



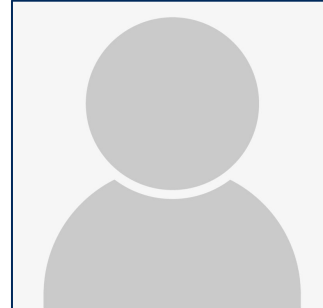
Toronto Property Search Dashboard

Data visualization project using Python, MongoDB, Flask, JS, and HTML

Presenters



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Project Theme

Real-Time Property Insights:

Get immediate access to detailed property information and local amenities like schools and subway stations.

Interactive Map Visualization:

Navigate through Toronto's real estate with ease using robust map overlays.

Customizable Searches:

Filter properties by the number of bedrooms to find exactly what you need.

User-Friendly:

Designed for simplicity, our dashboard makes finding and analyzing Toronto properties intuitive and effective.

Project Scope - Data and Ethics

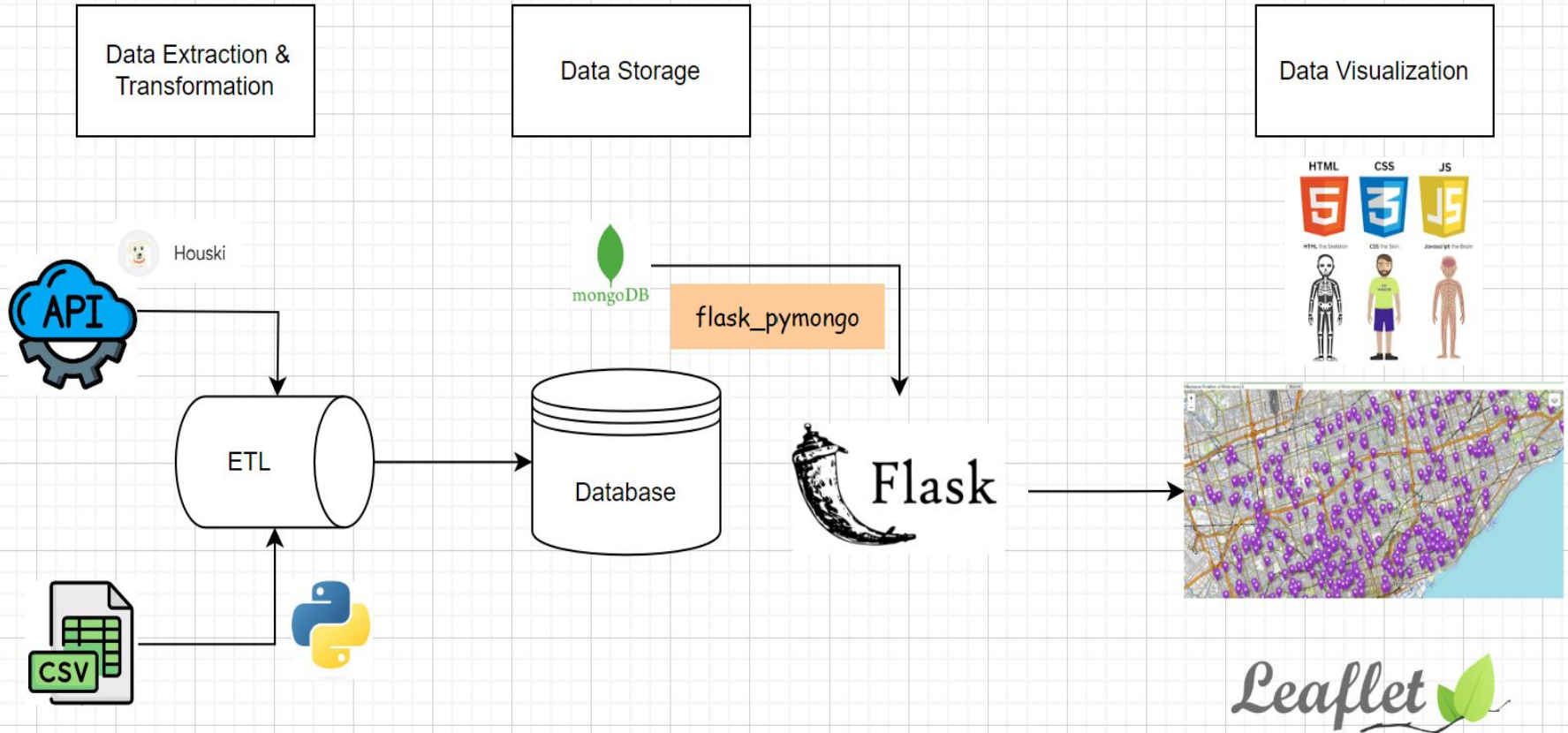
Data Sources:

