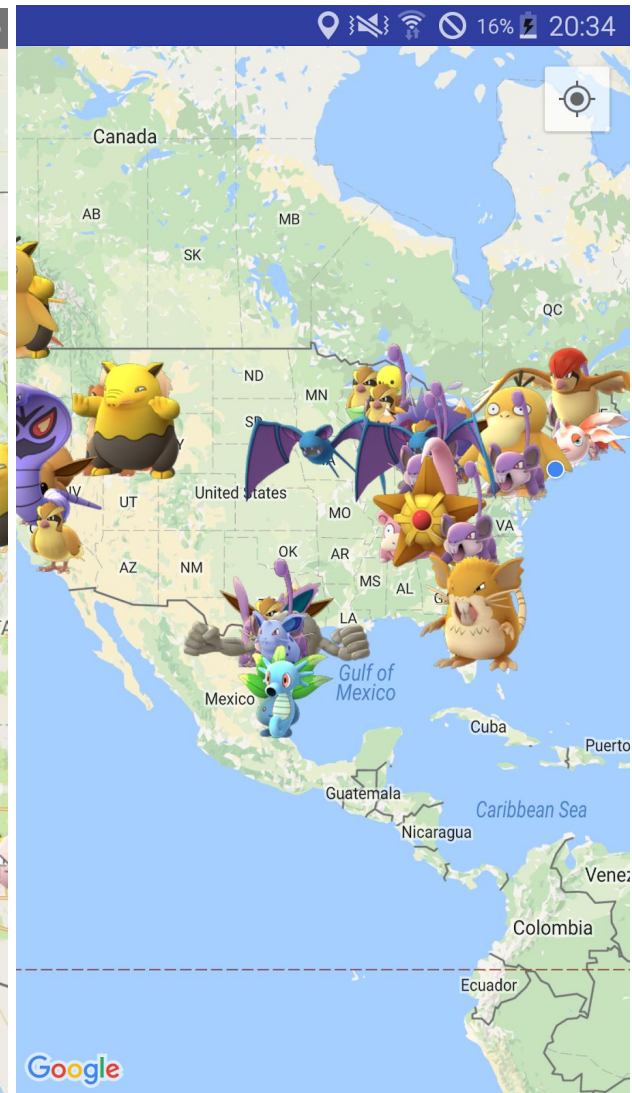


DATABASE (CPSC 437)

Pokemon Hunter

Chen Gu, Zijun Tang, Shuwen Deng



Introduction

Famous cell phone Pokemon Go has been extremely fashionable since last summer. However, it will be really annoying to only see some Pokemon's icons without actually find them. What's more, some rare and precious Pokemon can hardly be found by blind search. And currently there is no mature Android APP can rapidly locate Pokemon in a wider range and provide related attributes which will be advantageous for the hunters to catch them.

