

## Movie Recommendation System(iMovie)

### Group name: Identifier

**Group members:** Neo (Peng Jin, z5185874), Krist (Yong Lin, z5136783), Thomas (Tingfeng Lin, z5147976), Steven (Yang Yang, z5147438)

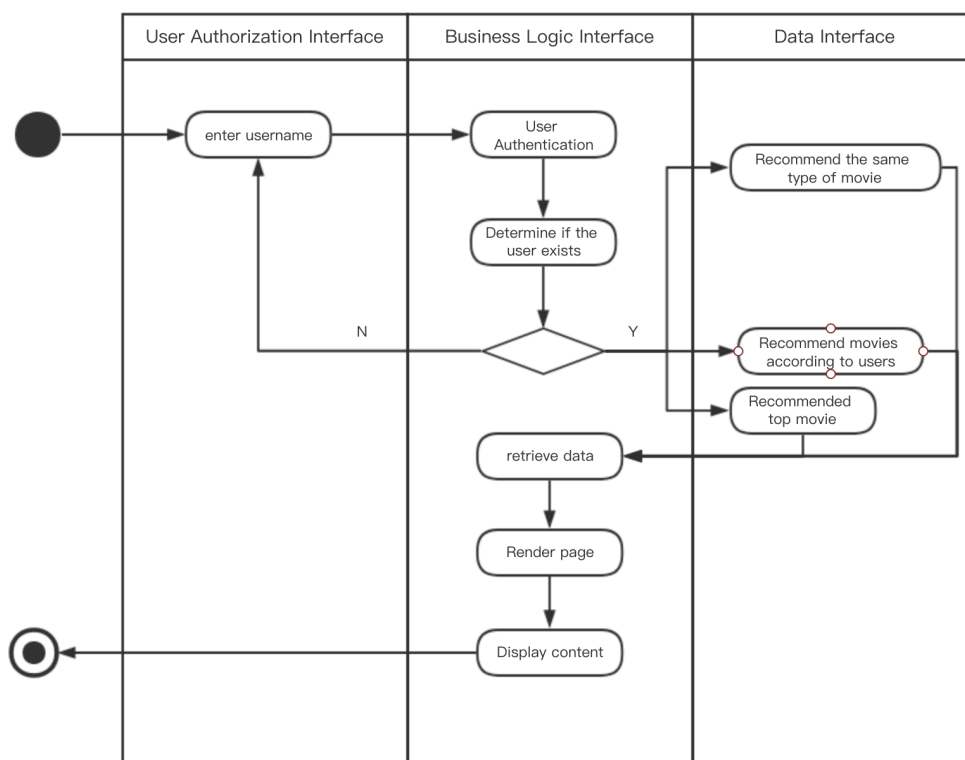
### Aim:

Choosing which film to watch is getting difficult as the number of options is growing rapidly nowadays.

Our project aims to solve this problem by implementing a movie recommendation system based on a neural network model to make predictions of what movies the customers are most likely going to enjoy.

We are going to integrate the recommendation service with well-designed client interface to increase the user experience. To be more specific, not only the name of the recommended movies but also their brief intros and posters will be provided to the client interface for users' conveniences.

### The architecture of the entire system:



**Front-end:** The webpage uses the layerUI framework based on the bootstrap framework, using ajax, json and other technologies to achieve interaction with the user.

**Backend:** Implementing movie recommendation functions using RNN neural network framework model

**Accessibility:** Use python beautifulsoup4 to implement web crawling information

**User authentication:** Control user permissions using flask auth technology

**Dataset:**

The dataset which we are going to use describes 5-stars rating and free-text tagging activity from [MovieLens](<http://movielens.org>), a movie recommendation service. The data we going to use are contained in four .csv files named “links.csv”, “movies.csv”, “ratings.csv” and “tags.csv”.

**Communication channel and code repository:**

Our communication channel is mainly base on WeChat and GitHub. Furthermore, GitHub is also our code repository. (<https://github.com/lemonlemon11/comp9321ass3.git>)

**Member’s role:**

We allocated the responsibility as below:

Neo (Peng Jin, z5185874) is focused on crawling poster and specific information of the movies.

Krist (Yong Lin, z5136783) is focused on designing the API of the application

Thomas (Tingfeng Lin, z5147976) is focused on designing the simple client with GUI

Steven (Yang Yang, z5147438) is focused on the document and the authentication schema of the application.

For building the machine learning part we discuss together and Tingfeng Lin pre-processes the data into different .CSV files so that the data can be used to train and evaluate the model.