- Schools
- Houski API
- TTC Subway Station Data
- Points of Interest (POI)

Data Ethics:

- No Personal Data
- Anonymous Information
- Open Data Use
- Clear Agreements
- User Trust

Architecture Diagram





localhost:27017

{ My Queries

Performance

Databases

Search

- admin
- autosaurus
- classDB
- class_db
- config
- epa
- fruitDB
- home
- local
- met
- petsitly_marketing

- real_estate_projec...
 - attractions_info
 - property_listings_info
 - schools_info
 - subway_stations_info

real_estate_project_db

{ My Queries

property_listings_info



+ Create collection

Refresh

View



Sort by

Collection Name



attractions_info

Storage size:
40.96 kB

Documents:
174

Avg. document size:
368.00 B

Indexes:
1

Total index size:
20.48 kB

property_listings_info



Storage size:
53.25 kB

Documents:
370

Avg. document size:
538.00 B

Indexes:
1

Total index size:
20.48 kB

schools_info

Storage size:
163.84 kB

Documents:
1.2 K

Avg. document size:
366.00 B

Indexes:
1

Total index size:
28.67 kB

subway_stations_info

Storage size:
24.58 kB

Documents:
70

Avg. document size:
323.00 B

Indexes:
1

Total index size:
20.48 kB

Technologies Used

Database

- NOSQL Database MongoDB.

Python Flask-powered API

- To fetch data from MongoDB and render the HTML template.

Python Libraries

- flask_pymongo - To bridge pymongo and Flask and provide some helper functions.

Python using Pandas Jupyter Notebook

- To Transform and clean the data.

