

Introduction to Databases – Project1-part 3

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The **URL** to access the application:

[http:// 35.237.166.24:8111/](http://35.237.166.24:8111/)

Link to the **GitHub repo** containing the codebase:

https://github.com/roqi/project1/tree/master/4111DB_project1

Changes made to the schema since Part 2:

For the google search results in risk part, we did not use the “googleit” method taught in class, as one package ‘postgresql-plpython’ is untrusted. Instead, we wrote html codes to achieve the same function.

Application description:

General:

interactively display the Venmo user activities in our database, in addition to our risk analysis on Venmo transactions.

1) index.html / users.html / trxs.html / trx.html / user.html

On index.html, the home page, we first set up two hyperlinks to present the whole user (users.html) and transaction (trxs.html) data stored in our database. Within trxs.html, by clicking on one specific date, one can view all the transactions happened on that day (trx.html); similarly, with in users.html, click on a user name and our app user can easily check that Venmo user’s personal info (user.html)

Also, we designed a multi-functional search window with three search keys: ‘user name’, ‘risk level’ and ‘date’. To use this, first select one function within the second column, and then type in the corresponding elements within the first column’s blank space.

2) User.html

One search function can be realized by filing in a user name, e.g., Guo-Zhiqi. After clicking on the search query, a new page, user.html can be accessed. On this, not only is someone’s personal info displayed, but also his bank account info and risk evaluation result. We conducted this risk analysis based on 4 aggregate results: number of public transactions, size of friends shown in transactions, comments, and likes, the maximum word length of transaction messages, and whether there is a track to someone’s Facebook account. The risk level ranges from 0 to 4. A higher value indicates riskier Venmo account and more serious privacy leakage.

Apart from that, a user could access a google search webpage based on the risk level result and the specific risks involved. We previously selected 16 subsets of keywords for all risk situations concerned, and the corresponding google search is based on these keywords.

Moreover, a hyperlink is placed to let an app user check risk evaluation results of other users(risk.html) who share the same risk level.

3) Risk.html

This page explains in details risk dimensions and standards.

One can directly access this page from home page, with the second search function, 'search users by risk level (0-4).

4) Trx.html

The purpose of this page is slight different from other pages mentioned, as we focus on transactions, not Venmo users.

This page can be reached by the third search function on home page, i.e. to search for all the transactions happened on the same day. Then, same-day detailed transaction info will display.