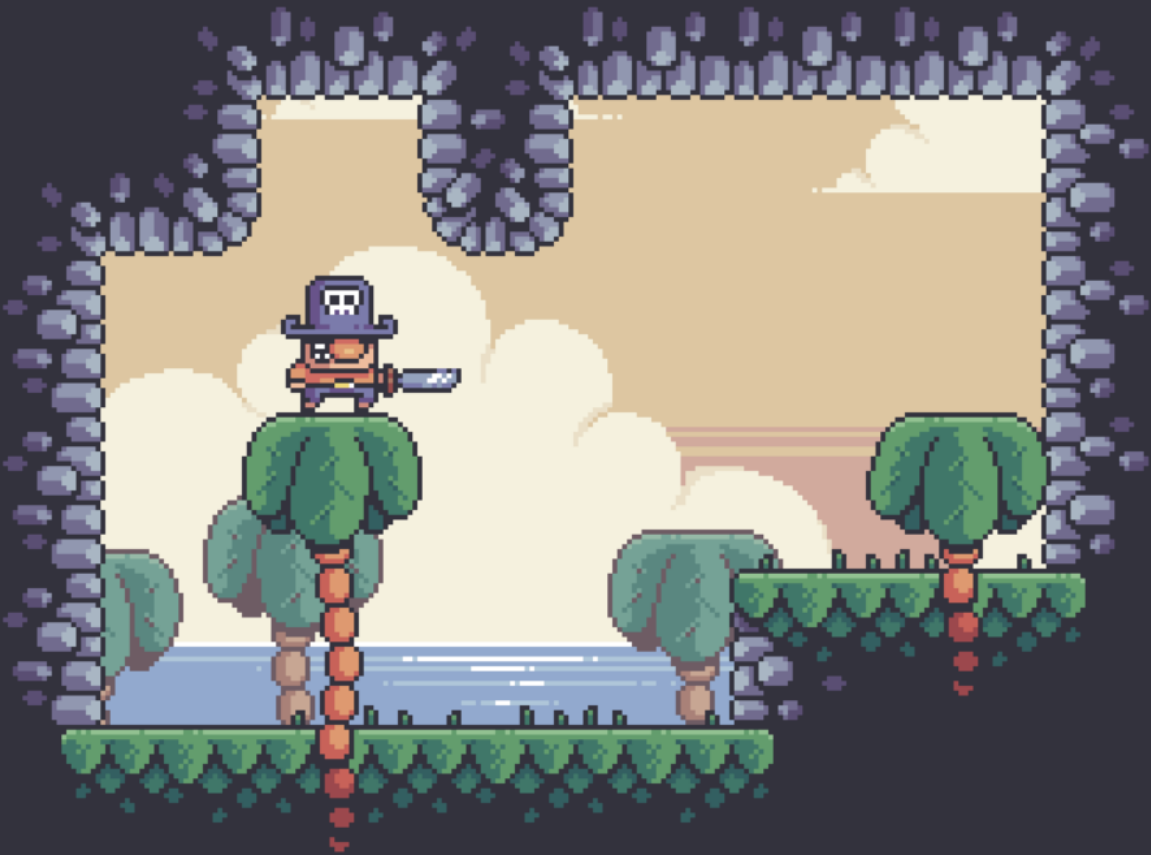


# Blast and Dash Game Proposal

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CS201 Assessment 1



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## Executive Summary

This document will go over the concept and game design of the proposed game “Blast and Dash”.

The game’s concept will be provided, and all the game’s features will be explained in detail.

The game’s target audience and unique selling points will be discussed, along with all the project constraints.

Finally, concepts for the game’s UI will be provided along with the philosophy behind the UI design.

## Mission Statement

Our goal is to develop and create a fun, engaging game that will deliver a combination of fast paced platforming and high intensity combat.

## High Concept

Blast and Dash is a fast-paced 2D platformer where the player takes on the role of a pirate who has been stranded on a deserted island. They must use their various abilities to traverse the island and find the four torn map pieces in order to escape the island.

But it won’t be easy as there are many dangers on the island. The player must defeat their enemies and avoid the numerous traps in order to reach their goal.

## Unique Selling Points

The game contains two core features that it is based on.

These are:

- The player can increase their momentum by chaining movement abilities together.

- The player's primary weapon acts both a weapon and a movement ability.

The game is inspired by other games in the platforming genre such as Celeste and Super Meat Boy, which are popular games in the genre because of their fun and interesting mechanics.

All of the game's mechanics will contribute to these two core features. Some of most interesting mechanics include dashing, and wall jumping. These mechanics support the first core feature of player movement and allow the player to traverse the game's levels in a more exciting way.