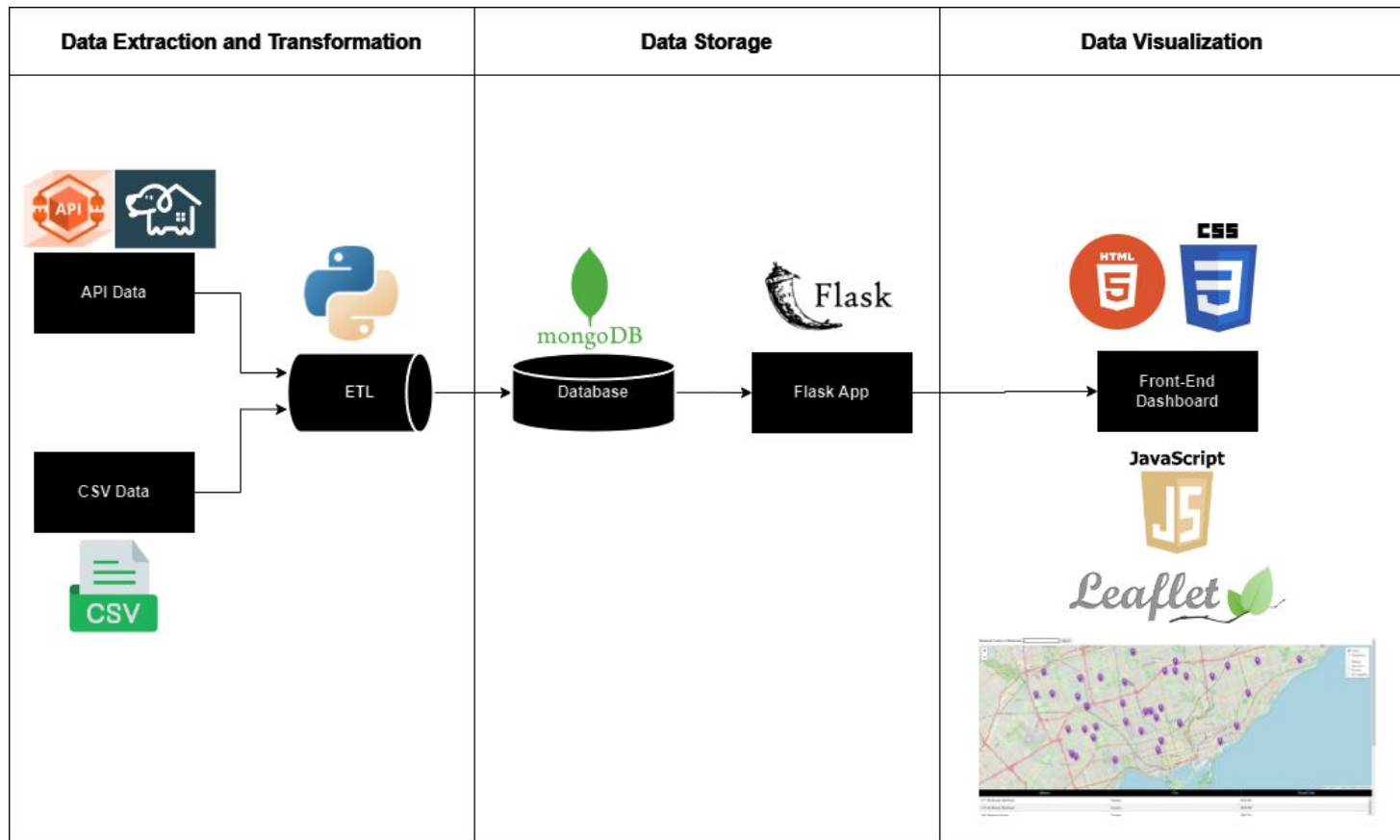
HTML / CSS

- For the index.html layout to render our maps and forms.

Javascript Libraries

- Leaflet - To display Interactive tiled web maps.

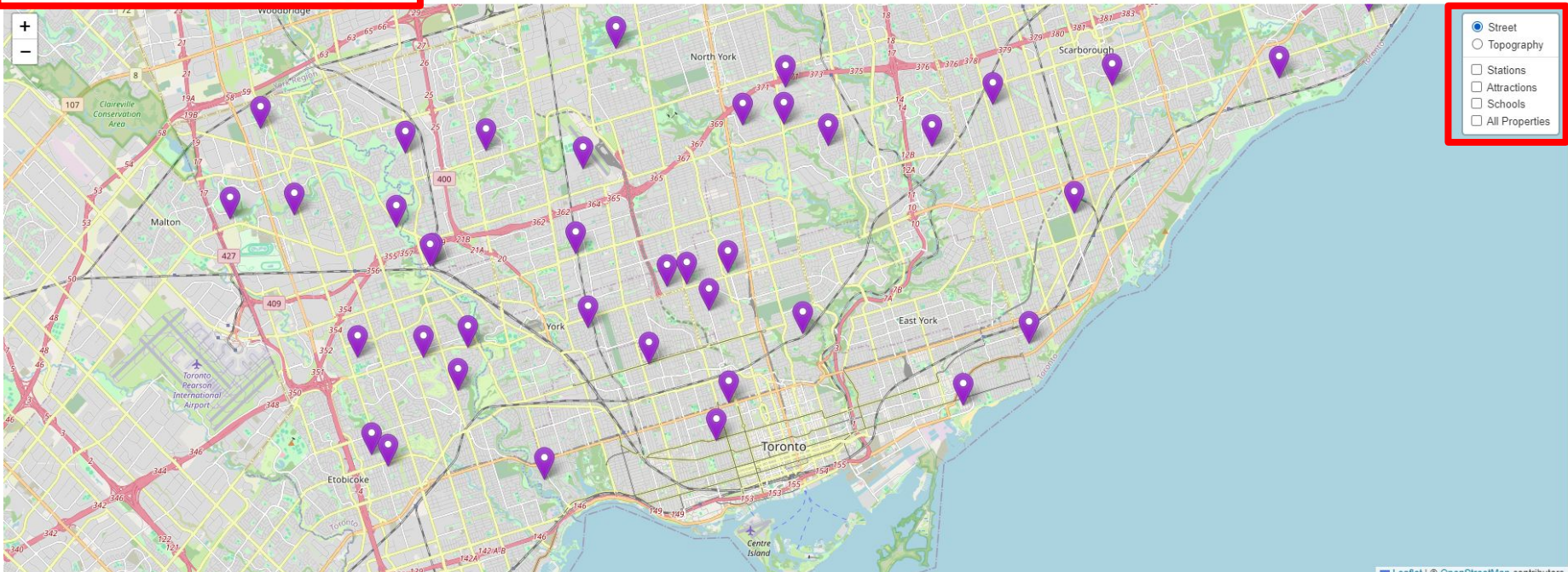
Architecture Diagram



Final Visualisation and Demonstration

Minimum Number of Bedrooms

Submit



Address	City	Postal Code
227 Old Forest Hill Road	Toronto	M5P2R5
150 Old Forest Hill Road	Toronto	M5P2R5
349 Manning Avenue	Toronto	M6J2K8

Future Improvements

Limitations:

- Data source
 - 370 results from Houski API

Improvements:

- Additional filter logic
 - Price range, additional property filters
- Setting vicinity to selected marker
 - Narrow down specified area
- Dashboard and map styling for UX
 - Relative position and property marker layout

Thank you! Questions?