



GALWAY MAYO INSTITUTE OF TECHNOLOGY, DUBLIN
RD CAMPUS

BSC IN SOFTWARE DEVELOPMENT

Mobile Applications Development 3 Design Document

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Chapter 1

Project Overview

1.0.1 Introduction

Welcome my name is Tomás O'Malley (G00361128@gmit.ie) I am a final year Software Development student studying @ Galway Mayo Institute of Technology . Here I will be documenting the obstacles , game design etc to my ment for myis the Design 4th Year endless runner for the Module Mobile Applications 3

1.0.2 Objective

To create a concrete/precise write up to develop a 3D Video Game using Unity

Project Overview		
Component	Tool	Developer
Write Up	LaTex	Tomás O'Malley
Software	3D Unity Mod- elling	Tomás O'Malley
Version Control	GitHub	Tomás O'Malley

Game fundamentals

1. Allow the player to control a specific character, that has an important fictional/narrative role.
2. Have game statistics and/or relational attributes with other game objects, enemies, and/or the player character.
3. Allow the player to take on and navigate the levels using an easy-to-use user interface.
4. Have obstacles that the player must overcome, such as enemies and bosses.

The game holds a rich number of features and should allow me to create lots of different tests. Game testing is a huge part of our team's experience and we will apply the different

methodologies to test and document their Product. Overall we were happy with the game Design Document provided by 'Game Development International Ltd' which my whole team studied. Exclusive access to the game allowed to Alpha test the game.

Chapter 2

Game Philosophy

2.0.1 Types of Games

1. 3D Rail Shooter

- A rail shooter is a type of action-based video game. In a rail shooter the player control is limited to directing where to fire a virtual gun or move their avatar around the screen; the player does not control the path their avatar takes from the start to the end (although they may be able to pause that movement). Examples of 3D Rail Shooter - StarFox 64 on nintendo 64.



2. - 3D Endless Runner

- An Endless Runner is characterized as an action game, linear in design with no end, without pauses or breaks for rest and no stages or changing levels. It has one continuous level. The game difficulty starts slow and easy. Examples of Endless Runners include Temple run available on the Ios Platform.



3. Traditional Board Game

- Board games are traditionally a subset of tabletop games that involve counters or pieces moved or placed on a pre-marked surface or "board", according to a set of rules. In common parlance, however, a board game need not necessarily contain a physical board.



Chapter 3

Introduction to 3D Gaming

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Chapter 4

Front End

4.0.1 Graphical User Interface

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Control Mechanisms

5.0.1 User Control System

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Software

6.0.1 Development Tools

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Chapter 7

The Gameplay

Chapter 8

Game Characters

8.0.1 Models

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8.0.2 Enemies/Targets

Chapter 9

Level Design

9.0.1 Art Direction

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9.0.2 Difficulty

Chapter 10

Reward System

10.0.1 Collectables

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10.0.2 Power Ups

Chapter 11

Obstacles

11.0.1 Artificial Intelligence

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Chapter 12

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