Web Mighty

Requirements and Specification Document

Abstract

Web Mighty offers game sessions of Mighty. Customers who want to play Mighty online can make or join rooms and play the game. Multiple game sessions can be run concurrently. Each customer has to sign up for their own account that can be customized (e.g. avatar). Each customer can add other users on the friend list. All of the game data will be collected, gathered to main server, and analyzed. With analyzed data, Web Mighty will offer "Hall of Fame" system, and so far. Also, we will offer Al players that have basic gameplay functionality. This feature will make the game more robust, because absent players can be replaced by Al players. Players can spectate game of others. Spectators can chat about game. Chatting record will be open to the players at the end of the game. Spectators can join the next game if some players leave the game.

Revisions

2017-10-20 - initial version

Customer

Anyone who is interested in playing online Mighty can use our service. Specific target is SNUCSE students.

We will provide our customers pleasant gameplay experience, personal gameplay data, and competitive ladder system.

Competitive Landscape

There is an existing online Mighty called Network Mighty(네트워크 마이티), which is developed long ago. It offers both online multiplayer game sessions and offline game sessions with Als, and the rule for each game is highly customizable. However, the game only runs on Windows, and its Al behaves awkward sometimes. Also, to play online multiplayer games, there should be at least one "host player" who opens a Network Mighty server, among the players. The host can offer only one game at a time, and it might be unstable in connectivity. Web Mighty, on the other hand, will run

on the web browser, which is platform independent. Its AI will be fine-tuned so that the players can play reasonable games and have fun even with AIs. Furthermore, Web Mighty will offer a reliable central server that can serve more than one game concurrently.

Also, there are several Mighty game application at Google Play Store, but most of them does not support multiplayer feature. Furthermore, their game rules are very weird and different with each other, so the players are likely to get confused and easily give up the game.

User Stories

Feature: Unregistered users can sign up to create new account

Scenario: Sign up Iteration: Sprint 1
Acceptance Test:

Given I am not logged in and on Login page

When I press 'Sign up' button

Then I should be on 'Sign up' page

When I fill up the required information correctly

And I press 'Confirm' button

Then verification email will be sent

And I should be on login page

When I fill up the required information incorrectly

And I press 'Confirm' button

Then I will be informed to correct some forms

When I follow the link inside of verification email

Then a new account is created and I should be on Login page

Feature: Users can login to play Mighty

Scenario: Login Iteration: Sprint 1
Acceptance Test:

Given I am on Login page

When I fill up the form correctly

And I press Login button

Then I will navigated to Lobby

When I fill up the form incorrectly (e.g password incorrect)

And I press Login button

Then I will be informed to correct some forms

Feature: Users can see the profile page

Scenario: Display profile

Iteration: Sprint 1 **Acceptance Test:**

Given I am navigated to someone's profile page

Then I should be able to see the profile page with avatar, nickname, and so on

When I am logged in as the profile owner

Then the "Edit" Button should appear and be clickable When I am not logged in or logged in as other user

Then the "Edit" Button should not appear

Feature: Users can edit their own profile **Scenario:** Edit personal information

Iteration: Sprint 1
Acceptance Test:

Given I am on my Profile page When I click the "Edit" button

Then I should be at Profile Edit page

When I modify some personal information And I type the password for verification

Then my profile should be modified and I should be at the profile page which is updated with new information

When I type the password incorrectly

Then I should be informed to input correct password

Scenario: Upload new avatar

Iteration: Sprint 1
Acceptance Test:

Given I am on Profile Edit page

When I click "Find" button

Then I should be able to see "browse file" prompt When I selected a file which have correct format

Then image preview should be appear

When I selected a file which have wrong format

Then I should be informed to upload the correct image

When I click "upload" button

Then the avatar should be updated to submitted image without password verification

Feature: Users can join a room from the Lobby

Scenario: Join a room Iteration: Sprint 1
Acceptance Test:

Given I am on the Lobby

Then I can see the list of valid rooms

When I click the "Join" button of one of the rooms Then I should be at the Game Room

Feature: Users can see their profile from the Lobby

Scenario: Navigate to the profile page

Iteration: Sprint 1
Acceptance Test:

Given I am on the Lobby

Then I can see my profile picture and my nickname on the menu bar

When I click my profile picture or my nickname

Then I should be on my profile page

Feature: Users can see rankings on the Hall of Fame

Scenario: Display the Hall of Fame

Iteration: Sprint 1 **Acceptance Test:**

Given I am on the Hall of Fame

Then I should be able to see the ranking of players

When I am logged in

Then I should be able to see my own ranking belong to other players

When I click someone's nickname Then I should be on the Profile page

Feature: Users can create a game from the Lobby

Scenario: Display game creation popup

Iteration: Sprint 1 **Acceptance Test:**

Given I am on the Lobby

When I click "Create New Game" button

Then I should see "Create New Game" popup

Scenario: Create a game

Iteration: Sprint 1 **Acceptance Test:**

Given I am seeing "Create New Game" popup

When I fill in the room name
And I set up the game rule
And I click "Create" button

Then I should be on Game Table

Feature: Users can leave a game

Scenario: Leave a game

Iteration: Sprint 1

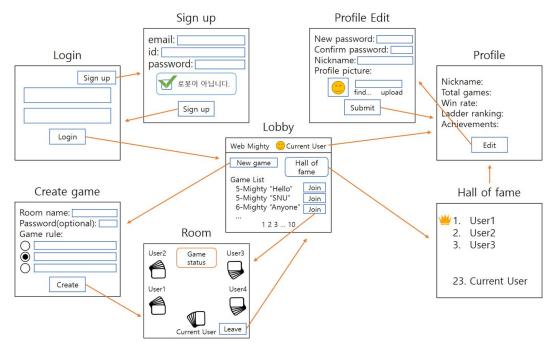
Acceptance Test:

Given I am on Game Table When I click "Back" button Then I should be on Lobby

Future Iteration Discussion

- Game play
- Sorting options for Hall of Fame
- Al player substitution when user left game
- Room search feature with unique room id or room name
- Random room search (matching?)
- Friend feature

User Interface Requirements



Login / Sign up / Lobby / Profile / Profile Edit / Hall of fame / Create new game / Room

Transition is indicated with arrows.