

CS5200 ProjectProposal

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1. **Group name:** ZhangY with only one member Yaming Zhang
2. **Description of the project:**

I would like to design a system for travel or trip records, which could help record your trips with your friends and families! These days traveling has become more and more normal for college students and adults. However, there is no convenient application for us to remember all the places we have gone with our beloved. So, I came up with this idea to help us remember all those precious times.

My system is designed to have a login system, which could be used for each user to login and get their data. Users will have their own email, password, username, etc. For each user, they could search for their friends by email or username to add friends and share the information with their friends. After login, users could add their trips that they have been to. The trips consist of the departure and return date, the city and their companies. If they like, they could also add their favorite cuisines during the trip so that people could learn more about the city and restaurant recommendations.

As I mentioned above, the main part of my application would reside on the users and the trip histories. This is also the part where I would demonstrate my ability on the CRUD operation on data as well as the procedures, functions, triggers etc.

For extra credits, I would like to add some notification part and file upload part. For example, users could receive email notifications when they are added to the trips of their companies. For the file upload, the system may allow the users to upload the photos of the trip in their zone. I will use these parts as extra functions and extra credits.

3. **Data Storage:** For data storage, I will use MySql as my relational database.
4. **Technical Stack:**

I will use **Python** and **Django** as my backend language and RESTful framework because Django is really friendly for full stack development. I could use the template offered by Django for my frontend view display. Moreover, Django provides database ORM for MySQL, which is more convenient and secure.

I would like to use **JWT** for my user authentication to ensure the security of my backend APIs.

After the development of the project, I will deploy the server on a public machine and resolve the public IP to my own domain so that people could get access to the application from all around the world.

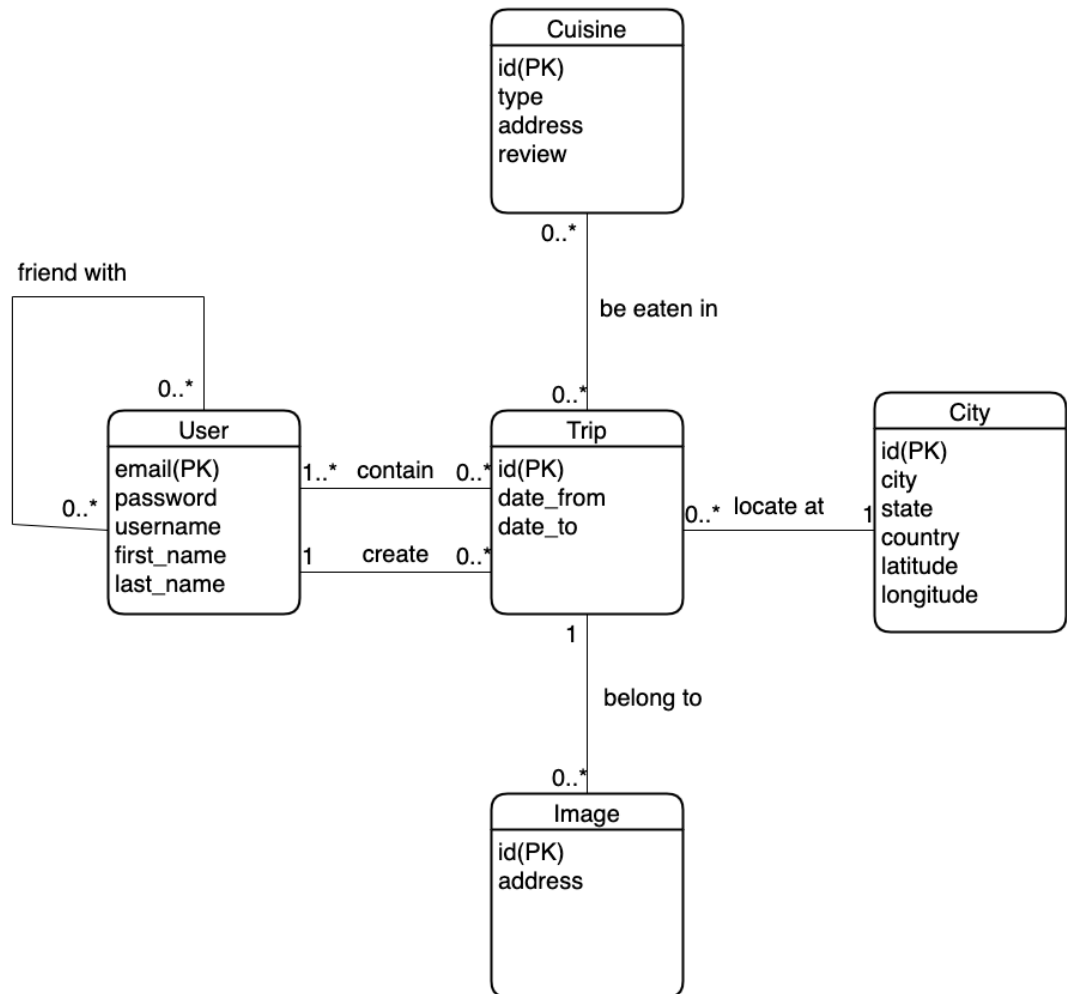
I am thinking of using some frontend libraries to show the places on the map using **GIS** features of the data. However, this part could be a little demanding for me thus I will put this part as extra effort too.

5. **Why this?**

My inspiration came for the Zenly mobile application which has been shutted down these days. Zenly is used for sharing real-time locations of your friends and families. After being shutted down, people are trying to find an alternative for the application. At that time, the idea got into my mind like I could design an application to share the trips with our friends. Although the location sharing is not real-time, we could always memorize those happy times.

Another reason is that I have done some Geospatial data research for my computer science study. Thus, I have a huge passion for geospatial data, which could be used anywhere in our life. I hope this project could also demonstrate my knowledge on geospatial data processing.

6. **Conceptual design:**



7. User interaction:

