Individual Project Report: Zeng Hanyu (A0231558A)

Personal Contribution

My groupmates and I finished the whole IRS project together. After we make a decision that to use the knowledge we learnt in IRS course to design a project to recommend properly destinations for the travelers and make a whole trip plan for them, we spend long period of time to find out the properly APIs to give us good result of the recommendations. At first, we do not think about to make a whole plan for the users, but we find that the recommendation system will be more useful for the customers if it has this function. There already have lots of traveling applications have the function to recommend the destinations for users, but few of apps will help the users to make a whole plan of traveling.

I was responsible for the attraction recommendation. Firstly, I find it is hard to find an API that recommend the attractions for the trip destinations directly. My groupmate suggested me to us the longitude and latitude of the destination as the input to the API, and use another API to search for the longitude and latitude of the destinations. So, I used 2 APIs, and I also make the video of the business part of our system.

Learning Journey and Outcome

I have gotten lots of experience in using the tools I learnt in the machine reasoning and the reasoning system and the cognize system courses. I find that the knowledge I learnt in classes are not just the words on ppt but can really be used in my projects, and this experience really helped me to understand some difficulties I met in classes, such as using dialog to design a chatbot model. Although we did not use the dialog to build a chatbot system eventually, because we find that the dialog is not that convenient when we run it on our laptop. We spend time to train a new NLP model to chat with our customer. By this way, we can make the chatbot become more controllable, we can change the code to make the NLP model to have more communications with the users in order to get more personal information, and have a more accurate result. I have learnt a lot when we train the model. My group has several meetings to discuss how to make the program more efficiency and useful for traveler. During those meets, we decide to recommend the destination, plane tickets, hotels, attractions and restaurant in the recommendation system. And we also start a new project on the GitHub. Seeing this project is gradually improved, I feel a sense of fulfillment. And I am now looking forward to getting another chance to do a project with friendly teammates.

Knowledge and Skills Application

Cognitive Reasoning System: NLP mode

We trained an NLP system by ourselves. I have learnt a lot in coding and model training.

Reasoning System & Machine Reasoning:

We built a system to do reasoning based on the input information of the user. The system will recommend different kind of destinations, hotels, tickets and attractions based on the users' personal information.

Tools:

API: We used 5 API in the project. First one will do some destinations recommendation

based on the input information typed in by the users. Then, the next API will recommend plane tickets for the location of traveler to their chose destination. The third API will recommend hotels depends on the information extracted by the NLP model, and the fourth one get the longitude and latitude, and then input the output of last API to the fifth one API, we can get the attractions.