The target audience is taken from games in the same genre with similar features to Blast and Dash. This demographic is broad as this genre appeals to a wide variety of people.

Blast and Dash will fill a gap in the platforming market by provided a fast-paced movement-based platformer. While there a variety of movement-based platformers available, there are only a small number of well-made, high-quality choices. This game aims to fix that problem and provide another high-quality option to players.

## Project Parameters

### Constraints

- The project will be constrained by various factors. These include but are not limited to, the project duration, the project budget, and the number of team members working on the project. These factors will be discussed later in this section of the document.

### Project Duration

- The project will start on 26/03/23 and will be finished by 23/04/23, lasting four weeks.

### Due Date

- The due date for the project is 23/04/23.

**Engine**

- The game will be developed using the Unity Game Engine. Unity provides a variety of features that make the development of 2D platformers much easier. This will help us develop the game within the provided time frame.

**Target Platforms**

- The target platform for our game is the PC. Platformer games are most popular on PC, and this is where our target audience is.

**Target Hardware**

- The game will be optimized to ensure that it can run on any PC. The player will be able to run the game on almost any hardware.

**Primary Programming Language**

- The game will be developed using C#. C# is the primary programming language used within Unity.

**Team Size**

- The game will be developed by a single developer. This developer will be responsible for the game's programming, design, and art.

**Project Methodology**

- The project will use an agile development methodology, and Trello will be used for task management.

**Budget**

- The budget for the project is \$6000. This includes 30 hours of development per week, for four weeks (totalling 120 hours), with a developer salary of \$50.00 per hour.

**Software and Tools**

- Various software and tools will be used throughout the project. These are:
  - Unity Game Engine

- Visual Studio
- Git / GitHub
- Trello

## Art

- The art for Blast and Dash has been taken from a free art pack on itch.io. Not every art asset will be used from the pack as only the assets that fit the idea of the game will be used.

The UI will be created from scratch using the sprites and tiles from the art pack. Additionally, the players main weapon will need to be created, as a shotgun weapon is not included in the pack.

The art pack has a Creative Commons Zero (CC0) license.

<https://pixelfrog-assets.itch.io/treasure-hunters>

## Target Audience

- Our target audience is based on the audience of other similar games in the same genre as Blast and Dash. Some of these games are Super Meat Bot, Celeste, and Ori and The Blind Forest. Some aspects of these games that our target audience enjoy are:
  - Satisfying movement.
  - Responsive controls.
  - Clear art design

The demographic of these games tends to be very broad as they will appeal to many groups of people. Both male and females tend to enjoy platformers, and they are enjoyed by a wide variety of ages.

To narrow down our target audience we are specifically trying to attract players who enjoy movement-based platforming games. These players fall into the same demographic as the overall platforming genre but have a more specific interest.

## Gameplay Overview

In Blast and Dash the player must navigate a deserted island and locate four torn map pieces in order to escape.

Throughout the game the player will encounter various enemies and traps that will deal damage to the player try to stop them. In order to overcome these obstacles, the player will have multiple movement and combat abilities at their disposal.

If the player receives too much damage they will die and need to restart the game in order to continue.

During their journey the player will be able to find and use a health potion that will recover some of the health that they have lost.

## Gameplay Features

The game will include a variety of gameplay features that will contribute to the core idea of the game.

These features are:

- Wall jumping.
  - The player will be able to jump off walls, giving them an extra boost in momentum and allowing them to reach higher places.
- Wall sliding.
  - While the player is against a wall, they will slide down it. This features pairs well with wall jumping as the player will be able to slide down a wall and then wall jump once they have reached the desired position.
- Dashing
  - By pressing the left shift button, the player will gain a boost of momentum and be pushed forward. This feature will help the player traverse the game's level easier, for example the player will be able to jump gaps by dashing that would be too far by only jumping.

- Shotgun
  - The player will have a shotgun. This shotgun will have two uses, as a weapon, and for movement. By shooting the shotgun the player will be launched in the opposite direction of the shotgun. This helps make sure that the game's combat works with the game's core idea of movement and momentum.

The shotgun will also be the primary weapon in the game. The player can aim the gun in any direction with their mouse and use the left mouse button to fire.

All these features contribute to the game's core concept of movement-based gameplay. Every gameplay mechanic will be used in some way to keep the player moving as much as possible.

Even the player's weapon contributes to this concept, as it can be used as a movement tool and will give the player a momentum boost.

## Enemies

Blast and Dash will feature two enemies.

