

Comp9321 assignment meeting-one

Group name: Salted Fish

Group member: Yaqi Yang, Dong Zhu, Jinpeng Jiao, Rui Xiao, Xiaohan Wang

1. What is the aim of the service?

Our team's data analysis service target is about movie. By processing data from the datasets, we are able to implement the following functions.

1. Enter the movie name, the server returns an overview of the movie, including the movie introduction, the name of the director and actors, the release date, and the overall rating, etc.
2. Enter a type of movie, the server returns some information about the type of movie, and implements the movie recommendation function.
3. Enter a review, the server returns this is negative or positive comment, we intend to divide the emotion into 5 levels as very positive, positive, neutral, negative and very negative.

2. What are the datasets?

We found two data sets about movies from Kaggle's dataset, one for movie reviews and emotional tags, and one for 1000 movies from 2006 to 2016, including movie titles, directors and actors names, year, rating, etc.

3. What is your communication channel?

The channel we communicate with is Worktile, a piece of software dedicated to teamwork. We created projects and discussion groups inside. In addition, there are network disk, schedule, task assignment and other functions in the project module.
<https://worktile.com/>

4. What is your code repository?

The repository for our code is Github, we have created a new project and the website is
https://github.com/Jettaustralia/Salted_fish_Ass2.

In addition we can also share our temporary code and files through the Worktile project file sharing window and everyone could edit online.

5. A very brief description of each member's role in the project

The five members of our team are Dong Zhu, Jinpeng Jiao, Yaqi Yang, Rui Xiao, Xiaohan Wang. The front-end implementation tasks of data analysis service are handled by Rui Xiao and Xiaohan Wang. The front end mainly contains a visualization window and a chat interaction window. The implementation of the backend is handled by Dong Zhu, Jinpeng Jiao and Yaqi Yang. The backend mainly contains the database, the construction of the dialogflow, the sentiment analysis model, etc.

6. Project documentation; correctly described use cases using notations, such as sequence diagrams, mock- ups, or plain natural language; the method is optional.

