1. **Running Environment**

The application has been developed in python with Dash framework. Also, we have used pandas, numpy, sklearn and json to support our project. As all of them are available in python, the application can easily be executed from python console. We have tested the application by running it using Anaconda Prompt.

1. **Steps to run the application**

Please follow the following steps to run the application:

1. Run the code using the command python *RecommendationSystem.py*. Notice that there are two files in the Code folder, *Recommendation.py* and *RecommendationSystem.py*. Please run *RecommendationSystem.py*.
2. The application should now be open in web browser and you should be able to view the main page. The main page includes options for old user as well as new user. Let us first look at the old user:
3. The old user must input their User ID in the textbox just before the “Sign In” button. The User ID of old users can be found from ratings.csv.
4. After entering the User ID, hit the “Sign In” button.

Now for the new user, they should just click the “New User” Button.

1. If you have opted for new user, you will be displayed with a new layout for genre selection. **Press “F5” or refresh the page if you are not able to select genres.** After you select 5 genres, “Next” button will appear. Press the button to continue. Notice that the “Next” button will appear only if you select exactly five movies.
2. After you click “Sign In” button for new user and “Next” button for old user (in genre selection layout), you will be displayed a layout with recommended movies. It lists 25 movies recommended for the user. This layout provides two interaction tools for the user:
3. Rating slider: User can further rate movies using the rating slider below each movie to refine their recommendations.
4. “Refresh” button: User can click the “Refresh” button after rating movies to get a refined movie recommendation.
5. To go to the Main page you should replace the current URL with the URL that was initially used to run the application (say, http://127.0.0.1:8050).