

# Prototype 2 - Project Plan

Team 5:

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05 August 2019

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# 1 Overview

## 1.1 Game Concept

The concept for the game is to bring the arcade to your computer screen by gathering inspiration from *Pinball*. The objective is to create a pinball style game with an all new aesthetic twist to bring about a different game experience.

## 2 Project Goals

Functional Goals:

Implementation of the requirement set out by the team.

- Player paddle control and collisions with the ball.
- Ball physics and collisions with the level and player paddles.
- Scoring system taking into account all different sources of points within the level.

Quality Goals:

- Player controls work properly and feel good to use.
- There are no game breaking bugs in the game. Minor bugs that don't affect the overall game feel and player experience are acceptable as this is a prototype.
- Game follows the planned and expected thematic for the game.

Constraints:

- The prototype needs to be done from start to finish within the week of 29 July to 05 August 2019. Less time to playtest due to the time constraints.

## 3 Project Organization

Each member will be responsible for the completion of specific tasks, but may still ask for assistance from members not managing the task. This is to ensure that the work load is distributed in a way that allows for maximum team performance.

Individual Tasks:

- Project Manager(PM): All documentation, setting up meetings, checking that things are running smoothly and quality assurance checks on the product.
- Programmer: All software programming implementation needed to create a working game.
- Designer: The design and layout of the game and its levels. Also checks to see that art assets and running of the game fit the design criteria set out.
- Artists: All art assets needed for the aesthetics of the game.

## 4 Schedule

### 4.1 Work Breakdown Structure

Meetings will be set up throughout the week and extras if required. Meeting will generally be to track progress, discuss problems and adjust accordingly.

### 4.2 Schedule and Milestones

Milestones can be found in figure 1 below. It provides all deadlines discussed and agreed upon at the first team meeting and also keeps record of whether all deadlines were met on a daily basis. It also has an account of problems faced, if any.

PROTOTYPE 2			
SCHEDULE			
WEEK OF: 30 JUNE 2019 – 04 AUGUST 2019			
TEAM NUMBER: 5			
PM: DAIN GABRIEL		PROGRAMMER: DUNCAN SMALE	
DESIGNER: NIVARSHA DOORSAMY		ARTISTS: SEYURIE MOODLEY & KAMOGILO MAFASA	
DATE	EXPECTED TASK COMPLETION	ACTUAL TASK COMPLETION	PROBLEMS
30/07	Repo created and group deadlines and decisions discussed.	Completed. Additional: Basic mechanics created and uploaded by programmer. Rough design of game created.	N/A
31/07	N/A	Rough layout of game scene created in unity project for the artists to work for scaling purposes. Project plan started. Blender curved assets created and uploaded.	2D CHANGED TO 3D DUE TO PROBLEMS WITH LEVEL DESIGN. CURVES CREATED IN BLENDER. DUE TO COLLISION ERRORS USING RECTANGLES TO CREATE CURVES.
01/08	PM – Documentation completed for proof reading Programmer – Mechanical Implementation on mockup scene done. Designer – Complete design of game ready for programmer and artists.	Project plan completed. Basic functionality of the game completed. Majority of the art assets completed. Design document restructuring started. A few sections need clarification from the designer before it can be completed.	BLENDER ASSETS CAUSED RENDERING ISSUES IN UNITY. PROBLEM WAS SOLVED QUICKLY AND EFFECTIVELY.
02/08	Art assets completed in full and ready for implementation. Programming almost completed. Internal QA testing.	Final art assets completed and uploaded for use. Game completed and ready for playtesting.	N/A
03/08	Bug fixes if need be and small final adjustments made.	Bugs fixed and certain physics assets for the game implemented.	COULD NOT START QA AND PLAYTESTING DUE TO AN ERROR WITH THE

Figure 1: Schedule and Milestones

### 4.3 Development Process

#### 4.3.1 Testing

Testing will be conducted by each individual of the team during and throughout the design and development process of the game. Final internal testing will be conducted by the PM upon first build on the game after which external testing will be conducted to provide further insight and changes that need to be made to the game, if any.

#### 4.3.2 Quality Assurance

Quality assurance checks will be done by the PM whenever playtesting occurs. Checks of all new assets will be done before they are officially implemented.

## **5 Development Environment**

### **5.1 Communication and Reporting**

General communication will be conducted using a Whatsapp group specifically for the team. Meetings will be conducted in person on Monday, Tuesday, Wednesday and Friday during convenient time slots. Extra meetings may be scheduled by team members if need be. Milestone and progress will be tracked through the whatsapp group and meetings. Final team meeting will be conducted on Friday or Saturday depending on the completion date and time. Internal testing will be conducted throughout and external testing will occur soon after the completion of the demo.

### **5.2 Technologies Used**

Development: Unity 2018.4

Programming Language: C-sharp

Communication: Whatsapp

Source Control: Git and Source Tree

Modelling: Blender

Art: Krita