**Kate Hartley Capstone Proposal**

**Executive Summary**

While babysitting/nannying and spending time with my nieces and nephews, I always had a hard time finding fun activities that were low cost. While the park can always be fun, playing at a new park or walking around a museum to change things up is mentally stimulating for both the children and adults. I wanted to make a guide of sorts for the Nashville area that all families could utilize. I wanted to focus on low income families and where these activities were compared to their location/county. I also wanted to consider the best place for low income housing to be built so they would have easy access to multiple low cost activities.

**Motivation**

I myself am a single mother and aunt to 5 young children always looking for a low cost or free activity that all the kids would enjoy. An easy guide to review cost, see location, and any rating of the activity would help myself and any other mom or caregiver find fun things to do during the day. I also wanted to consider families that had low income and where these activities were compared to their county.

**Data Question**

Around the Nashville area, do families in poverty have easy access to family activities for little to no cost. Also, where is it best to build low income housing with easy access to low cost family activities.

**Minimum Viable Product (MVP)**

My MVP will include a dashboard to show graphs and statistics of my findings. I would also like to include an intro powerpoint or dashboard to go over any terms that need a deeper understanding before looking at the data. The intended audience would be families with low income, families looking for low cost activities around Nashville, local government looking to build low income housing and anyone else interested in the topic.

**Schedule (through 6/28/2022)**

1. Get the Data (by 6/12/2022)
2. Clean & Explore the Data (by 6/18/2022)
3. Create Presentation of your Analysis (by 6/23/2022)

* Should be a presentation, but could include a Jupyter Notebook or dashboard in Excel, Tableau, or PowerBI

1. Internal demos (6/23-25/2022)
2. Demo Day!! (6/28/2022)

**Data Sources**

census poverty data <https://censusreporter.org/data/table/?table=B17026&geo_ids=05000US47189,05000US47021,05000US47037,05000US47043,05000US47119,05000US47125,05000US47147,05000US47149,05000US47165,05000US47187&primary_geo_id=05000US47189>

explaining census poverty calculation <https://www.census.gov/topics/income-poverty/poverty/guidance/poverty-measures.html>

yelp api explained <https://towardsdatascience.com/getting-started-with-the-yelp-api-ac30915a77ae#906d>

**Known Issues and Challenges**

Issues that may come up:

* understanding yelp api and troubleshooting those issues
* yelp api only grabs 3 reviews that are predetermined
* getting all of the free or low cost activities through yelp