

## Airbnb Price Prediction

### Weekly Project Meeting Minutes

Date of meeting: 02/27/2023 – 03/03/2023

Group: 6

Section: 4

#### Group members:

Name	ID
Joyal Patel	0792200
Raihaanah Abubakkar Sidiq	0785786
Ezekiel Ayeni	0778486
Jyoti Bala	0792019
Harsh Kumar	0791250

Specific Activities that were completed/worked on:

#### List brief description of activities carried out by group members.


- In the week starting 27<sup>th</sup> February 2023, the team met to review the progress made since the last meeting. The team had a successful midterm project presentation.
- The team had extensive preparation and practice concerning the midterm project presentation. This is because each team member turned in their portion of task that was assigned to them timely.
- Harsh Kumar, Joyal Patel, and Jyoti Bala worked extensively on data cleaning and data preprocessing while Ezekiel Ayeni and Raihaanah Sidiq were able to put together the report in time for the presentation.
- Discussion of exploratory data analysis (EDA) for Airbnb price prediction project, team discussed the EDA process for the project, including visualizing the data and identifying any patterns or trends. We also discussed various statistical techniques that could be used to explore the data, such as correlation analysis and hypothesis testing.
- We identified several insights and trends in the data: Ezekiel Ayeni suggested that listings with higher ratings tend to have higher prices than those with lower ratings. Jyoti Bala suggested that listings in certain neighborhoods tend to have higher prices than others. Hash Kumar suggested that listings with more amenities tend to have higher prices than those with fewer amenities, Rihaanah Sidiq and Joyal Patel suggested that listings with a higher number of reviews tend to have more stable prices.

Specific Output from work:

**Include a summary of any written work or any code developed.**

- Exploratory data analysis was fully sorted and completed to 90%
- The Midterm project presentation gave the team the opportunity to review areas that need more attention and fine tuning.
- The team now has an overview of what the final project will look like.

On Target:

- Indicate the status of your project:
  -  green: everything on track for completion by due date

Challenges/Disagreements:

**List any challenges identified/discussed and possible solutions.**

- There were minor challenges in identifying relevant features for our EDA. We also had some challenges in identifying the best trends and patterns.
- The project status is green and going according to plan.

Planned Activities for coming week:

**List brief description of activities by group members**

- Joyal Patel, Ezekiel Ayeni, and Rihaanah Sidiq, Jyoti Bala, and Harsh Kumar to discuss and create hypothesis and possible statistical methods to use for our project.

## Airbnb Price Prediction

### Weekly Project Meeting Minutes

Date of meeting: 03/06/2023 – 03/10/2023

Group: 6

Section: 4

#### Group members:

Name	ID
Joyal Patel	0792200
Raihaanah Abubakkar Sidiq	0785786
Ezekiel Ayeni	0778486
Jyoti Bala	0792019
Harsh Kumar	0791250

Specific Activities that were completed/worked on:

#### List brief description of activities carried out by group members.

- In the week starting March 3<sup>rd</sup>, 2023, the team met to review the progress made since the last meeting.
- Each member of the team was saddled with the responsibility of taking minutes of each meeting, this would be collated by Ezekiel Ayeni for final submission.
- Rihaannah Sidiq, Harsh Kumar, and Joyal Patel reminded the entire group on the objective of the project and timeline. Ezekiel Ayeni and Jyoti Bala encouraged the team to always make use of the project plan to guide the group on what needs to be done at every point in time.
- The team embarked on lengthy discussion on creating and choosing the best hypothesis that could be tested for the project.
- There were several possible suggestions of possible hypotheses from each member of the team.
- Jyoti Bala and Ezekiel Ayeni suggested that we make use of correlation matrix to identify relationships between variables of our dataset to create our hypothesis.
- Harsh kumar, Joyal Patel and Rihanna Sidiq suggested that we make use of price and availability to create our hypothesis.
- With the assistance of Professor Manjari, we had a clear understanding of what variables to use in creating our hypothesis.

Specific Output from work:

**Include a brief summary of any written work or any code developed.**

The team was able to come up with two hypotheses as stated below:

**Hypothesis 1**

Null hypothesis: City type has no effect over Airbnb price.

Alternate hypothesis: City type has an effect over Airbnb price.


**Hypothesis 2**

Null hypothesis: Reviews has no influence over Airbnb price.

Alternate hypothesis: Reviews has an influence over Airbnb price.

- Rihaanan Sidiq, Harsh Kumar, and Jyoti Bala in their views suggested that we should test to see if the location of cities will have a reasonable effect on the price of Airbnb
- Ezekiel Ayeni and Joyal Patel also suggested that we test if customer reviews will play a major role in the price of Airbnb.
- The whole team agreed that city type and reviews should be tested to see the effects on price.

On Target:

- Indicate the current status of your project:
  -  green: everything on track for completion by due date

Challenges/Disagreements:

**List any challenges identified/discussed and possible solutions.**

- The only challenge here is that we had numerous options in selecting the best hypothesis to test for our project.
- The status of the project remains green.

**List any notable disagreements and subsequent discussion and resolution.**

- The challenge was resolved after consultation with Professor Manjari, she explained that it is possible to test more than one hypothesis in our project. Hence, we chose to test two hypotheses.

Planned Activities for coming week:

**List brief description of activities by group members**

- Harsh Kumar, Jyoti Bala, Ezekiel Ayeni to start working on creating models for our dataset.
- Joyal patel and Rihaanah Sidiq to start working on testing and evaluation.