

User Guide for FirstStop

UWHousingTeam

STEP 1:

Clone the project repo:

git clone <https://github.com/sliwhu/UWHousingTeam.git>

STEP 2:

properly set data path os.environ "SALES_DATA_PATH" and os.environ["SALES_DATA_FILE"] ('Merged_Data.csv') follow instructions in the house_price_model_2.py file

STEP 3:

Run the following commands on three different terminals from Scripts directory.

```
dipsm@DESKTOP-AVC8QQC MINGW64 /  
$ cd ~/Documents/UWHousingTeam/UWHousingTeam/Scripts/  
  
dipsm@DESKTOP-AVC8QQC MINGW64 ~/Documents/UWHousingTeam/UWHousingTeam/Scripts (master)  
$ bokeh serve --port 5001 part1_predict_price.py
```

```
dipsm@DESKTOP-AVC8QQC MINGW64 /  
$ cd ~/Documents/UWHousingTeam/UWHousingTeam/Scripts/  
  
dipsm@DESKTOP-AVC8QQC MINGW64 ~/Documents/UWHousingTeam/UWHousingTeam/Scripts (master)  
$ bokeh serve --port 5002 part2_bid_price.py
```

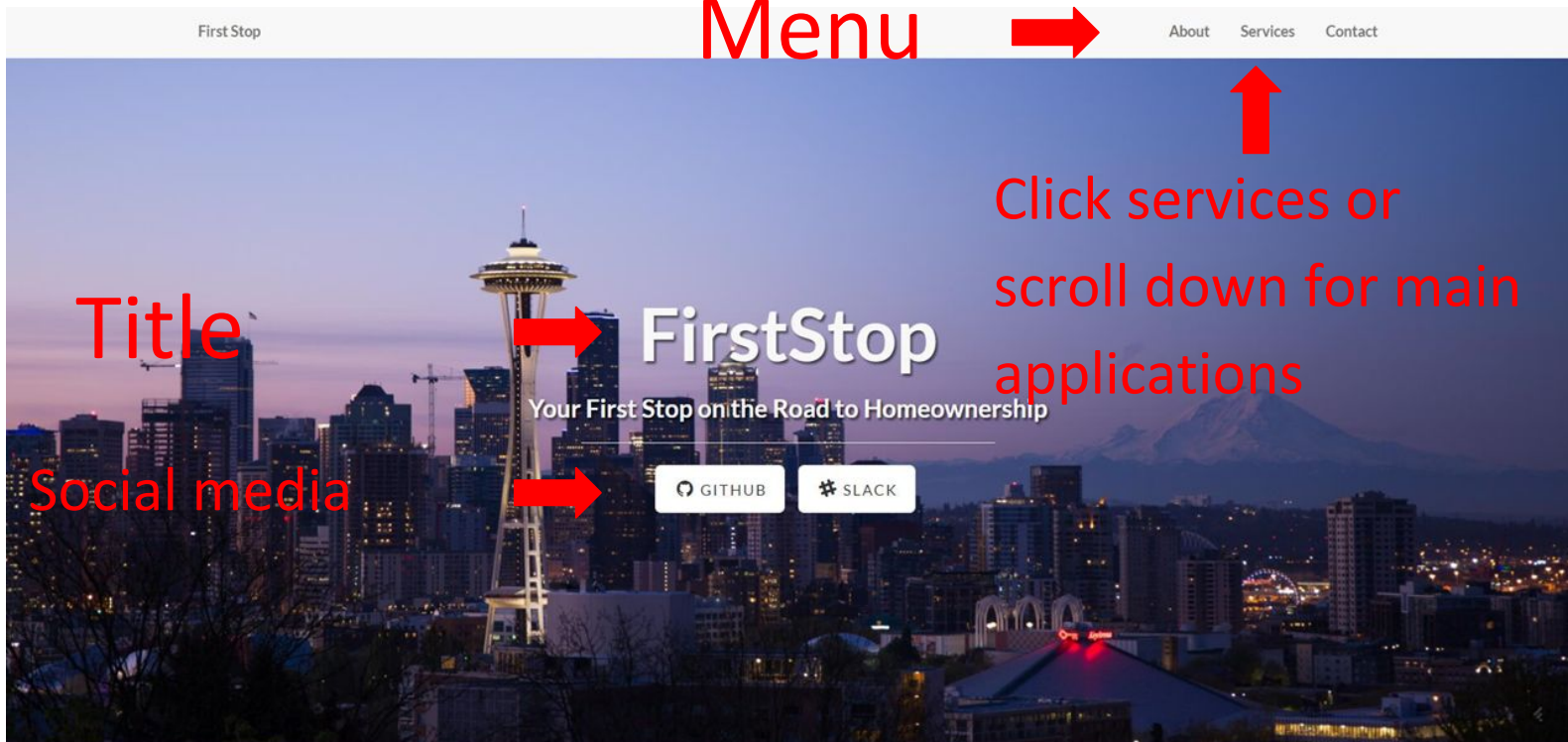
```
dipsm@DESKTOP-AVC8QQC MINGW64 /  
$ cd ~/Documents/UWHousingTeam/UWHousingTeam/Scripts/  
  
dipsm@DESKTOP-AVC8QQC MINGW64 ~/Documents/UWHousingTeam/UWHousingTeam/Scripts (master)  
$ bokeh serve --port 5003 part3_monthly_cost.py
```

