **Audience:** People looking for an arcade-ish type of game where you feel the adrenaline and love the progressive type of games
3. **Advantages from competitors:** The enthralling story, the controls feeling and the powerups feedback will be satisfactory.

# Management

## Schedule

1. **Release date:** Have a playable demo by the end of September and create a more complex story if wanted by end of October.
2. **Budget****:** Personal project only to show on portfolio and possibly with an upload on Play Store or Itch.io

## Management Tools

* Usage of notion to structure all the milestones and the organization of the project
* Git repository to have a control of the versions and to see a gradual progress

## Test Plan

First time applying URP and check for limits of rendering, particles effects and display effects do not affect FPS.

## Risk Analysis

No budget risk.

## Localization Plan

1. Is there a possibility the game will be localized to other countries and languages?

Planned to be in 2 languages (Spanish and English)

1. Are audio (e.g. dialogue) and art (e.g. logos) assets localized?

Yes, the audio is still TBD but the character is from itch.io and it is a renowned free asset used in various free tier games or projects and the Typography is the one proportionated by the unity asset store but this might chance in the future.

# Game World and Narrative

## Look and Feel

Fantasy world which includes elements of different timelines or scenarios with a variety of themes

## Locations and Structures

The game is going to be divided in different areas but for the demo only it will me shown a very natural and rural environment. The player is in a maze and can only move to the next level by getting all the pieces scattered through the maze.

## Plot

Possible Stories (In future Versions might develop one of these):

1. Futuristic Robot living in a underground city trying to escape to the exterior because it was it´s dream to see a sunset.
2. A depressed man trying to escape his problems through different addiction playing scenarios in his head only to realize he needs to confront them to move on.
3. A pseudo-Robin hood collecting money for villages in need and from different king each one with it´s different castle design and themes.

## Characters (TBD)

1. …

# Art

What is the general policy for the game art?  
Low poly-based assets with a mixed of voxel or other similar art style options

## Characters (TBD)

1. General guidelines for character design?  
   3D characters with a distinguish color that represent each type of object in scenes. For the demo will treat a colorful palette with bright tones. Representing a medieval time with a lot of nature in it.

## Environments (TBD)

1. For the demo will have a medieval theme with a lot of nature in the background.

## User Interface

1. Cartoonish style menu with light weight font with wood backgrounds and rustic forms in UI elements

## Cut Scenes (TBD)

1. …

# Mechanics

## Progression

Complete all the levels to win the games if you lose restart a level from 0.

1. **Replay Value:** Maybe as a matter to beat their own PR
2. **Progression feeling:** Through the different powerup and intensity level progression

## Core Loop

1. Internal Loop within a level until beaten and the go to the next one and so on. You could pause the game to restart or go to the main menu

## Challenge

The player must master the character movement and its advantages from the powerups. Difficulty can be altered through the number of enemies and how exact the A\* algorithm (heuristic) is and shorten the time of chase and be more direct. Increase the life of the enemies and present different types of enemies which alters the normal playstyle of the player. Possible boss fights.

## Movement and Actions

* Move up, right, left, down
* Jump / Dash / Shoot

## Screens

1. For demo main menu and pause menu.

# Levels

## Level Flow

Levels design to be fast paced, within 5-10min finish a level and go directly to the next one. Maybe a fade in and fade out effect to enter a new level. A level finishes when the player collected all the points needed to open a door and continue.

## Obstacles

Depends of each level but the entire playable area is going to be a puzzle maze

## Physics Items

Expected to have poly destruction for more satisfaction while playing and some throwable objects are being proposed.

# Objects

## Pick-ups

1. Powerups such as Shields, Weapons, invisibility, speedup can be pickeup and use once. Kind of like Pacman big sphere. Also there are coins/parts/meds in the ground that needs to be picked up to continue on to the next level.

# Non-Player Characters

## Enemies

* Have predetermined positions that can rotate or alter but all within a set.
* There can be different type of enemies
* A\* is going to be implemented for chasing the player.

## Friendly Characters (TBD)

1. …

# Interface

## Controls

|  |  |
| --- | --- |
| **Action** | **Keyboard+Mouse** |
| Movement | W, A, S, D |
| Jump | Spacebar |
| Shoot / Dash | Left click |

## Graphical User Interface

* In-Game HUD to let to know the player how many pieces they need to go to the next level.
* A life bar of represented with units
* Powerup feedback
* Maybe a close to death camera effect

## Dialogue (TBD)

1. …

## Audio (TBD)

1. …

## Help System (TBD)

1. …

# Audio (TBD)

# Technical

## Target Hardware

## OS: Windows 7 and up / Processor: i5 and up / Memory: 4 GB RAM / Graphics: NVIDIA GTX 960 4GB / DirectX: Version 11 / Storage: TBD

## Development Standards

**Code guidelines:**   
- A mixed between Pascal and Camel case for certain scenarios.  
- Low dash for private component and Pascal for Getters  
- Comments in xml for readable code and future documentation  
- Encapsulation of variables, if possible, with getters and setters  
- Use a component base with reusable code or code than can evolve with few changes and only additions.  
-Uppercase for Constants   
- Alignment of braces for an correct indentation and more clean code

## Game Engine

1. **Game Engine:** Unity, easy to use, a lot of build-in functionalities and it facilitates the development. Version (2021.2.12f1).