Software Test Case Document

for

CS451-002 Group 3 Project

Revision 0.9

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Revision History

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# 1. Introduction

The purpose of this document is to outline the specific testing approaches and test cases used to evaluate the functionality, performance, and completeness of the *CS451-002 Group 3 Project,* as defined by the requirements outlined in the *Software Requirements Specification for the CS451-002 Group 3 Project.* The project is a web application that facilitates a game of checkers between two remote users.

## 1.1 Definitions, Acronyms, and Abbreviations

Please refer to the Appendix and Glossary sections for any definitions and abbreviations.

## 1.2 References

This document references requirements and software architecture as specified in the *Software Requirements Specification for the CS451-002 Group 3 Project* and *Software Design for CS451-002 Group 3 Project* documents.

# 2. Testing Environments

The project and all associated test cases, as outlined in this document, have been run within the following test environments.

## 2.1 Environment 1 – Player 1

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Machine Name |  | DB Directory | N/A | | | | | |
| OS and Version | Windows 10;  8 GB RAM;  256 GB SSD | Interpreter Platform |  | | | Client Server / Back-End | AWS  (Node.js) | |
| Tester Name | Samara Painter | | | Test Date |  | | |
| New Log |  | | | | State | |  |

## 2.2. Environment 2 – Player 2

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Machine Name |  | DB Directory | N/A | | | | | |
| OS and Version |  | Interpreter Platform |  | | | Client Server / Back-End | AWS  (Node.js) | |
| Tester Name | Natie Kolbe | | | Test Date |  | | |
| New Log |  | | | | State | |  |

# 3. Setup Information and Prerequisites

Prior to testing the project, the following prerequisites must be met:

* The project and all test cases can be run by launching the project with no additional setup.
* The project contains a GUI, which is the only method of interaction the user has with the project.
* All computers the tests are being run on have a working, stable internet connection.
* The AWS server hosting the project server is up and running properly.

# 4. Test Cases

Once the following test cases pass, the *CS451-002 Group 3 Project* fulfills all Priority 1 requirements as outlined by the *Software Requirements Specification for the CS451-002 Group 3 Project* and is considered complete and correct.

## 4.1 Test Case Set A: Initialize Game

### 4.1.1 Description

These test cases cover the expected scenarios that may occur when starting a game. For these tests, Player 1 and Player 2 will be attempting to start a game against each other. Their respective environments are specified in section 2.

### 4.1.2 Preconditions

All preconditions outlined in section 3.

### 4.1.3 Scenarios

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case | | | | | |
| ID | Req | Description | Execution Steps | Expected Result | Actual Result |
| A1 |  |  |  |  |  |

## 4.2 Test Case Set B: Gameplay

### 4.2.1 Description

These test cases cover the expected scenarios that may occur while playing a game. For these tests, Player 1 and Player 2 will be playing against each other. Their respective environments are specified in section 2.

### 4.2.2 Preconditions

All preconditions outlined in section 3. Additionally, a game must already be set up and active between Player 1 and Player 2.

### 4.2.3 Scenarios

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case | | | | | |
| ID | Req | Description | Execution Steps | Expected Result | Actual Result |
| B1 |  |  |  |  |  |

## 4.3 Test Case Set C: End Game

### 4.3.1 Description

These test cases cover the expected scenarios that may occur while ending a game. For these tests, Player 1 and Player 2 will be in an active game against each other. Their respective environments are specified in section 2.

### 4.3.2 Preconditions

All preconditions outlined in section 3. Additionally, a game must already be set up and active between Player 1 and Player 2.

### 4.3.3 Scenarios

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case | | | | | |
| ID | Req | Description | Execution Steps | Expected Result | Actual Result |
| C1 |  |  |  |  |  |

# 5. Appendix

## 5.1 Glossary