**Project 4 Part 2 Report**

# Team members

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1. **Basic Requirements: Finished**
2. **Introduction**

We have Program.fs and index.html in this project.

Program.fs contains implementation for websocket and JSON API, and client to use the websocket was implemented in index.html using html and JavaScript.

We use suave to implement this project. Here is the reference: <https://github.com/SuaveIO/suave/blob/master/examples/WebSocket/Program.fs>

For Json-based API we used FSharp.Json serialization library: <https://github.com/vsapronov/FSharp.Json>

1. **Compile and run**

First, input “dotnet run” to compile the code.

Text

Description automatically generated

Or you can run the project and server directly in visual studio.

Copy 127.0.0.1:8080 and paste this in your browser (chrome) and then you will see the Twitter Simulation interface.

Or you can open up the index.html file directly in the project folder.

Below picture is the screenshot for our project UI.

Graphical user interface, application

Description automatically generated

Graphical user interface, text, application, chat or text message

Description automatically generated

1. **Functionalities**

* **Register**

You should create your username and password, then click sign up button. Once your account is registered successfully, terminal will send you feedback.

You are allowed to register multiple accounts.

**Graphical user interface, text, application

Description automatically generated**

**Graphical user interface, text, application

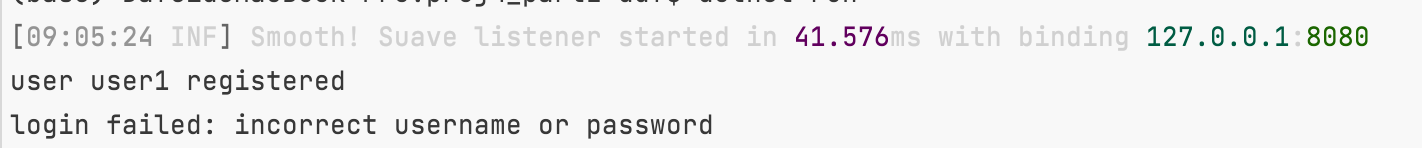
Description automatically generated**

* **Login**

After you register an account, you can login. Make sure you input correct username and password, otherwise, you will get a warning.

Graphical user interface, text, application

Description automatically generated



Once you login your account successfully, you can explore more functionalities.

Graphical user interface, text, application, email

Description automatically generated

Graphical user interface, text, application

Description automatically generated

* **Subscriptions**

Input a valid username to subscribe.

Graphical user interface, text, application, chat or text message

Description automatically generated

Text

Description automatically generated with medium confidence

* **Send Tweet**

Write some words in text box and click send button. You’ll get the tweet showing below.

**Graphical user interface, text, application, email

Description automatically generated**

**Text

Description automatically generated**

**Text

Description automatically generated with medium confidence**

* **Search Tweet**

You can search tweets by typing tag or any key word.

**Text

Description automatically generated with medium confidence**

**A picture containing text

Description automatically generated**

**Text

Description automatically generated with low confidence**

**Text

Description automatically generated**

* **Display all your tweets and tweets from subscribed users**

Entering a username will show all the tweets from this user and all tweets from the subscribed users.

**A picture containing logo

Description automatically generated**

**Text

Description automatically generated**

* **Retweet**

Input another valid username to retweet.

Graphical user interface, text, application, chat or text message

Description automatically generated

**YouTube Demo:**

More detailed and clear demo can be found here:

[**https://youtu.be/blnX66MZcsY**](https://youtu.be/blnX66MZcsY)(a bit longer ~13 mins, the recording was interrupted at 10mins so the video was cut in half.).

**Bonus:**

Not completed.