Group 6
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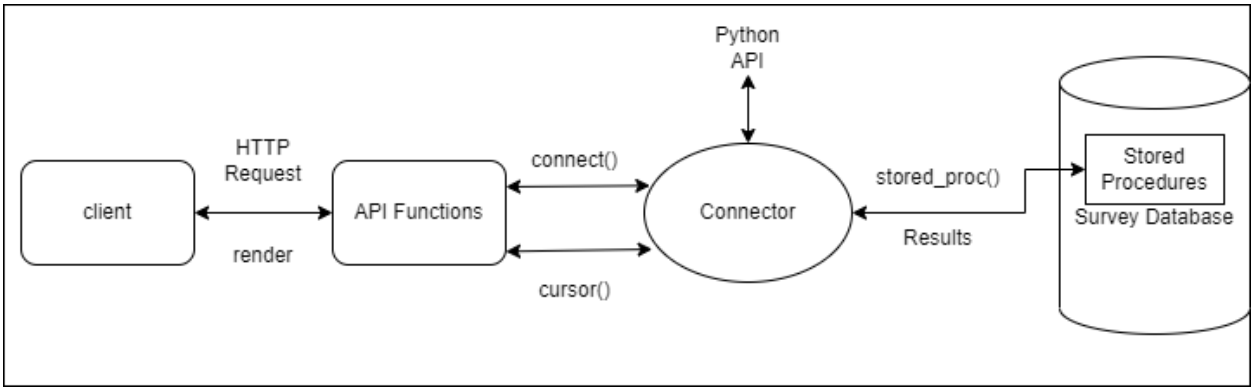
COP 4710

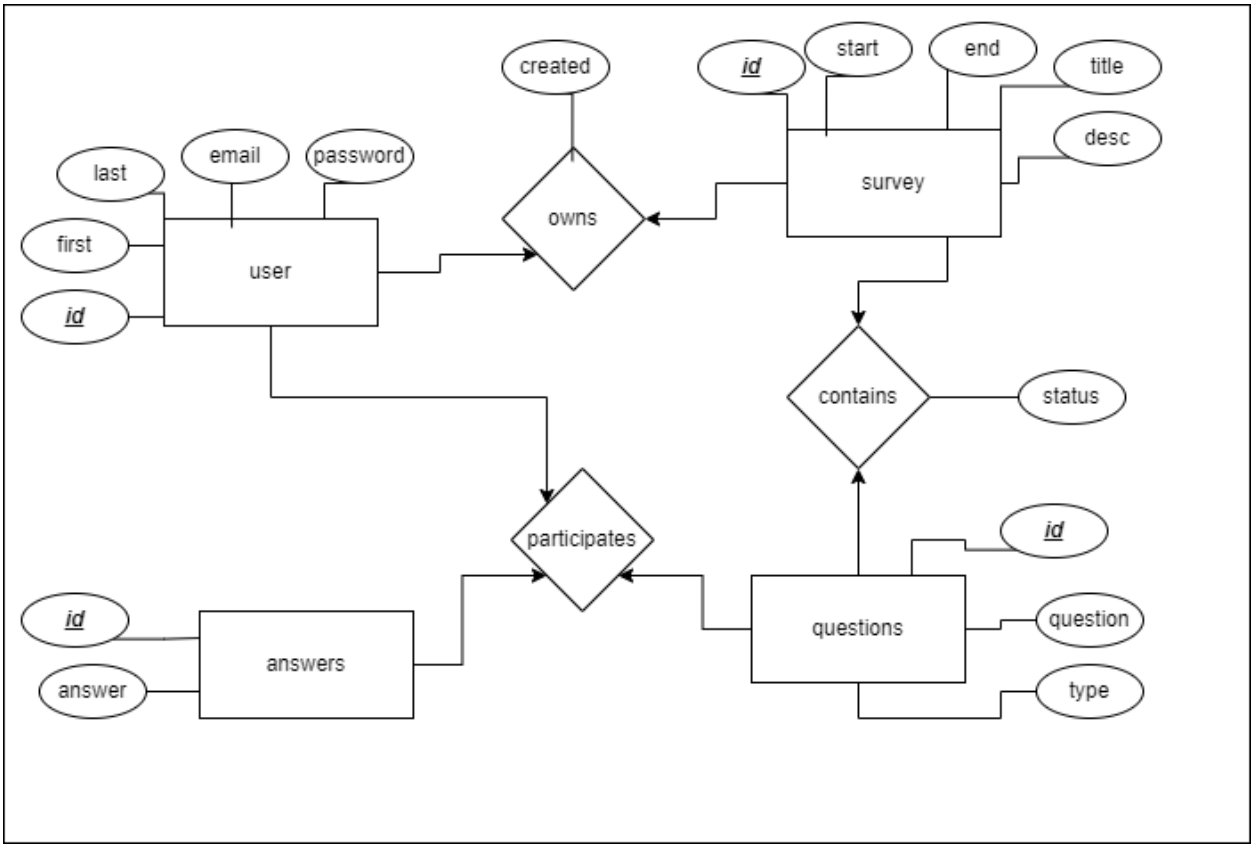
This project was a collaborative effort between both group members, pair programming a large amount of the project's functionality. The development environment utilized was local to each of the team members, utilizing git and GitHub for source code management, and MySQL community servers on individual windows machines. The stack utilized is flask for the web service gateway interface and application programming interface (API), plus MySQL for the database.

For the front end and API, flask was utilized for its web service gateway interface functionality. The API utilized flask templates written by the developers and rendered those templates on the web browser based on API endpoints. The API maintains a RESTful design by staying stateless and scalable. On the back end the API utilized a MySQL connector to call stored procedures in the database. Per API route a connection and cursor were opened via the connector, information was passed in between and the connection was closed.



The software works by running the API which initializes the web service gateway interface and renders the home or index route to the local client. The user can log in or register once on the home page. Once logged in or registered the users id is stored in a session to keep them logged in between API routes. While logged in the user will be on the welcome screen where they can select for a series of options. The user then must log out to return to the home screen. While logged in the user can select for a variety or options, including creating a new survey, viewing their surveys, or the survey results.

The MySQL database is relational and made up of several tables and stored procedures. The database design is based on the diagram below.



This diagram is based on the need to support many to many relationships. The use of foreign keys is utilized to relate the tables and support the need for deletion.

Group meetings were frequent and productive. They took place in person at the library and in the Harris Engineering building. The group also communicated via message when any issues presented in between meetings. The meeting schedule is outlined below.

Date	Present	Location	Agenda
11/21	ALL	HEC	First meet up and architecture discussion
11/28	ALL	Local coffee shop	Read over prerequisites
11/30	ALL	Local coffee shop	Discussed tech stack
12/1	ALL	Library	development
12/2	ALL	Library	development
12/3	ALL	Local Coffee shop	development
12/5	ALL	Library	Organize design document

During meetings we discussed blockers, short term and long-term goals, and general questions. This project was a challenge for us as a group so we meet frequently. The work was divided by order of need and priority, due to our group missing the third team member.

The work and tasks were split by order of functionality, meaning that a full front to back application was the priority. Each member was responsible for developing flask API routes that would connect to the database to either post or query data. Flask render templates was used to develop the html for the API routes, with each flask route effectively being an html page, or a link that redirects to one. Each member was responsible for rendering the template o. Each member was responsible for rendering the template of the route they developed. f the route they developed.