# **Team Contract – Class Project**

**Course:** APAN 5310 – SQL & Relational Databases  
 **Project Scenario:** Dream Homes NYC – Real Estate Data System  
 **Team Members:** Yuxuan Chen, Yishan Liu, Xianghui Meng, Steven Huo  
 **Submission:** Project Checkpoint 2 – Team Contract and Business Requirements

## **1. Team Agreement**

We, the members of this team, agree to collaborate equally and responsibly on the successful design and implementation of a relational database system for Dream Homes NYC, in alignment with the class project objectives. We commit to open communication, timely task completion, and mutual support throughout all project phases. There will be no designated team leader; decisions will be made collectively and respectfully.

We will use WeChat for daily communication and schedule virtual check-ins every Monday and Thursday via Zoom. Tasks will be evenly distributed to ensure each member contributes to the technical, analytical, and reporting components.

## **2. Task Division and Timeline**

| **Category** | **Task** | **Assigned Member(s)** | **Planned Completion** |
| --- | --- | --- | --- |
| Business Understanding | Define detailed business requirements and client goals | Yuxuan Chen | Week 8 |
| Database Schema | Design a normalized ERD (20+ tables in 3NF), including entities and relationships | Xianghui Meng | Week 8 |
| Data Simulation | Generate and clean sample data to simulate messy or semi-structured input | Steven Huo | Week 9 |
| Table Creation | Write SQL DDL scripts to define all tables and constraints in PostgreSQL | Yishan Liu | Week 9 |
| Data Loading | Create Python/SQL scripts to load data into the database | Xianghui Meng | Week 9 |
| Complex Queries | Each member will write 2–3 complex SQL queries to support business decisions | All Members | Week 10 |
| Dashboards | Design and build interactive dashboards using Metabase or Power BI | Yuxuan Chen & Steven Huo | Week 11 |
| Final Report | Co-author project report, including intro, schema design, queries, and business insights | All Members (each writes one section) | Week 12 |
| Final Presentation | Prepare slides and live demo walkthrough; each member presents part of the work | All Members | Week 12 |