

# Meeting Notes 19/08/25

## Quick recap

The team discussed their approach for analyzing Airbnb pricing data, ultimately deciding to use regression analysis rather than clustering due to its simplicity and better alignment with their reporting needs. They explored various machine learning models to predict housing prices and agreed to prioritize price prediction as their main goal, with the possibility of additional analysis if time permits. The team planned to continue their collaboration through Discord, with potential in-person meetings and discussions about AI tools and model development for the project.

## Next steps

- Sarah to upload meeting notes to Google Drive
- Sarah to add notes about what to look for when running models and what results to capture
- Sarah to look into Google Colab setup issues
- Victor to continue working on Google Colab analysis and document exploratory notes under code
- All to run initial models and share results/explanations in Discord
- All to compare different regression models
- Amaka to review Kaggle codes and run models using Google Colab
- Team to decide on visualizations after model selection
- Team to write up findings and suggest business implementations
- Team to schedule follow-up meeting for weekend if needed

## Summary

### Project Progress and Research Decisions

Sarah, Viktor, and Amaka discussed the progress and next steps for their project. They reviewed Sarah's document on research questions and discussed the decision between using a regression or clustering approach for task one. Amaka mentioned she had to leave early due to personal commitments, and Sarah offered to share the meeting notes in the Google Drive afterward.

### Airbnb Pricing Analysis Strategy

Sarah, Amaka, and Viktor discussed their approach for analyzing Airbnb pricing data. They agreed to pursue a regression analysis rather than clustering, as regression was deemed more straightforward and suitable for their reporting needs. Sarah mentioned she had compiled relevant references for both methods, while Amaka expressed a preference for regression due to her current skill level. Viktor raised a question about the concept of "fair pricing" versus actual prices in the data, which the team acknowledged as an interesting point for further exploration in their analysis.

## **Property Price Prediction Analysis**

Sarah and Viktor discussed their data analysis approach, focusing on predicting property prices using regression models. They agreed to refine their question after initial analysis and mentioned the possibility of clustering after the regression task if time permits. Viktor shared a Google Colab notebook with code for data exploration, which Sarah can access by uploading the CSV file directly. They decided to prioritize price prediction as their main goal, with any additional analysis like clustering mentioned in the report if time allows.

## **Machine Learning Models for Housing**

Sarah and Viktor discussed the next steps for their data analysis project. They decided to try out different machine learning models, including linear regression, decision trees, and gradient boosting, to predict housing prices. Viktor suggested comparing the results of using all variables versus a manually selected subset to evaluate interpretability and prediction accuracy. Sarah offered to explain their findings to Amaka through the Discord chat. They also mentioned the importance of sustainability and interpretability for the report's audience.

## **Airbnb NYC Pricing Analysis Plan**

The team discussed their analysis approach for Airbnb pricing in New York City, focusing on regression models to predict prices based on listing attributes. They agreed to start with a straightforward regression analysis before addressing clustering later, and decided to use Kaggle codes as a resource for implementing models in Google Colab. Amaka will explore YouTube tutorials and practice running models, while Sarah will merge Amaka's question with their existing document.

## **Airbnb ML Analysis Planning Meeting**

Sarah and Viktor discussed their next steps for a project involving machine learning analysis of Airbnb business trends. They agreed to run models, analyze results, and consider both technical and business-oriented aspects, keeping in mind that the report is for executives. Sarah suggested making notes on what to look for in model results and what to prove with them, which they can discuss in a future group meeting. They also planned to decide on visualizations based on the chosen model and write up the findings, including potential future directions.

## **Airbnb Price Prediction Model Development**

Viktor and Sarah discussed the development and application of a price prediction model for Airbnb listings. They explored how the model could help identify successful hosts and provide insights for pricing strategies. The conversation focused on how Airbnb could use this information to benefit both hosts and the platform, including potential incentives for hosts who set prices within recommended ranges. They agreed that the final report should include actionable suggestions for executives, emphasizing the model's business value beyond just price prediction.

## **Project Progress and Collaboration Updates**

Sarah and Viktor discussed their project progress and challenges. They agreed to continue working collaboratively through Discord, with the option to meet in person next week if

needed. Sarah expressed interest in learning Python and experimenting with various packages. Viktor mentioned difficulties with mounting the Google Drive in Google Colab, but they decided to upload files directly to Colab for now. Sarah offered to look into Viktor's Google Cloud issues later.

## **AI Tools and Project Updates**

The team agreed to share updates on their AI model work through Discord and potentially meet in person over the weekend if schedules align. Both expressed confidence in their ability to complete the report and emphasized their interest in the learning aspect of the project.