STEP 4:

Now go to the landing page as described in next slide.

Landing Page

http://housing-prediction.azurewebsites.net/UWHousingTeam/html_landing_page/



Predicting House Price

Click [here](#) to enter your requirements and get a price predict for your first house.



Click to go to Bokeh app page on predict price



First Stop



Estimate Bidding Price

Click [here](#) to enter the list price of the house you like and get a bidding price estimation.



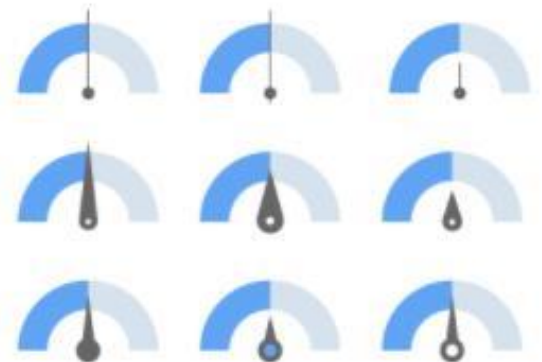
Click to go to Bokeh app page on bidding price

Calculate Monthly cost

Click [here](#) to enter the list price of the house you like and get a monthly cost estimation.



Click to go to Bokeh app page on monthly cost



Predict price

Bokeh widgets



You are one step closer to your dream home.
Please enter your inputs below

STEP 1:

Bedroom number: <input type="text" value="3"/>	Bathroom number: <input type="text" value="2"/>	Built year: 1900 <input type="text"/>	Zipcode: <input type="text" value="98004"/>
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STEP 2:

Living Sqft: 500 <input type="text"/>	Lot Sqft: 500 <input type="text"/>	Waterfront: <input type="text" value="Either"/>	House view: <input type="text" value="1"/>
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STEP 3:

House grade: <input type="text" value="3"/>	House Condition: <input type="text" value="3"/>
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Almost Done. Just Submit!

<input type="button" value="Submit"/>	<input type="button" value="Reset"/>
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Ta Daa!

The predicted price of your house is: \$739533.34

Follow step1 to step3 to select parameters and click submit to see predict price pop up.
Click reset if you'd like to start over

Houses with 3 bedrooms, 2 bathrooms, built after year 1900 and list price as 739533.34(+/-10000\$) are shown on this map. Hover to see detail information



Map filtering criterias are shown here.

Click the side of the map for pan, select, zoom and hover functions.

Bokeh map

Predict bidding price



You are one step closer to your dream home.
Please enter your inputs below

enter list price/predict price here (\$)

enter zipcode here

Submit

Reset



Enter List price and Zipcode. Click
'Submit' to see bidding price pop
up. Click 'Reset' if you'd like to
start over

Predict Monthly expense



You are one step closer to your dream home.
Please enter your inputs below

enter list price/predict price here

Mortgage period:

Interest rate (%): 5

House type:

Submit

Reset



Enter List price, Mortgage period,
Interest rate and House type. Click
'Submit' to see overall monthly
expense pop up. Click 'Reset' if
you'd like to start over