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2014

**Test Plan for**

**Digital Cards Against Humanity**

***A party game for horrible people.***

# Introduction

This test plan document describes the testing undertaken for Digital Cards Against Humanity. The purpose of this was project is to create client and server software to host and play [Cards Against Humanity](http://cardsagainsthumanity.com/) (a multiplayer party game).

## Purpose

This document provides the following guidance:

* A detail of what is and what is not functioning as expected.
* A reference for subsequent bug fixing.
* To evaluate progress made thus far on this project.

## Project Status

This project is still in development and as such many more features and more complete error handling will be built on in later versions.

# Testing objectives

Testing was carried out to insure stability and functionality of all aspects of the system e.g. the client and the server. The desired functionality was insured by testing all aspects of each significant element of the solution e.g. being a player, being the card czar, messaging etc.

## Features to be tested

Client:

* Logging in.
* Player actions.
* Card Czar actions.
* Messaging.

Server:

* Custom Game.
* Commands.

## Features not to be tested

* Czar leaving mid game not implemented yet
* Player and czar commands through chat window not implemented yet

Testing Approach

Elements will be tested as follows:

1. Elements will be subjected to irregular use cases.
2. Results will be noted.
3. Element will be graded PASS, NONFUNCTIONAL, or FAIL based on the results.

## Element Status

Every Element has been assigned a status to help quickly identify its current condition.

|  |  |
| --- | --- |
| **Status** | **Description** |
| PASS | Is preforming as expected with all test cases being resolved successfully |
| NONFUNCTIONAL | Is not preforming as expected but does not impact the simple functionality of the base game. |
| FAIL | Causes crash or makes the game no longer playable |

**Table 1** **- Element Status**

## Client Test 1 - Login

### 28/04/2014

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Element** | **Test Case** | **Expected Behavior** | **Actual**  **Behavior** | **Status** |
| Name Textbox | Enter random string with spaces: “f63s f s gd4hgh jh222rdf g” | Name accepted and game functions normally | Expected | PASS |
| Name Textbox | Leave Empty | Message box telling user to input name | Expected | PASS |
| Server IP Textbox | Enter random string with spaces: “f63s f s gd4hgh jh222rdf g” | Return “Server unresponsive” after some time | **Crash** – IP Address parse failed.  **Fix** – move to Try Parse | FAIL |
| Server IP Textbox | Leave Empty | Message box telling user to input server IP | Expected | PASS |
| Submit | Leave all fields empty | Message box telling user to input name | Expected | PASS |

## Client Test 2 – Player Actions

### 28/04/2014

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Element** | **Test Case** | **Expected Behavior** | **Actual**  **Behavior** | **Status** |
| Whitecard Button | Attempt to click extra cards | Cards are hidden but remain in hand | Expected | PASS |
| Game Window | Quit mid game | Player removed server-side and the game continues | Expected | PASS |

## Client Test 3 – Czar Actions

### 28/04/2014

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Element** | **Test Case** | **Expected Behavior** | **Actual**  **Behavior** | **Status** |
| Game Window | Quit mid game | FAIL – czar exiting is unhandled currently | Expected | FAIL |

## Client Test 4 – Messaging System

### 28/04/2014

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Element** | **Test Case** | **Expected Behavior** | **Actual**  **Behavior** | **Status** |
| Message Box Textbox | Send random string: “f63s f s gd4hgh jh222rdf g” | Send to all players successfully | Expected | PASS |
| Message Box Textbox | Send empty message with send button | Send empty chat messages, limitation not in place yet | Expected | NONFUNCTIONAL |
| Message Box Textbox | Send empty message with Enter key | Does nothing, limitation in place | Expected | PASS |
| Chat Box Textbox | Send 1000 character message | Send to all players successfully | Not sent successfully. Can crash server if spammed, causes buffer overflow. Current max is 360 characters | FAIL |

## Client Test 5 – General

### 28/04/2014

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Element** | **Test Case** | **Expected Behavior** | **Actual**  **Behavior** | **Status** |
| Non specific | Join midgame | Crash, not handled | Expected | FAIL |
| Non specific | Run Multiple Clients on one PC | Implemented for single pc multiplayer, should work fine | PASS | PASS |

## Server Test 1 – Custom Game

### 28/04/2014

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Element** | **Test Case** | **Expected Behavior** | **Actual**  **Behavior** | **Status** |
| Custom Deck Builder | Start game with empty deck | Empty Stack Error, unhandled | Expected | FAIL |
| Hand Size Selector | Set hand size greater than 10 with gui clients | Client side crash, unhandled | GUI clients have can only see 10 of their cards but otherwise still function normally | NONFUNCTIONAL |
| Win Score Selector | Select 0 as the win score | Server crash, unhandled | AI loops infinitely, czar is left waiting infinitely | FAIL |

## Server Test 2 – Commands

### 28/04/2014

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Element** | **Test Case** | **Expected Behavior** | **Actual**  **Behavior** | **Status** |
| Command console | Enter made up command: “!game.killJoe” | Print “unknown command” | Expected | PASS |