The first enemy is the Crab. The crab is the basic enemy of the game, it will move back and forth along a set path and will attack the player once in range.



Figure 1 Crab enemy



The other enemy is the Starfish. The Starfish, like the Crab will move side to side and attack the player once in range. The difference is that the Starfish has a larger attack range, and will dash towards to player, making it able to attack from further away. The player will need to keep their distance in order to avoid this attack.



*Figure 2 Starfish enemy*

## Traps

In addition to the game's enemies, the island of Blast and Dash is host to numerous deadly traps that the player will need to avoid in order to reach their goal.

The game's first trap is the Spike. This simple trap will damage the player when the spike is stepped on. This trap will help create more interesting levels and platforming challenges, as the player will need to be careful where they step.

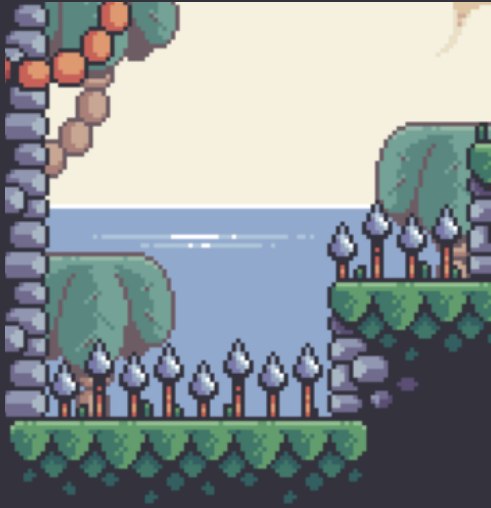


Figure 3 Spike trap

Blast and Dash will also feature a ranged trap. The Clam is a ranged trap that will shoot a pearl projectile at the player. But the player will need to keep their distance and attack the clam from afar because if they get too close the clam will perform a melee attack.



Figure 4 Clam trap

## Items

In Blast and Dash, the player must collect four torn map pieces in order to create a complete map that will allow them to leave the island.



Figure 5 Map items

Along their journey the player will be fighting several enemies and avoiding various traps. Eventually the player will be damaged by either an enemy or a trap. In order for the player to recover some of the health they have lost a healing potion can be found throughout the game. This healing potion will allow the player to regain a portion of their health.



Figure 6 Healing potion item

## User Interface

The layout of the game's UI will only provide necessary information to the player, as overloading the player with information can lead to an unenjoyable game experience and confusing gameplay.

Because of this the UI will remain as minimalist as possible. The UI will also be spatial and non- diegetic.

The colour of the game's UI will match the rest of the game's colour palette from the chosen art pack.

The focus of the game should be on the player, and the gameplay. The UI should be a way to provide information to the player.

By default, the only UI element visible to the player will be their healthbar, as this is the only information needed by the player at the time.

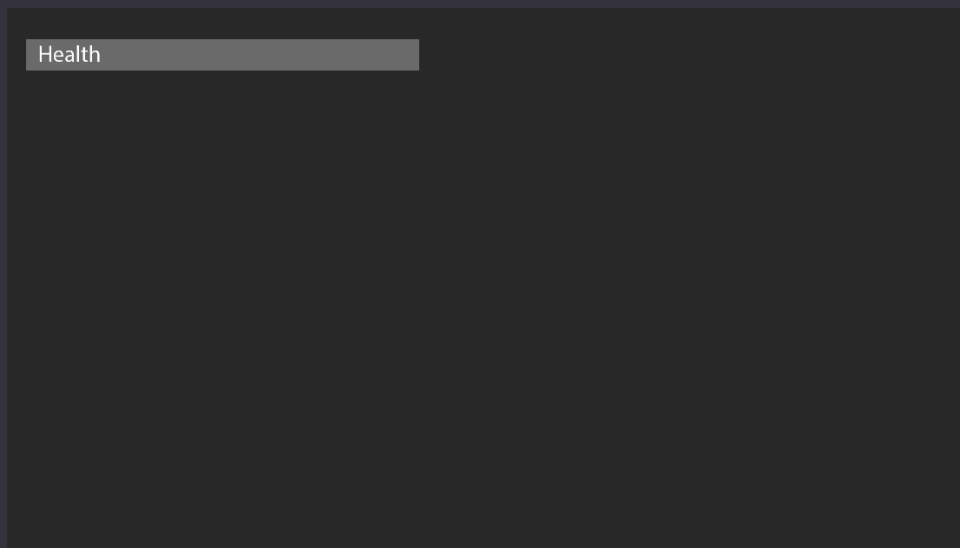


Figure 7 HUD

Enemies will have a health bar that displays once they are hit. Before the player hits the enemy, no health bar will be displayed.

