|  |  |
| --- | --- |
| **SLOT MACHINE PROJECT** | *Version: 1.1* |
| Test Plan  Project Documentation | **Date:** 04/07/22 |
| Website: <http://asgag.eu/edu/Test_Task.html> | |

**CONTENTS**

**1 Introduction 3**

**1.1 Background 3**

**1.2 Test Objectives 3**

**1.3 Scope 3**

**1.4 OUT OF Scope 3**

**2 PROJECT IDENTIFICATION 3**

**3 Test deliverableS 4**

**4 REQIUREMENTS FOR TEST 4**

**5 test strategy 5**

**6 tools 6**

**7 resources 6**

**7.1 HUMAN RESOURCES 6**

**7.2 SYSTEM RESOURCES 7**

**8 SChedule 8**

**9 Risks aNALYSIS 8**

**10 APPROVALS 8**

# Introduction

The objective of this document is to test the functionality of the game application.

# 1.1 Background

The slot machine created in this project is quite similar to that of a modern slot machine. The project consists of five reels and only one middle payline.

# 1.2 Test Objectives

The slot machine project.

# 1.3 Scope

# As the website requirements, the team only focus on testing all the functions and automate as many test cases as possible. Smoke test, critical path test.

# **1.4 Out of scope**

# Nonfunctional testing such as stress, performance or security currently will not be tested.

1. **Project Identification**

|  |  |  |  |
| --- | --- | --- | --- |
| **Document**  **(version / date)** | **Created or**  **Available** | **Received or**  **Reviewed** | **Comments** |
| Requirements Specification | 🞎 Yes 🗹 No | 🞎 Yes 🞎 No |  |
| Functional Specification | 🞎 Yes 🗹 No | 🞎 Yes 🞎 No |  |
| Use-Case Reports | 🞎 Yes 🗹 No | 🞎 Yes 🞎 No |  |
| Project Plan | 🞎 Yes 🗹 No | 🞎 Yes 🞎 No |  |
| Design Specifications | 🞎 Yes 🗹 No | 🞎 Yes 🞎 No |  |
| Prototype | 🗹 **Yes** 🞎 No | 🞎 Yes 🞎 No | We have only website |
| User’s Manuals | 🞎 Yes 🗹 No | 🞎 Yes 🞎 No |  |
| Business Model or Flow | 🞎 Yes 🗹 No | 🞎 Yes 🞎 No |  |
| Data Model or Flow | 🞎 Yes 🗹 No | 🞎 Yes 🞎 No |  |
| Business Functions and Rules | 🞎 Yes 🗹 No | 🞎 Yes 🞎 No |  |
| Project or Business Risk Assessment | 🞎Yes 🗹 No | 🞎Yes 🞎 No |  |

1. **Test Artifacts**

Test Cases **-** Test Cases will be submitted during the test design phase.

Bug Report - Bug Report will be shared at the end of each day throughout the test execution cycle.

Test Summary Report - Report will be submitted at the end of testing.

# **Reqiurements for test**

See document: [Reqiurements for Slot Machine project](Reiqurements for tests.docx).

1. **Test Strategy**

Functional testing levels:

Smoke test - automated with batch files under Windows/MacOS.

Critical path test - executed manually.

Technique:

Execute each test case, using valid and invalid data, to verify the following:

* The expected results occur when valid data is used.
* Define equivalence partitions and boundary values for all combinations

Completion Criteria:

* All planned tests have been executed.
* All identified defects have been addressed.