Working split

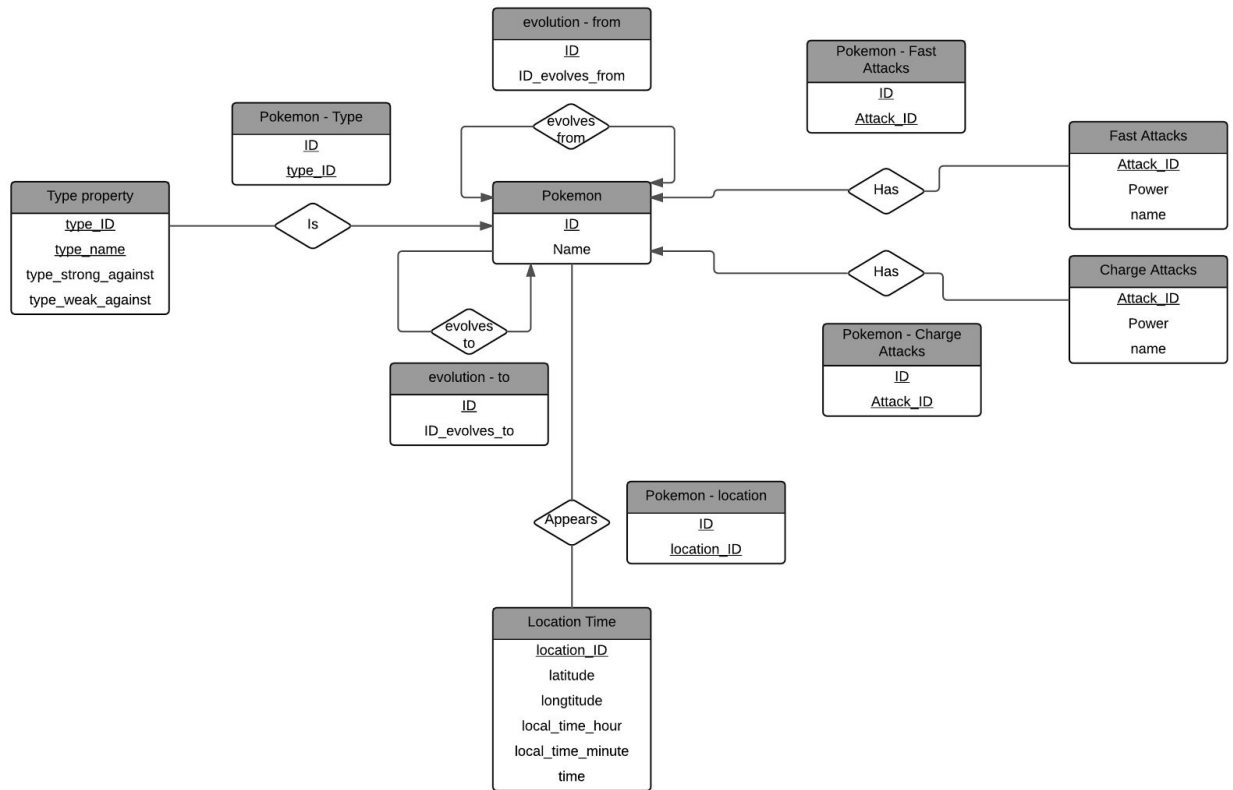
Chen Gu: Implemented the backend (including database itself and PHP scripts to fetch data) and overall android App architecture which utilizes Google Map API to show pokemons' location and navigate.

Zijun Tang: Take part in the design of database system; post request to server to fetch Pokemon's data; design user interface to display pokemon's information.

Shuwen Deng: Search data about the properties of Pokemon and make database for the entity-relationship system.

