Problem
Property buyers/renters rarely know the full address to a property they are interested in. They usually want to find properties near specific points of interest such as schools, malls, clubs, beaches, movie theaters, sports arenas, workplaces, etc.

Solution
I implemented Proximity Search, which assigns a coordinate to a user query. The coordinate is then passed on to the Proximity Algorithm, which returns properties near the query. Users can search by zip code, city, address, points of interest, street, county, or any combination of the above.

Current System
Previously there was no Search Engine implemented. There was also no Proximity Algorithm to filter out properties by location. In addition, there was no UI for the Search Engine. Finally, the Results Map was not connected properly to the search results.

Requirements
- Search Engine Core
- Proximity Search
- Auto Complete Integration
- Results Refinement Search
- Results Map Integration
- Familiar UI

BreazeHome
- Web application to provide property information to home buyers, sellers, renters, and realtors
- Designed to be simple and intuitive for all users to enable them find the correct property quickly
- Project originated and lead by Dr. Masoud Sadjadi to help his students learn Agile Software Development
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Implementation
- Frontend: AngularJS
- Backend: Python, Django
- Database: PostgreSQL
- Environment: VirtualBox, Linux
- Tools: Git, Selenium

System Design

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