



Sddec23-11

Daniel Chrisman, Christian Boughton, Ella Knott, Michael Wieland, Lith Almadani

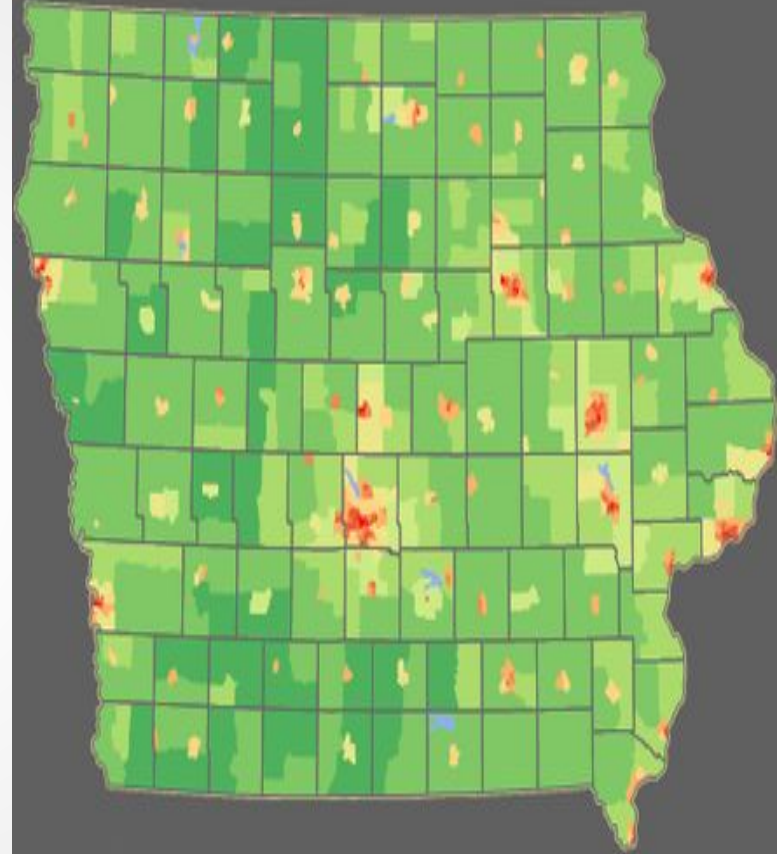
Client/Advisor: Dr Timothy Bigelow

Team Lead: Boughton@iastate.edu

What is Home finder

Buying a home is a stressful and time consuming process with current reality applications specializing niche areas. Our application provides a single interface for each step.

- User inputs
 - Frequent locations
 - Travel time constraints
- Heat map generation of ideal areas
- For sale homes and information
- Works for businesses as well



Detailed Design

User inputs locations and weights

Locations are converted to coordinates

Generate a custom sized grid

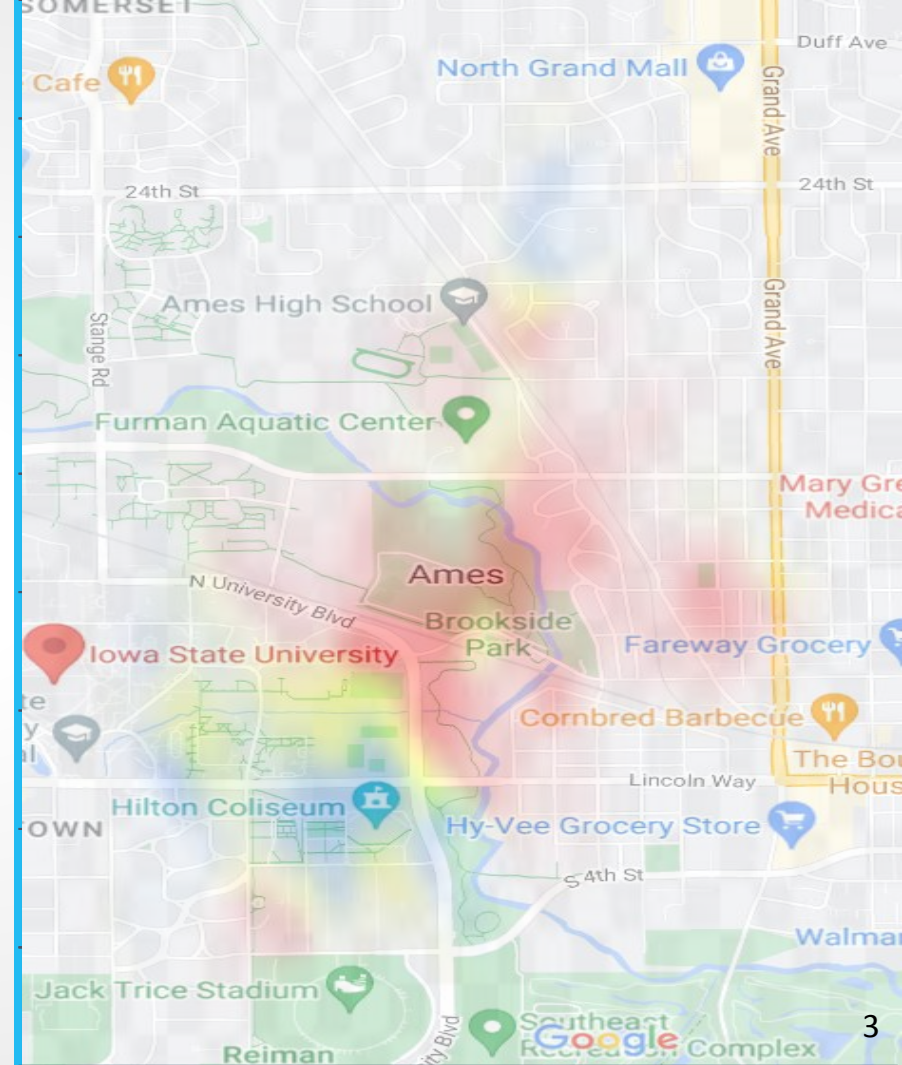
Calculate drive time to each vertex

Scale the drive times to weights and average

Call the Heatmap generation API

Call Zillow API to obtain listings in ideal areas

Show Heatmap and add pins for listings



Goals

- Set up the back end
 - Figure out framework
 - Learning the language

- Connect the front end to the backend

Goals

- Move Front end only application to a react framework
- Connect APIs
 - Make sure they can be called
- Future proofed

Technical Challenges

- Integrating the APIs
 - Unsure of our access to zillow API
 - Need to see how Radar works with our ideas

- Setting up the database
 - Trying to figure out the best type to use
 - What we want it to hold