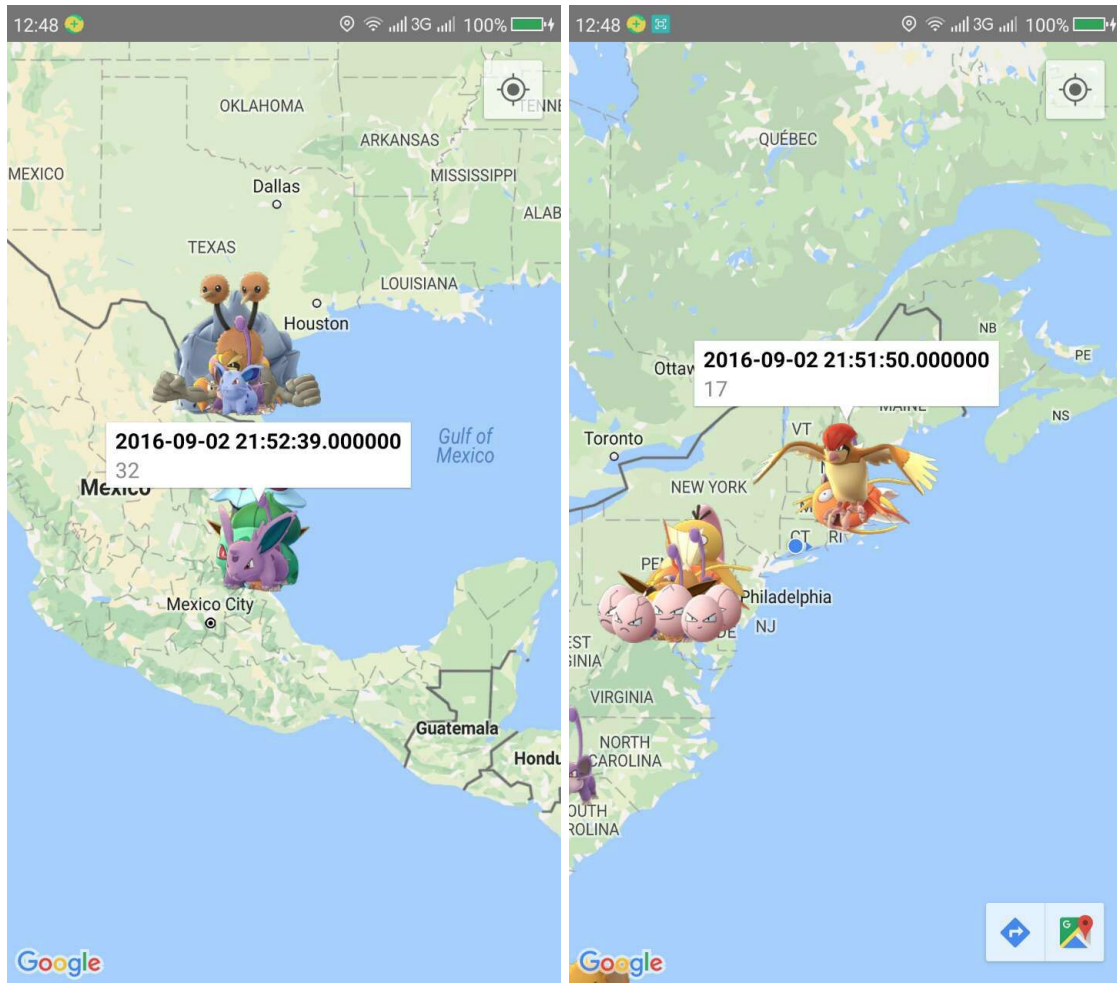
Entity-Relationship Diagram for the whole Database

There are totally 11 tables organized for both entity and the relationship among them:

