Eaoow (Eat Now)- an Android application tells people what to eat

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Goal

- If users are familiar with nearby restaurants, they will spend less time determining which restaurant to go.
- If users are not familiar with nearby restaurants, they will spend less time reading online reviews and recommendations.
- Solve the problem of choosing a restaurant.
- Help users discover their desired food with constraints.

Motivations and Objectives

- People do not know what they want even if they know what nearby restaurants have.
- Spend too much time on making decisions of restaurants.
- Online services such as Yelp and Google Maps are there for helping people make decisions. When people are not sure what they want, it will be a good idea if an app can tell them what to eat.
- By doing so, people are likely to know their preferred restaurant.

Challenges

- Get current location of user
- Get information of nearby restaurants
  - Google services implementation
  - Parsing, download JSON file
- Apply food preferences to restaurant search
  - Manipulate threads to prevent app crashing
- Store user's action to given restaurant
  - Room implementation

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Methodology

- To get user's current location,
  - import native Geocoder and Location object, create a StringBuffer, retrieve location information.
- To get information of nearby restaurant
  - Connect to Google Places Services by using http URL connection, parsing data from URL request
- To apply food preferences
  - Create a class extends PreferenceFragment. Use a worker thread on a class extends Asynctask to reach better performance, meanwhile not blocking main UI thread.
- To record user's action
  - Using Room Persistence Library database (a optimized query tool based on SQLite) store and update user's action.

Results

- First time launch
- User Interfaces
  - Eaoow Current Location:
    - Current Location: 13-417 East Lane Piermont, New Jersey
    - Menu:
      - Search Distance
        - 1 km (5 miles)
        - 2 km (12 miles)
        - 5 km (3 history)
        - 10 km (6 miles)
  - Restaurant}

Future Plans

- Eaoow will be able to give user recommended menu based on user's choice of restaurant.

Methodology:

- When user have restaurant name, web crawler will get the reviews. Reviews includes the dish name and the review content.
- Use AWS sentiment Analysis help the app choose the positive reviews and display the dish name.

References

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