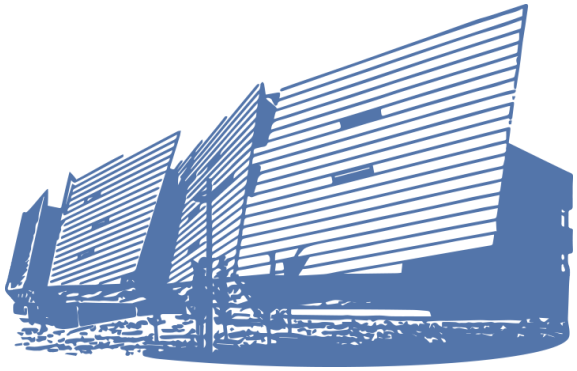

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BSc Project

Software Testing Project

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Contents

Chapter 1

Introduction

Welcome to my Test case documentation for the latest game developed by Game Development International Ltd . The company provided me with a short brief informing me on the features/fundamentals to their new game title. The product developed by Game Development International Ltd is a 2D side scrolling platformer which borrows behaviors from other titles such as 'Shovel knight' to 'Skyrim'. Here are a list of the characteristics/functions set in their title.

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 give me the opportunity to create lots of different tests.

Chapter 2

Objectives and Tasks

2.0.1 Objectives

Here some of the primary objectives of the test Plan

1. Create Validation
2. Create Feedback
3. Test Products Components

2.0.2 Tasks

Here are some of the tasks that I will go into detail later

1. Report Document
2. Bug Report
3. Testing methodologies

Chapter 3

Scope

Game Development International Ltd has rich catalogue of features in their game which I cover briefly in the Introduction.

Here are some of the technical features

1. **Menu Systems :** Test the products menu such as the start pause menu screens
2. **In game controls :** Test the basic used to interact with the game e.g W- To move forward
3. **Character Attributes :** Test the basic character attributes such as health and points

Chapter 4

Testing Strategy

4.0.1 Unit Testing

Unit Testing is a level of software testing where individual units/components of a software are tested. A unit is the smallest testable part of any software. It usually has one or a few inputs and usually a single output. In procedural programming, a unit may be an individual program, function, procedure,etc.

4.0.2 System and Integration Testing

System Integration Testing is defined as a type of software testing carried out in an integrated hardware and software environment to verify the behaviour of the complete system.It is testing conducted on a complete, integrated system to evaluate the system's compliance with its specified requirement.

4.0.3 Performance and Stress Testing

Performance testing is carried out to check the system's performance under varying loads.Stress testing is carried out to check the behaviour of the system under the sudden increased load of the system or software application. It only checks the stability of the system or software application.

4.0.4 User Acceptance Testing

User acceptance testing (UAT) is the last phase of the software testing process. During UAT, actual software users test the software to make sure it can handle required tasks in real-world scenarios, according to specifications

4.0.5 Batch Testing

Batch testing is a comprehensive test on your current trained model to measure its performance in LUIS. The data sets used for batch testing should not include example utterances in the intents or utterances received from the prediction runtime endpoint.

4.0.6 Automated Regression Testing

Regression Testing is defined as a type of software testing to confirm that a recent program or code change has not adversely affected existing features. Regression Testing is nothing but a full or partial selection of already executed test cases which are re-executed to ensure existing functionalities work fine

4.0.7 Beta Testing

A beta test is a type of testing period for a computer product prior to any sort of commercial or official release. Beta testing is considered the last stage of testing, and normally involves distributing the product to beta test sites and individual users ("beta testers") outside the company for real-world exposure.

Chapter 5

Test Schedule

A test Schedule

Chapter 6

Control Procedures

When testing the products features when a bug is found I report it in a .csv file containing under a template a I created.The template will be as follows

Example Bug Reported

Bug reporting			
Bug Name	Component	Tester	Risk
Character Movement	Player Movement in main Scene	Tomás	Severe

Chapter 7

Features to Be Tested

Some Features to Be Tested

Chapter 8

Features Not to Be Tested

Some Features Not to Be Tested

Chapter 9

Resources-Roles and Responsibilities

The Resources and Roles - Responsibilities

Chapter 10

Schedules

Scheduling in project management is the listing of activities, deliverables, and milestones within a project. A schedule also usually includes the planned start and finish date, duration, and resources assigned to each activity. Effective project scheduling is a critical component of successful time management.

Scheduling was a very difficult area to manage when testing their product.We had to create an incrementally approach starting with the bare bones of the Product and working from the ground up e.g testing the transition from Start menu to the in game.Underneath are Schedules created during testing.

Test Plan

The overall testPlan

Test Cases

The overall test cases

Test Incident Reports

the test incident Reports

Test Summary Reports

The Test Summary Reports

Chapter 11

Risks and Assumptions

The Risks/Assumptions

Chapter 12

Tools

A program used for software development or system maintenance. Virtually any program or utility that helps programmers or users develop applications or maintain their computers can be called a tool. The Tools used during testing are as follows :

1. Bugzilla - Bug Report Tool
    - Bugzilla is a web-based general-purpose bug tracking system and testing tool originally developed and used by the Mozilla project , and licensed under the Mozilla Public License
2. Selenium (software) - Automated Testing
    - Selenium is a portable framework for testing web applications. Selenium provides a playback tool for authoring functional tests without the need to learn a test scripting language
3. Bugzilla - LaTeX - Documentation System
    - LaTeX is a document preparation system. When writing, the writer uses plain text as opposed to the formatted text found in "What You See Is What You Get" word processors like Microsoft Word, LibreOffice Writer and Apple Pages

Chapter 13

References