## **Team Contract**

**Team Name: Group 2** 

GOALS: What are our team goals for this project?
What do we want to accomplish? What skills do we want to develop or refine?

**Objectives:** Apply classical machine learning techniques (regression & clustering) to Airbnb data in order to predict pricing, identify demand trends, and segment customers for strategic business insights.

What We Want to Accomplish: Deliver a clear, analytical report (1,000 words) supported by visualisations, demonstrating practical applications of machine learning to Airbnb's business model. Ensure results are relevant to Airbnb's strategic decision-making.

**Skills to Develop/Refine:** Advance our knowledge in data preprocessing, regression analysis, clustering techniques, data visualisation (Matplotlib, Seaborn, Plotly), Python libraries (scikit-learn, pandas, NumPy), teamwork, project management, and professional report writing.

EXPECTATIONS: What do we expect of one another in regard to attendance at meetings, participation, frequency of communication, the quality of work, etc.?

**Attendance:** Be present and punctual for all scheduled meetings.

**Participation:** Actively contribute with ideas, analysis, and constructive feedback.

**Communication:** Maintain open, clear, and frequent communication through agreed channels. Respond promptly to updates.

**Quality of Work:** Deliver accurate, well-documented, and timely outputs.

**Collaboration:** Provide support to team members when needed, work respectfully, and resolve conflicts collaboratively.

**Deadlines:** Adhere strictly to all internal milestones and the final deadline (Monday, 8 September 2025, 11:55 PM).

POLICIES & PROCEDURES: What rules can we agree on to help us meet our goals and expectations, such as preparatory tasks, generating ideas, evaluating outcomes?

**Preparatory Tasks:** Review relevant data, literature, and previous discussions before meetings.

**Idea Generation:** Encourage all contributions, document every idea, and ensure a judgment-free brainstorming environment.

**Decision Making:** Use consensus as the first option; if not possible, decisions will be made by majority vote.

**Evaluation:** Regularly review progress against goals, report quality, and alignment with grading criteria

**Documentation:** Keep records of meetings, assigned tasks, deadlines, and key decisions.

**Accountability:** Every member owns their assigned responsibilities and ensures timely delivery of tasks.

ROLES: Which roles do we need in this project and how do we allocate them? Will there be a project lead? Is there a need to rotate roles?

**Project Lead:** Mariam Almarzooqi /Prepares the team contract, supports exploratory data analysis, and ensures the project timeline and deliverables remain on track.

**Exploratory Analysis Lead:** Nasir Albannai / Explores the dataset to identify key columns or combinations of columns that contribute to Airbnb listing prices.

**Presentation & Submission Lead:** Bayr Harrison / Compiles all team inputs into the presentation, ensures cohesion, submits the final deliverables on time and exploratory analysis and cleaning.

**Data and Documentation Lead:** Yousif Ali Karam / Prepares a document explaining the dataset columns, their meaning, and relevant background information.

**Exploratory Analysis Lead:** Fatima Mohammed / Explores the dataset to identify key columns or combinations of columns that contribute to Airbnb listing prices.

**Rotation:** Roles can rotate if necessary to ensure all members develop new skills.

CONSEQUENCES: How will we address non-performance regarding these goals, expectations, policies and procedures? How do we resolve disagreements?

## Non-Performance:

**Step 1:** Address concerns privately with the team member to understand challenges.

**Step 2:** If unresolved, raise it in the group to redistribute tasks or adjust workload.

**Step 3:** Escalate persistent issues to the course instructor.

## Disagreements:

- Discuss openly, allowing everyone to voice their perspective.
- If no consensus is reached, use majority voting while respecting minority opinions.

By signing this contract, we confirm that:

- We have collectively formulated these goals, expectations, roles, procedures, and consequences.
- We agree to abide by the contents of this contract.

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Mariam Almarzooqi, 03-09-2025

Nasir Albannai, 03-09-2025

Bayr Harrison, 03-09-2025

Yousif Ali Karam, 03-09-2025