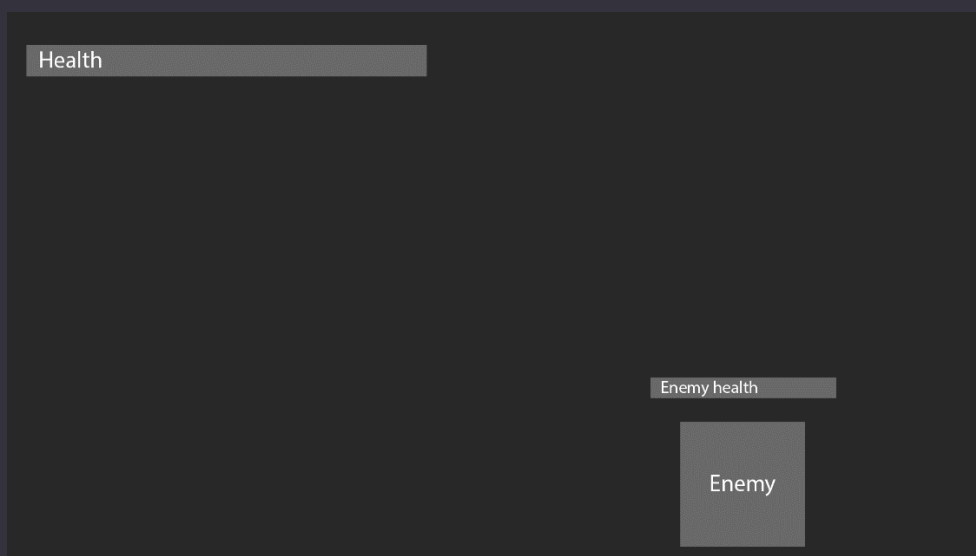


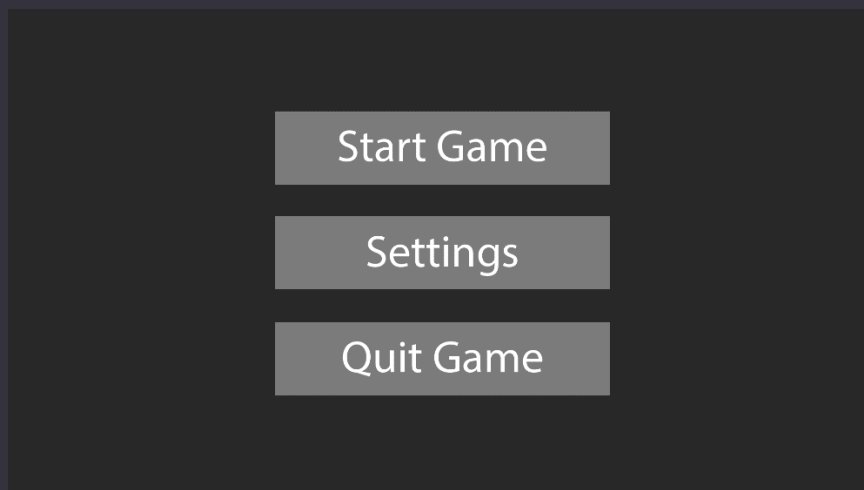
Figure 8 HUD (Enemy health)

These UI elements are the only elements visible to the player during regular gameplay.

The game's main menu will have an animated background in order to add some life into the menu.

There will be three buttons on the main menu:

- The start button which will load the game.
- The settings button which will open a second menu and let the player adjust various settings for the game including volume, and a music toggle.
- And lastly the quit button which will close the game.



*Figure 9 Main Menu*

The game's pause menu will be the same menu as the main menu, except the start button will be replaced with a continue button.

The continue button will unpause the game when selected. Alternatively the player can unpause the game by pressing the same button they used to pause it.