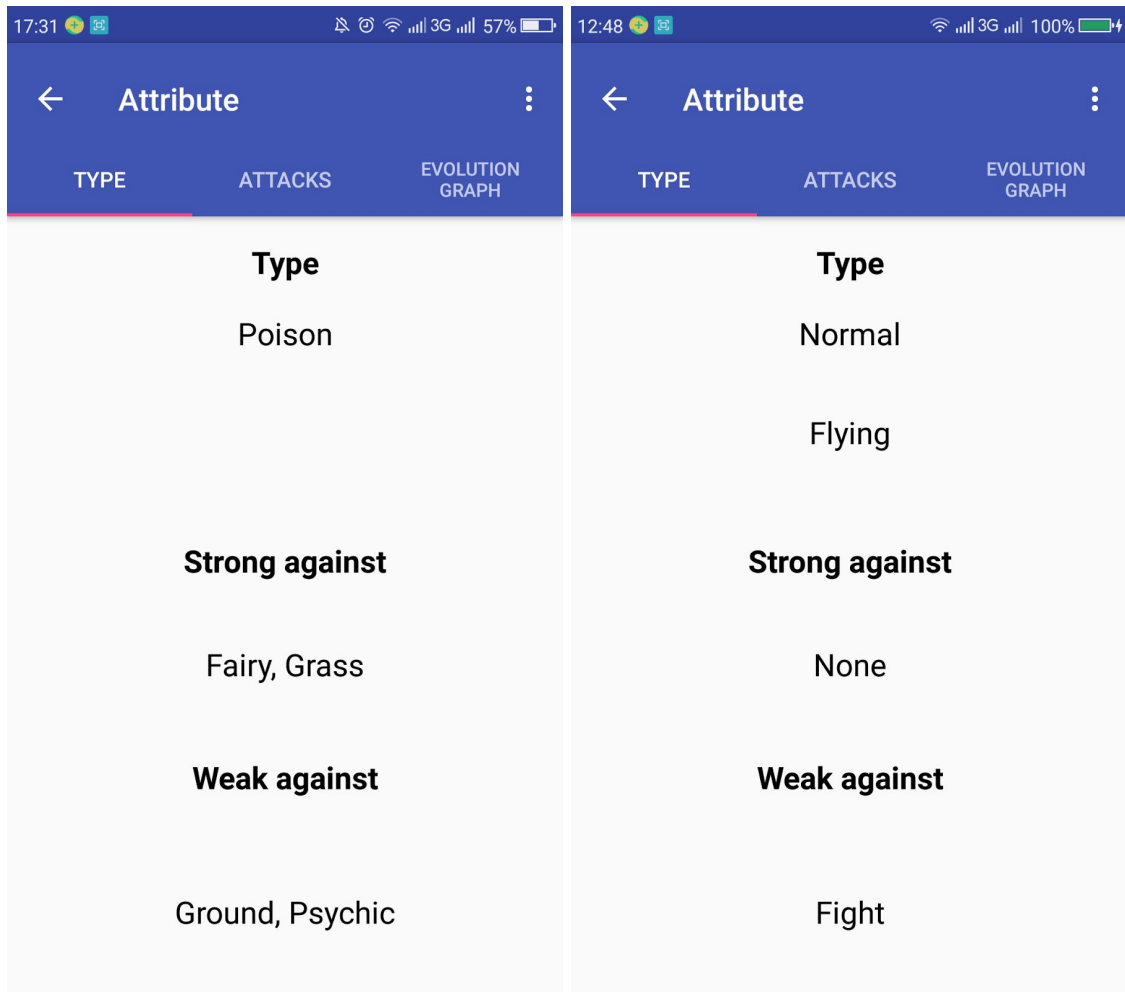


Functions supporting

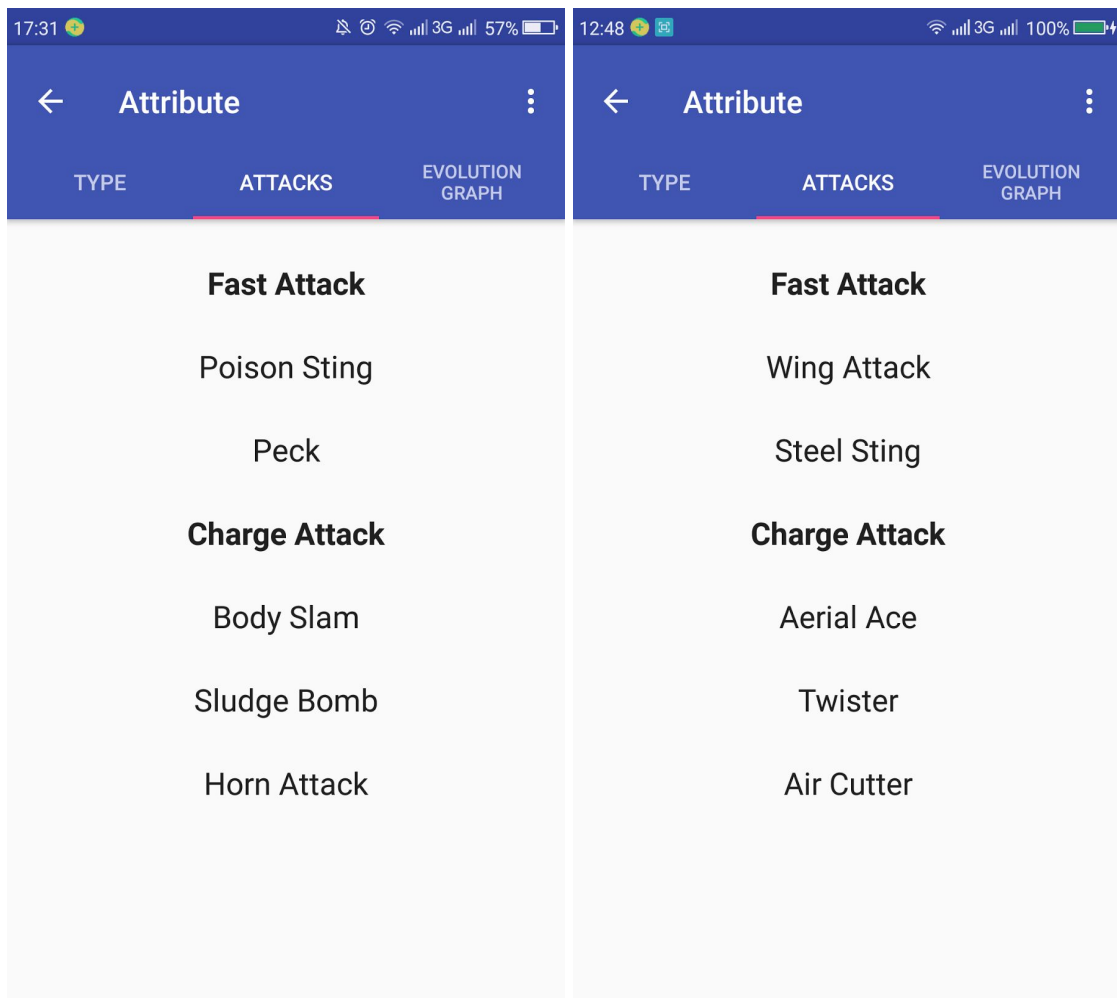
1. Display locations and appearing time of pokemons.



