**Project Summarized Meeting Minutes**

**Project Name: Data-Driven Evaluation of Toronto Apartment Buildings**

**Attendees:**

* Jibin George - 0832593
* Jibin Kuruppassery Sebastian - 0829897
* Kailas Krishnan Radhakrishnan Sudhadevi - 0850313
* Vishal Ramesh Babu - 0832438
* Yashas Mysore Srihari - 0851592

**Group Formation and Expectations**

* Our group was formed based on a strong foundation of collaboration from previous semesters, where we worked together on minor projects and built a cohesive team dynamic.
* We shared a unified vision of delivering a high-impact capstone project, which we had been preparing for since the first semester by polishing our individual and group skills.
* Roles were assigned after assessing each member’s strengths, ensuring that responsibilities were distributed effectively. To maintain progress and accountability, we committed to holding weekly meetings, either in person or virtually, to discuss updates and align efforts.

**Initial Brainstorming and Dataset Exploration**

* We brainstormed several project ideas, including a Consumer Airfare Report, MRI Scanner, and Apartment Building Evaluation.
* During our initial research, we identified datasets for each project but faced challenges related to insufficient data, missing values, and the relevance of features.
* Each team member contributed by exploring additional datasets and identifying the limitations of the options available. This collaborative effort helped refine our focus and set the stage for selecting a viable project.

**Focusing on the Apartment Building Evaluation Project**

* After thorough discussions and evaluations, we decided to focus on the Apartment Building Evaluation project due to its potential for meaningful insights and social impact.
* We identified a dataset that aligned with our objectives, which included data on building compliance scores and evaluation categories. However, we encountered issues with data gaps, inconsistencies, and limited data points.
* To address these challenges, we explored alternative datasets, analyzed their strengths and weaknesses, and incorporated feature engineering techniques to fill gaps and enhance the dataset’s quality.

**Overcoming Dataset Challenges**

* We revisited our dataset concerns, such as missing values and limited features, and identified alternative datasets from government databases, real estate repositories, and open data portals.
* After reviewing these options, we shortlisted two datasets and conducted a comparative analysis to finalize our choice.
* To manage data limitations, we applied feature engineering techniques and adjusted our project scope to align with accessible data points.

**Exploratory Data Analysis (EDA) and Data Cleaning**

* We completed a thorough data cleaning process, addressing missing values and inconsistencies across the dataset. Each team member was responsible for reviewing specific sections to ensure data readiness.
* Exploratory Data Analysis (EDA) was conducted to identify trends in compliance scores, evaluation categories, and other key metrics. This allowed us to define the key features for our project and refine our research questions.

**Interactive Dashboard Development**

* Using the cleaned dataset, we began building visualizations in Tableau, focusing on clarity, relevance, and alignment with our objectives.
* Our team worked collaboratively to integrate dynamic and interactive features into the dashboard, ensuring it effectively showcased insights related to building compliance and performance trends.
* The dashboard includes visually appealing graphs and metrics that highlight key findings, making it user-friendly and informative for stakeholders.

**Finalization**

* We finalized the interactive dashboard based on our collective ideas and extensive efforts. The final product represents the culmination of our data analysis, visualization, and teamwork.
* The dashboard is polished, fully interactive, and ready for presentation, providing actionable insights into apartment building conditions and compliance across Toronto.