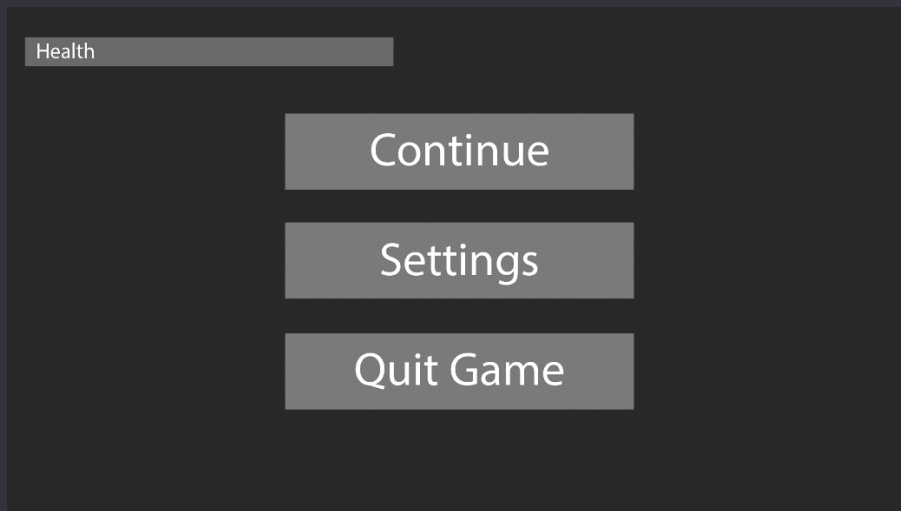


Figure 10 HUD (Paused)

The settings menu will give the player the option to toggle on or off the music and adjust the volume of the game.

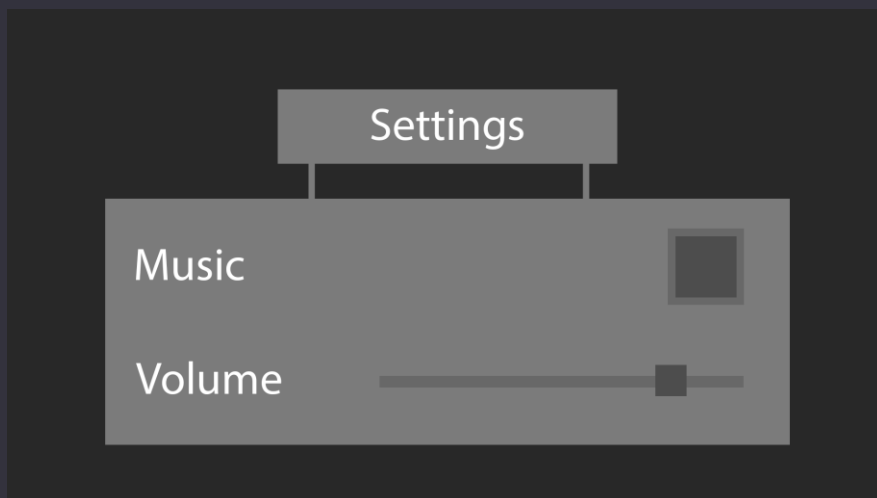


Figure 11 Main Menu (Settings)

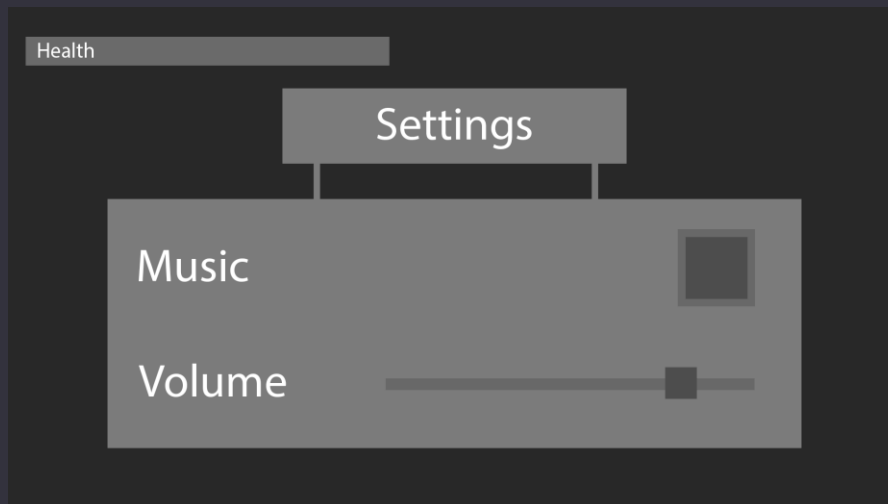


Figure 12 HUD (Settings (Paused))

## Conclusion

Blast and Dash is fast paced 2D platformer where the player takes on the role of a pirate.

The players weapon acts both as a weapon, and a movement ability. This and the other various movement abilities the player has will help set this game apart from other 2D platformers.

The game's UI will be minimalist in order to avoid a complicated and confusing user experience, while still providing all the required information to the player.

The development of Blast and Dash will start immediately after the approval of this proposal.

## References

*Treasure Hunters by Pixel Frog.* (n.d.). itch.io. <https://pixelfrog-assets.itch.io/treasure-hunters>