FRONTEND	JavaScript
BACKEND	Python
DATABASE	Mysql
MIDDLEWARE	DialogFlow

Table 1. Technical method form

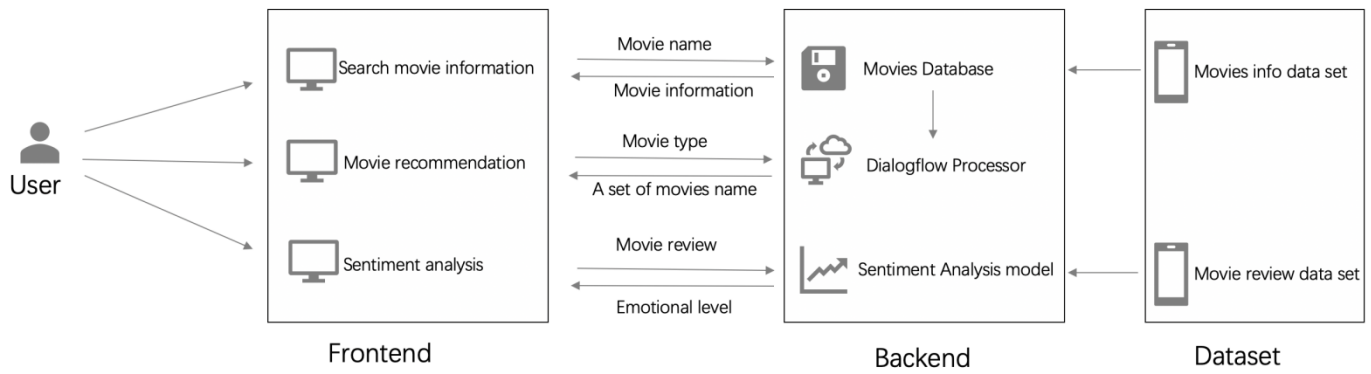


Figure 1. Architecture diagram of the project

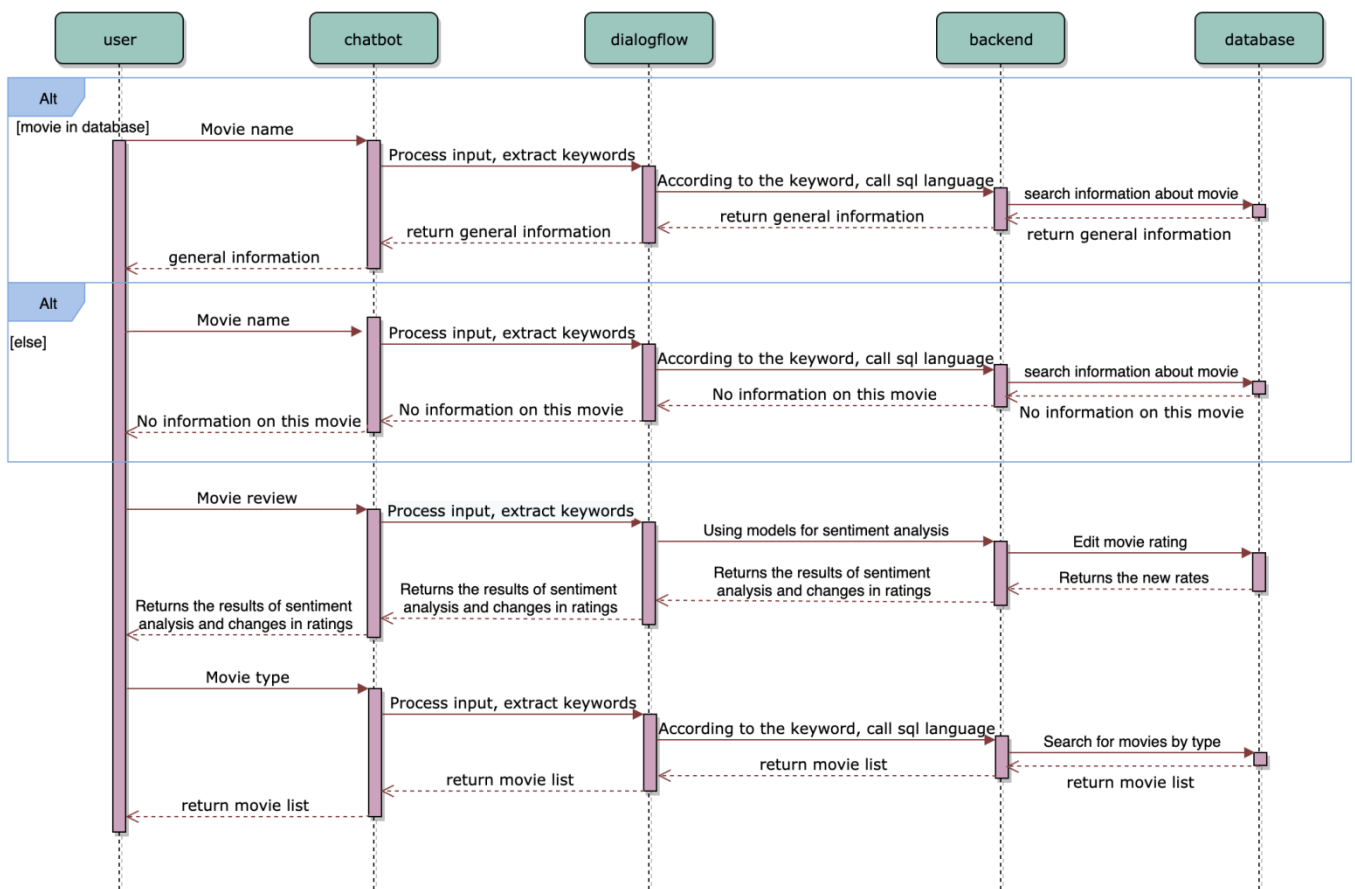


Figure 2. Project sequence diagram

Through the processing of the movie profile dataset, we intend to store information about all the movies in the dataset in the database. For each movie detail query, we return information about the movie to the user from the local database.

For the movie recommendation function, we use the Dialogflow to assist us in the processing of natural language and the connection of the database, and to achieve the output of relevant information by matching keywords. In this database we will save the category of the movie, the year of the release, the overall rating and so on. The server will not only implement recommendations based on movie categories, but will also be able to implement movie rankings for a particular year based on movie ratings.

In the function of film evaluation sentiment analysis, we mainly use the BERT model to realize the task of sentiment analysis. We obtained tagged reviews from the Kaggle dataset and trained the models as a training set for the BERT model. The final model is a core part of sentiment analysis.