TP001: Master Test Plan

*This document conforms with the IEEE 829 standard for a test plan document*

Table of Contents

[Introduction 1](#_Toc398884143)

[Product Needs 1](#_Toc398884144)

[Test Items 1](#_Toc398884145)

[Features 1](#_Toc398884146)

[To be tested 1](#_Toc398884147)

[Not to be tested 2](#_Toc398884148)

[Approach 2](#_Toc398884149)

[Pass/fail Criteria 2](#_Toc398884150)

[Unit Testing 2](#_Toc398884151)

[UX Testing 2](#_Toc398884152)

[Functional Testing 2](#_Toc398884153)

[Performance Testing 2](#_Toc398884154)

[Testing Needs 3](#_Toc398884155)

[Test Deliverables 3](#_Toc398884156)

[Test Tasks 3](#_Toc398884157)

[Environmental Needs 3](#_Toc398884158)

[Responsibilities 3](#_Toc398884159)

[Staffing and Training Needs 3](#_Toc398884160)

[Schedule 3](#_Toc398884161)

[Risks and Contingencies 3](#_Toc398884162)

[Approvals 3](#_Toc398884163)

# 

# Introduction

This is the master test plan for the Poker project. It is also the only test plan, as the project is small enough to only require one test plan.

# Product Needs

## Test Items

The following items will be tested:

* Server software
* Client software
* User guide and documentation

## Features

### To be tested

#### Sever Software

* Ability of users to connect to server.
  + Priority: High
  + Risk: Medium
* Ability of server to complete a game according to rules of Poker
  + Priority: High
  + Risk: Medium
* Ability of server to retrieve user avatars
  + Priority: Low
  + Risk: Low
* Ability of server to create new players
  + Priority: Medium
  + Risk: Low

#### Client software

* Ability of users to connect to server
  + Priority: Medium
  + Risk: Medium
* Ability of users to interact with interface in order to perform actions
  + Priority: High
  + Risk: Medium

## Not to be tested

None. This is the initial release of the software.

## Approach

Due to reduced staffing, as much testing as can be automated shall be. A Continuous Integration approach shall be used in order to ensure that unit testing is run on every build; no functional testing will be conducted until a release candidate is presented. Code coverage metrics will be collected to ensure that testing is thorough at the unit level.

Due to reduced lab capacity, only two environments will be tested: a Windows 7 environment and a Linux environment. One configuration will be tested on each.

Unit testing, functional testing, integration testing, and performance testing shall be conducted. Security testing will not be conducted.

## Pass/fail Criteria

### Unit Testing

* Unit testing will begin when the development phase begins. Unit testing shall be conducted in parallel with development activities.
* No build will be considered a release candidate until and unless all unit tests are passing. Furthermore, a minimum of 85% code coverage is mandatory for a build to be considered a release candidate.

### UX Testing

* UX testing will be done on the client-side software once a prototype is developed.
* UX testing will not be conducted while there are outstanding interface defects
* UX testing will be considered completed once a prototype interface has passed

### Functional Testing

* Functional testing will be done on each release candidate build.
* Functional testing will not be considered finished while there are more than 1 critical-severity defect, 5 high-severity defects, or 20 low-severity defects outstanding.
* Functional testing will be conducted until all requirements outlined in the requirements document have been tested

### Performance Testing

* Performance testing will be done on each release candidate build of the server that has passed functional testing.
* Performance testing will be concluded when the performance of the server is considered acceptable by all stakeholders.

# Testing Needs

## Test Deliverables

The following deliverables will be created by the testing team:

* Test design specification(s)
* Test case specifications
* Test procedure specifications
* Test incident reports (if any)
* Test logs for any manual testing
* Test summary report

## Test Tasks

The following tasks will be performed:

* Test analysis
* Test design
* Test implementation and execution
* Environmental configuration
* Test reporting

## Environmental Needs

Two environments shall be prepared: one linux machine, and one machine running Windows 7. This represents our largest market share. The server shall be deployed on one machine, and the client on the other; each machine shall take a turn being the client and the server to ensure cross-system compatibility.

## Responsibilities

Due to a staffing constraint, all of the above tasks shall be assigned to the Test Lead on the project.

## Staffing and Training Needs

Due to staffing constraints, the project shall have one tester assigned to the project. That tester will need to be trained in the functional testing toolset for the language chosen.

# Schedule

TBD

# Risks and Contingencies

If the system cannot successfully be deployed to the linux machine, linux testing will have to be forgone. In that case, both the client and server shall be deployed to the Windows machine for testing.

If the scope of the requirements changes significantly, more time will need to be allotted to testing.

If the number of defects is significantly higher than expected for a given release candidate, testing may take longer than expected.

# Approvals

None.