Log in Website project

Sean Yin
say4@uw.edu

Abstract

Design and implement a web-based email classification system. You need to implement both web server-side code and front-end UI (browser) code. The system should have login/logout functions, and also be able to run the pre-trained classification Machine Learning model.

Disclaimer*: The report has not been subjected to the usual scrutiny reserved for formal publications.*

1. Docker

The final.tar is the docker file that contains the website, the port is 5000 on docker side, please load the image and type the locoalhost: "forwarding-port" to load the web.

If one cannot load the docker image properly, one can still access the web from source code by running "run.py" and type the url to run the webpage locally. Figure 1 is the tree structure of files. The environment requirements can be found in requirements.txt file. The overall running procedure can be found on Figure 2. Folder "users" contains all user-related source code. Folder "model" contains all pre-trained model related source code.

One can also create a docker image based on the Dockerfile. The framework of the project is based on Flask with Python.

2. Function

2.1. Registration

Figure 3 shows the register page. The registration page is the default home page of the website. One can register an account with a unique username and a distinct email address and then set a password. Figure 4 shows the account duplication warning during creating a new account. The user will be logged into the system directly once he/ she finishes registration successfully.

2.2. Log in

Figure 5 shows the login page. One can login based on his/ her username and corresponding password to log into the account. If one gives a wrong password, the web page

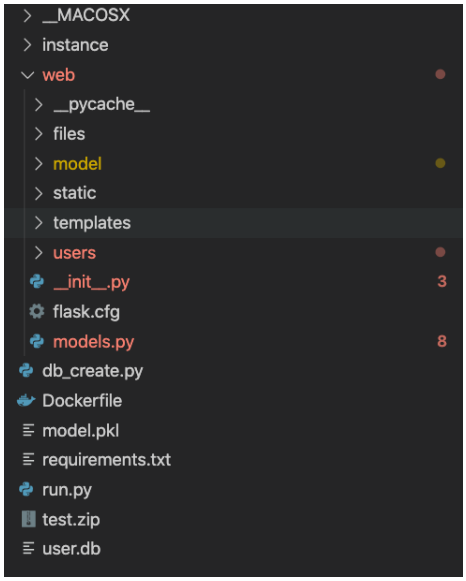

Figure 1: Files structure.

```
FROM python:3.7.2-stretch

WORKDIR /app

ADD . /app

RUN pip install -r requirements.txt

CMD python run.py
```

Figure 2: Set up information.

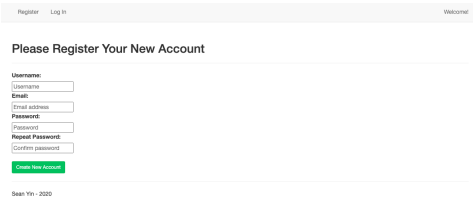

Figure 3: Registration page.

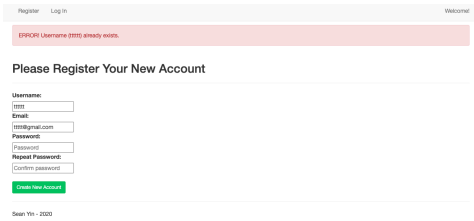

Figure 4: Account duplication warning.

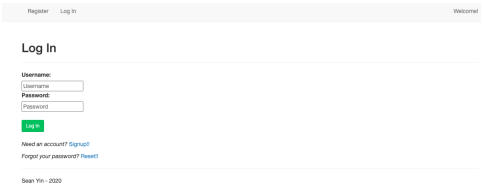

Figure 5: Log in page.

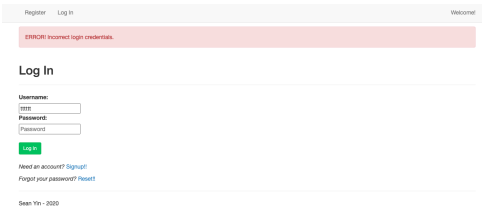

Figure 6: Incorrect login warning

will show a notification. Figure 6 is an example of incorrect log in. One can sign out at any time through the button on the navigation bar. The login session will be terminated automatically if the user idles more than 10 minutes (Due to the fact that analysis will take more than 2 minutes to finish).

2.2.1 Profile

One can access his/ her profile from his/ her email address on the right of the navigation bar after login the account. One can also see his/ her basic information and reset the email address and password here. Figure 7 is an example of user profile.

2.2.2 Updating email and password

One can update his/ her password and email address through the user profile page. Figure 8 is the page to update the password.

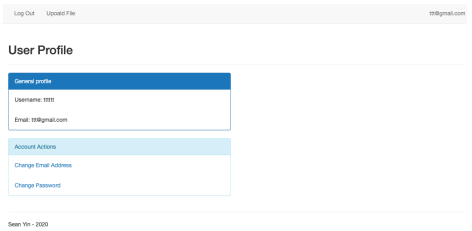

Figure 7: Profile page.

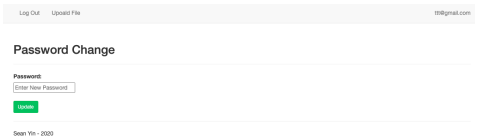

Figure 8: Update password page.

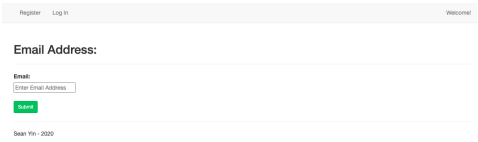

Figure 9: reset password through email page.

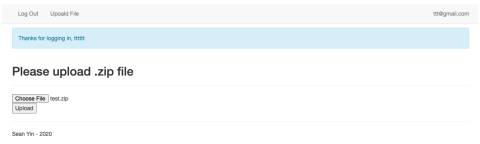

Figure 10: Upload file.

2.2.3 Reset password via email

If one forget the password, he/ she can also access the account by reset the password via the email. Figure 9 shows the reset password via email page.

2.3. Upload file

After logging into the account. The web page will redirect to the upload page to upload testing data. Figure 10 shows the upload page. One can access the upload page at any time after log into the account. The page will show the warning if one uploaded incompatible files.

2.4. Results' page

After uploading the file successfully and finishing the analysis, the web page will redirect to results' page and

Figure 11: Analysis results.

shows the analysis results. The analysis is based on the pre-trained model.Figure 11 shows an example of the results page.

3. Unittest

We test the overall project on duplicate registration, update the password and then log in. We also test the functionality of page redirection. Due to the time limitation, we did not finish the all potentially testing and it will leave to be the future work.