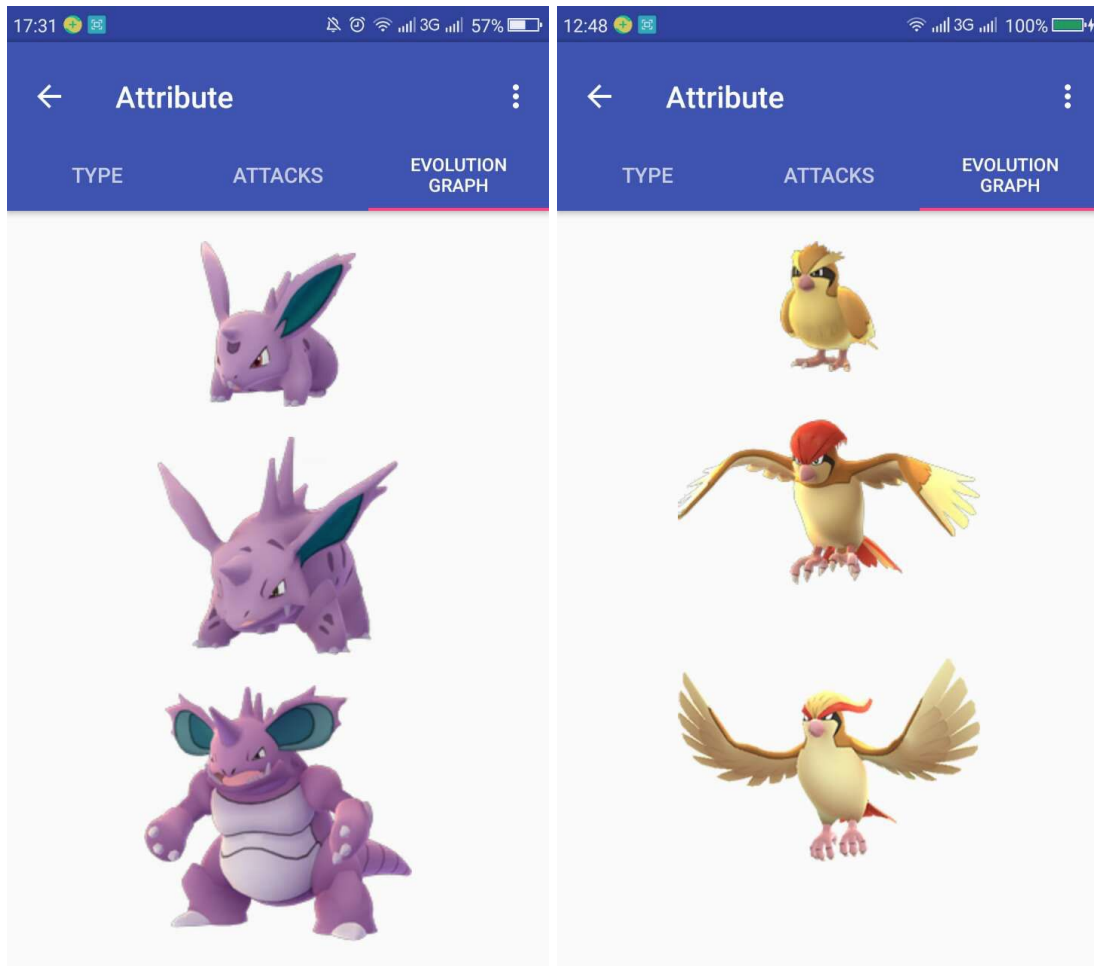
2. Provide information about pokemon's types, advantages and disadvantages.



