I will create a web page where user can input the values for the house features and get an estimate of price based on the input feature values.

The major components of my deployment include the basic HTML structure to set up the input fields and output display. Then I will use CSS to organize the appearance of the page to make it look nicer. Finally, I will use Javascript and Python to handle to functioning and operation of the model.

The data will be stored locally in the same folder with the html and supporting files. Once deployed live online, it will be stored wherever accessible by the html file.

The data will be called by javascript and python functions to implement the ML model and calculate the result. The life cycle of the model will be whenever new data are available for training and updates. For example, if we get more housing price data in newer years, we will update the data and retrain the model to fit in the new data. Whenever the web page is loaded, the newly trained model will be updated and ready to use.

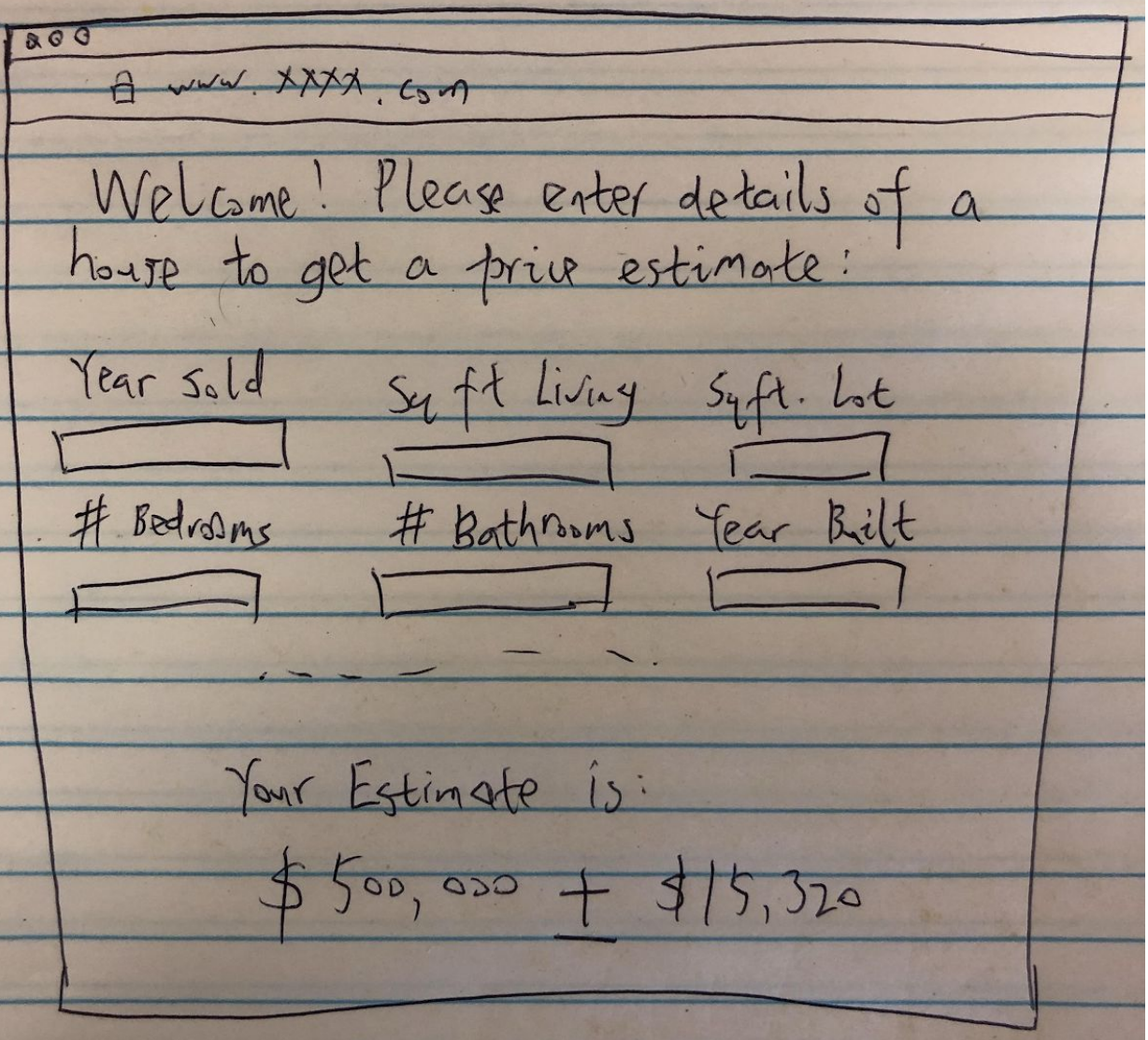
The new data will be stored in the same file as the old data so it is easier to manage and use them. However, when the data get bigger and bigger, we may have to consider separating the data into different files by year. For example, houses sold in 2014, 2015, and 2016 etc. will be stored and managed in different csv files by sold year.

The system will be monitored by using Google Chrome's development inspection tools, as well as error logs provided by the deployment platform when something happens. I will first write functions to catch common errors and display the error message in a proper way so it prevents the web page being crashed down.

To build this model, I need to use text editor like Sublime text to write the html, css, javascript, and python code. Then I need to use Google Chrome to test and debug the program. Finally, I need to use a web deployment platform like Heroku, Netlify etc. to make the website live and running.

Given the amount of data, the expected total file size should be very low so ideally it is free to implement everything for now. As we collect more data and the data size gets bigger and bigger, we may have to pay about $15/month for larger storage. The time for implementing this program is about 20 hours.

Below is a sketch of how the website will look like:


www.XXXX.com
Welcome! Please enter details of a house to get a price estimate:
Year Sold
Sq ft Living
Sqft. Lot
Bedrooms
Bathrooms
Year Built
Your Estimate is:
$500,000 ± $15,320