1. **Tools**

The following tools will be employed for this project:

|  |  |
| --- | --- |
| Title | Tool |
| Test Management | Jira Software |
| Defect Tracking | Jira Software |
| ASQ Tool for functional testing | Java Base automation framework |
| Test Coverage Monitor or Profiler | Zephyr Squad |
| Project Management | Jira Work Management |

1. **Resources**
   1. **Human Resources**
2. Project Manager - provides management oversight: 1 member

* Manage the whole project
* Define project directions
* Acquire appropriate resources

1. Test Designer - identifies, prioritizes, and implements test cases - 2 members

Responsibilities:

* generate test plan
* generate test model
* evaluate effectiveness of test effort

Tester - executes the tests - 7 members

Responsibilities:

* execute tests
* log results
* report the defects
* document change requests

* 1. **System Resources**

For testing a web application, you should plan the resources as following tables:

Server:

* Install the web application under test
* This includes a separate web server, database server, and application server if applicable

Test tool:

* The testing tool is to automate the testing, simulate the user operation, generate the test results
* There are tons of test tools you can use for this project such as Selenium

Network:

* You need a Network include LAN and Internet to simulate the user environment

Network:

* The PC/Notebook which users often use to connect the web server

1. **Schedule**

**1 Phase - manual testing:**

Start Date: 04/07/22

End Date: 07/07/22

**2 Phase - automation testing:**

Start Date: 07/07/22

End Date: 21/07/22

**1 phase:**

|  |  |  |
| --- | --- | --- |
| **Task** | **Members** | **Estimate effort** |
| **Create the Test Cases** | Test Designer | 8 man-hour |
| **Perform Test Execution** | Tester | 5 man-hour |
| **Test Report** | Tester | 5 man-hour |
| **Test Delivery** | Tester | 8 man-hour |
| ****Total**** |  | ****26 man-hour**** |

**2 phase:**

|  |  |  |
| --- | --- | --- |
| **Task** | **Members** | **Estimate effort** |
| **Create the Test Cases** | Test Designer | man-hour |
| **Perform Test Execution** | Tester | man-hour |
| **Test Report** | Tester | man-hour |
| **Test Delivery** | Tester | man-hour |
| ****Total**** |  | ****man-hour**** |

1. **Risks Analysis**

**Risk:** Lack of required skills within the team.

**Mitigation:** Plan **training course** to skill up members.

**Risk:** Vacation of team members.

**Mitigration:** Plan vacation in advice according to a roadmap.

**Risk:** A team member decides to quit.

**Mitigration:** Bonus motivation.Regular review 1 by 1.Open position. Add another specialist if possible.

**Risk:** A team member get sick.

**Mitigration:** Ask another specialist for part-time work.

**Risk:** A lack of cooperation negatively affects your employees productivity.

**Mitigration: Encourage**each team member in his task, **and inspire** them to greater efforts.

**Risk:** Wrong budget estimate and cost overruns

**Mitigration:** Establish the **scope** before beginning work,

pay a lot of attention to project planning and constantly track and measure the progress.

**Risk:** The project schedule is too tight; it’s hard to complete this project on time.

**Mitigration:** Set **Test Priority** for each of the test activity.

**Risk:** The project schedule is too tight; it’s hard to complete this project on time.

**Mitigration:** Set **Test Priority** for each of the test activity.

**Risk:** Delays in feedback/approval from client-side.

**Mitigration:** Approve the meeting plan with customer.

**Risk:** Delays in feedback/approval from client-side.

**Mitigration:** Approve the meeting plan with customer.

**Risk:** Infrastructure of project

**Mitigration:** Provide additional hardware, dedicated/host servers.

# Approvals

Project manager should agree on completion of the project and determine the steps to proceed further.

The exit criteria are the targeted results of the test and are necessary before proceeding to the next phase of development.

Acceptance criteria:

**100%** success of test cases on smoke test;

**95%** of all critical path test cases must pass.

**Metrics**

* Test cases success percentage:
* *T* sp= \* 100%, where

𝑇𝑆𝑃 – percentage of successfully passed test cases,

𝑇𝑆𝑢𝑐𝑐𝑒𝑠𝑠 – quantity of successfully passed test cases,

𝑇𝑇𝑜𝑡𝑎𝑙 – total quantity of executed test cases.

# Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author** |
| 03/07/22 | 1.0 | Document creat | Sergei Boiko |
| 04/07/22 | 1.1 | Document update | Sergei Boiko |
|  |  |  |  |
|  |  |  |  |