Obsidian Ark
Team 27 Product Backlog
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Problem Statement

Quick-play games are quite popular in modern day gaming due to their simple concepts that allow players to jump right into the action. However, the majority of these games are usually limited to single genres. As developers, we'd like to create a procedurally generated 2D-adventure game that incorporates RPG elements, horde-style fighting, and a diverse set of maps. As such, this offers players a wider range of choices and gameplay while retaining the simplicity that comes with a quick-play game.

Background Information

Gaming is a large and diverse industry, and every member of our team is undoubtedly familiar with the countless genres that each game is built upon. We've noticed however, that the players who are looking for a quick, easy-to-start and easy-to-finish game are somewhat restricted in variety. Many of these quick-play games are built around a single context, such as The Binding of Isaac's roguelike dungeon crawler. Our goal is to build a game that players can jump right into and are not limited in gameplay. To do this, we plan to combine genres like RPG, seen in larger games such as Skyrim or Final Fantasy, with genres like hack-and-slash that are popular among smaller, quick-play games such as Hero Siege. This will allow users to experience more of each genre, while maintaining the session-based gameplay that quick-play games are known for.

Environment

We will build the bulk of the game in Javascript on top of a game framework such as Phaser.io or Pixi.js. The majority of the saved data (such as account information, rewards and scores) will be stored in a MySQL database hosted on any cloud server such as AWS or Azure.

Requirements

Functional

Backlog ID	Functional Requirements	Hours	Status
1	As a user, I would like to be able create an account	5	Sprint 1
2	As a user, I would like to be able to login to my account	3	Sprint 1
3	As a user, I would like to be able to change my password	2	Sprint 2
4	As a user, I would like to be able to see my highscores	2	Sprint 2
5	As a user, I would like to be able to select a map	2	Sprint 2
6	As a user, I would like to be able to see global high scores	3	Sprint 2
7	As a user, I would like to be able to see my unlocked rewards	3	Sprint 2
8	As a user, I would like to be able to choose a starting difficulty	2	Sprint 1
9	As a user, I would like to be able to navigate the menu options	4	Sprint 2
10	As a user, I would like to be able to stop a session at any point	2	Sprint 1
11	As a user, I would like to be able to choose upgrades	4	Sprint 1
12	As a user, I would like to be able to control my character	2	Sprint 1
13	As a user, I would like to be able to pause the game	4	Sprint 1

Nonfunctional

Backlog ID	Nonfunctional Requirements	Hours	Status
1	As a developer, I would like player account information to be secure	15	Sprint 1
2	As a developer, I would like to efficiently handle up to 50 entities on the screen	7	Sprint 2
3	As a developer, I would like to have a server to store the scores of players	7	Sprint 1
4	As a developer, I would like to have the server store account information	8	Sprint 1
5	As a developer, I would like to learn common game development practices	20	Both sprints
6	As a developer, I would like to improve my Javascript programming	20	Both sprints
7	As a developer, I would like to learn how to correctly debug my game	20	Both sprints

Use Cases

Case: Account Creation

Action	Response
1. Click "Sign up" at the menu	2. Display sign up screen
3. Input password and username	4. Display username and hide password
4. Click "Submit" button	5. Display login screen

Case: Login

Action	Response
1. Input username and password	2. Login user
3. Login is successful	4. Display the game menu
5. Login unsuccessful	6. Return to login screen

Case: Change password

Action	Response
1. Click 'Change password' at the menu	2. Display change password screen
3. Input username and old password, and new password	4. Change the user's password to new password
4. Click "Submit" button	5. Display success/error message
	6. Display login screen

Case: Start a game session

Action	Response
1. Login	2. Display main menu
3. Click 'Play'	4. Display map selection screen
5. Select a map and difficulty	6. Begin game session

Case: Pause the game

Action	Response
1. Hit the pause button	2. Display pause screen
3. Click resume button	4. Remove pause screen and resume gameplay

Case: Control character

Action	Response
1. Hit direction control keys	2. Character moves in the selected direction
3. Hit action/attack key	4. Character attacks towards current direction

Case: Choose upgrades

Action	Response
1. Select upgrades	2. Show currently selected upgrades

Case: Logout

Action	Response
1. Click 'Logout' button	2. Log user out
	3. Display login screen