Summary: This WBS provides the milestone steps in the plans at developing a real estate application that leverages Zillow historical data, an API that connects to Zillow for near real-time data, a SQL database, Tableau for data visualizations, and Heroku to host a website. Cumulatively, the hope is to have the initial application built in 11-15 weeks.

Step 1

Task: Hand download Zillow historic data(housing/rental) and open in Excel to build macro to transform data

Time: One week

Required learning: N/A

Step 2

Task: Load and store historic Zillow Data into the DBMS Postgre

Task: Develop SQL Queries to filter data

Time: 2 weeks

Required learning:

* Udemy: SQL and PostgreSQL: The Complete Developer’s Guide. 22 hours
* Udemy: SQL – Master SQL Database Queries in Just 90 Minutes!: 1.5 hours

Step 3

Task: Use SQL queries to load Zillow historic data into Tableau

* Objective with this is to perform trend analysis on area.
* Need to analyze both housing costs and monthly rent.

Time: 1-2 weeks

Required Learning: Tableau

* Udemy: Tableau Prep for Business Intelligence: 5.5 hours
* Udemy: Tableau 2020 A-Z: Hands-On Tableau Training for Data Science

Step 4

Task: Use python to create an API connection to Zillow for current market data

Time: 3-4 weeks

Required learning:

* Udemy: Creating powerful API’s with Django REST framework on Heroku: 6 hours
* Udemy: Postman: The Complete Guide – REST API Testing: 14 hours
* Udemy: The Complete Python & Postgre SQL Developer Course: 22 hours

Step 5

Task: Implement Zillow API into Tableau data analysis

Time: 1-2 weeks

Required Learning: N/A

Step 6

Task: Build a website using Heroku. Implementing Tableau Charts

Time: 3-4 weeks

Required Learning:

* Udemy: The Complete JavaScript Course 2021: From Zero to Expert: 68.5 hours
* Udemy: Moderns HTML & CSS From the Beginning (Including Sass): 21 hours

Step 7

Task: Check for other data science analysis methods to implement.

Time: ∞

Required Learning:

* Statistics for Business Analysis and Data Science A-Z: 6 hours
* Data Science 2021: Complete Data Science and Machine Learning: 26 hours