FAR OUT FAIRWAY

Game Design

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Version 1.1

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1. Introduction

1.1 Scope

This document is to be read by members of the development team involved in the design, implementation, and testing of Far Out Fairway.

1.2 Complexity Statement

Far Out Fairway is considered to be large and complex for multiple reasons. One of the main components to our game that makes it so complex is different physics aspects such as different gravity on the Mars courses. In addition, we also have to consider the different kinds of golf clubs and terrain that will be used on the golf course and how they will affect the velocity and launch angle of the ball when hit. Another component of our game that makes it so large and complex is the design of the courses themselves, which will include many different terrains such as sand traps, the fairway, the rough, the green, and water. Along with the terrains, we also have to consider textures such as the sky and clouds as well as the time of day, skyboxes and shaders and the different objects such as rocks and trees. We also plan to add an animated introduction as well as sound effects which both add more layers of complexity and professionalism to the game. All of these components together make for a difficult challenge in making 9 intricate courses that seamlessly implement all of these features.

2. Target System

Far Out Fairway will primarily be developed for the WebGL platform for web distribution, but development for a standalone build may be considered as well.

3. Development System

3.1 Software

The game will be developed using Unity game engine, as well as Visual Studio C#.

4. Specification

4.1 Concept

The goal of Far Out Fairway is to produce a fun golf simulation with cartoon style graphics.

4.2 Story

4.2.1 Setting

The game will be set in present-day on various golf courses in the real world, on an office desk, and on Mars. We replaced the moon map with Mars, as well as replacing the house map with an Office desk.

4.3 Game Structure

The game will have three different locations: a normal golf course, an office desk, and Mars. Players will complete three holes of golf before progressing to the next location. In total, these three locations will make up a 9-hole game of golf.

4.4 Players

Only single player functionality is implemented for Far Out Fairway.

4.5 Action

Players will complete a 9-hole round of golf, progressing to a new location every three holes. The player will be able to control shot power, and different environmental components will have unique impacts on the ball's physics.

4.6 Objective

The objective will be to complete the 9-hole round of golf in as few shots as possible.

4.7 Graphics

4.7.1 Landscape

The landscape will be viewed from a third person view.

The different types of scenery consist of a grass golf course, on an office desk, and Mars' surface.

The camera will follow the ball towards the point where it lands.

4.7.3 Screen Display

4.7.3.1 Golf club

The current golf club will be displayed in the user interface as the user prepares to hit the golf ball.

4.7.3.2 Golf ball

The golf ball will be in the player's view as they try and hit it.

4.7.3.3 Controls

An element of the user interface will inform the user on how to bring up a list of controls for the game.

4.7.3.4 Map

The user will be able to reference a map that corresponds with the current hole.

4.7.3.4 Scoreboard

The user will be able to reference their score card at any time during the game, which updates after every shot.

4.8 Data Storage

4.8.1 Map Assets

The assets being imported will include:

- JPG files
- MP3 files
- Map texture

5. Gameplay

5.1 World

The world will consist of three maps that the player will be golfing on.

A grass golf course, an office desk, and Mars.

5.2 Landscape

The landscape will consist of:

- Trees
- 3 Types of Grass
- Water
- Sand
- Office Supplies
- Desk
- Mars' surface

This list includes everything that is in all three maps.

5.3 Ground Type

The different types of ground will consist of:

- Fairway
- Rough Grass (out of bounds)
- The Green (area before the hole)
- Sand
- Office Desk
- Mars' surface
- Water

5.4 Object Types

Objects that may appear will consist of:

- Trees
- Rocks

- Logs
- Wooden Boat

5.4.1 Tree Obstacles

Trees may block the player's path towards the hole.

5.4.2 Rock Obstacles

Rocks are mostly there for decoration but can block a golf ball from going towards the hole.

5.5 Control

This game uses a mouse and keyboard for input.

5.5.1 Direct Control

The player can hit the golf ball.

5.6 Physics

The gravity will be different on the Mars map. Terrain and the type of golf club will affect the velocity and launch angle of the ball

6. Front End

6.1 Intro

There will be an animated intro to the game.

6.2 Menus

This game will use a simple menu system, for selecting basic options such as starting the game and resetting the game.

7. TEAM

1. Matt Baldridge
2. Michael Barto
3. Sean Styer
4. Jake Zappo

8. TIME

Official Start Date:	November 10, 2020
Complete Game Design:	November 16, 2020
Milestone 1- Basic Physics:	November 19,2020
Milestone 2 - Look and Feel:	December 1, 2020
Milestone 3 - Alpha:	December 3, 2020
End of Project:	December 8, 2020