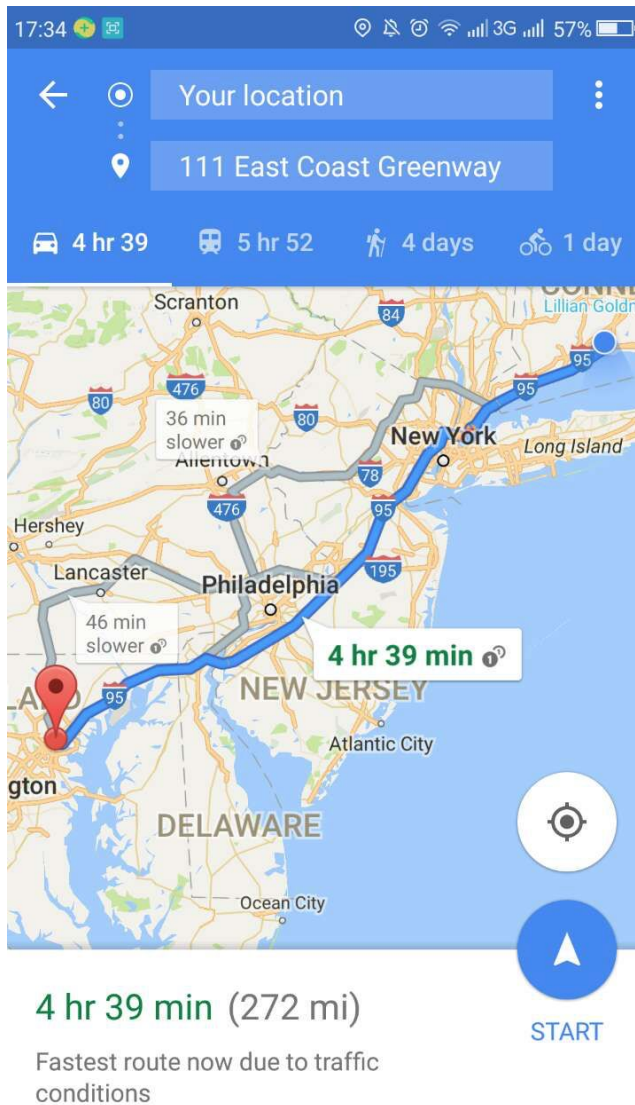
3. Provide information about pokemon's attacks.



4. Provide information about pokemon's evolution graph.



5. Navigate and find directions for target pokemon.



Function limitation

1. Currently we cannot support Pokemon location prediction, which requires sophisticated data mining methods.
2. Search capabilities is not enabled on the App side, though is supported by the backend.

Issues and problems meet

1. No integrated and organized data in the website about the properties of pokemon.
2. Data we collect is not in BCNF form nor in 3NF.
3. Connect Android applications to local PC Mysql database.

Main contributions

1. Users are able to find a lot of experienced data about where, when and what Pokemon has showed up in the dynamic whole map of world.
2. Properties of Pokemon's type properties, evolution information, fast and charge attack are sorted for every single Pokemon. User can derive these information by simply clicking on the icon of the Pokemon.
3. After choosing the Pokemon users want to catch in the map, it is able to navigate them to the places by redirecting people to Google Map and route is provided.

Selling points

1. An integrated App which gather all kinds of information of pokemons
2. Good combination of Pokemon exploration and Pokemon navigation, which other existing apps don't have.