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Database Technology

HousingAffordability.viz will utilize a NoSQL database to store the zip code, latitude, longitude, sales price, income and affordability measures. NoSQL was selected due to its compatibility with the D3.js library which will be utilized on the frontend. Each zip code will be a separate document in one overall collection. MongoDB will be the NoSQL database technology.

There will be no extra database collections required for the stretch feature, the visual would use the same dataset, with a different filter on the UI.

Document Structure

```
{
    zip code: double
    latitude: double
    longitude: double
    average sales price: double
    affordability index: double
    salary required to afford average sales: double
}
```

Data Structure Use

The JSON data structures will be retrieved and fed into the frontend, which will build out the interactive map. The zip code and affordability score will be used to shade in the heat map via D3.js. Additionally, as users zoom in on the map visualization, the average sales price and salary required will show up as a pop up on mouseover.