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SI 507 Section 002
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Final Project Proposal

Data source

- U of M off campus site: https://offcampushousing.umich.edu/ (8 points, Crawling [and scraping] multiple pages in a site I haven't used before)
- Google place API: text-search (2 points, an API we've used before)

Data storage and database

- Crawl housing information from the above mentioned site (600+ housing from 43 pages.), store in Cache file.
- Call google place API to get the coordinate data for each housing and store the information in Cache file.
- There will be four database tables, the first one is a list of housing with information such as title, address, rent, bed/bath, pet policy, parking, building type and status. The second table is building type. The third table is parking type. The fourth table is pet policy.
- Table housing will have relationship with other three tables so that columns such as pet policy, parking, building type in table housing will get the value.

Presentation options

- The program allows users to filter housing by building type/rent/bedroom/ bathrooms.
- Optionally, a user can view housing listing on a map (All results or filtered result).

Presentation tool(s)

- Data is displayed using HTML tables within a Flask App. In addition, display the results of filtered housing as Plotly scatter plot.