Hi Merrit,

Here is what I’m thinking for my Capstone:

**Name:**

Portland Affordability and Safe Housing Initiative (PASHI!)

*Giving those in need an ability find, not only affordable, but SAFE housing in the City of Portland.*

**Project Overview:**

Obtaining affordable housing in Portland is challenging; finding affordable housing that is also safe and desirable is even more challenging especially for those in need.  This app is designed to allow users to view their options and make informed decisions based on a location factoring in its safety for themselves and/or families.

**Libraries or frameworks:**

* Utilizing City of Portland data (APIs)
* Portland Crime Data.
* Django
* Vue
* Skeleton Framework (CSS)

**Features**:

* List all available units in the Portland Area designated ‘affordable’
* List out safest units in Portland area (ranked)
* allow users to login, establish profile, save units, and make notes.
* Designed for mobile use (those in need may not have access to computers)

**User stories:**

Housing affordability issues in Portland are well documented on a local and national level.

From a review on Yelp on one of the ‘affordable’ units:

*"Two weeks ago I watched a man beating a woman at the bus stop and had to call the police. Terrible thing to see in your home.”*

*"You cant leave you windows open as you will hear nonstop druggie action and homeless rift-raft outside. (We are right on the max line and bus stops)"*

Although not explicitly requested; the person quoted could potentially have found a better unit if they had the ability to choose a unit based on a crime analysis of the area.

**Tasks**

* Do an analysis of current Portland crime data (2020) and cross-reference with areas affordable housing is located in.
* Allow users to be able to take notes (and save units they are interested in).
* Display lists of affordable housing units in the area and those that are located in the safest areas.
* Ensure compatibility with desktop or mobile use.

**Data Model:**

Schema as of now:

* User Info Table; username, password, unit saved, unit notes
* Housing Info Table; name, address, area, phone, crime\_rank, zip
* Crime Data Table; zip, area, num\_of\_crimes

**Schedule (very rough):**

* Week 1: Build out shell, develop UXI and model, interface with API to list housing units
* Week 2: Scrub crime data, merge crime table data with zip data, ensure compatibility with housing unit data (match fields)
* Week 3: Build out logic to develop ‘safest’ units list and display in dropdown, continue developing UXI.
* Week 4: Hopefully, formatting and polishing.

Post Capstone: Build project to utilize ARCgis to display maps and locations visually.