**Establishing Naming Conventions and Project Standards**

**IST 722: Data Warehouse Project**

**Team: The Special Ones (Team 1)**

**Naming Conventions**

**1. Tables:**

- Use prefixes like `dim\_` for dimensions and `fact\_` for fact tables.

- Table names should be lowercase and use underscores (`\_`) for separation. Example: `fact\_rider\_volume`.

**2. Columns:**

- Use `snake\_case` for column names (e.g., `rider\_count`, `stop\_id`).

- Foreign key columns should explicitly reference the dimension (e.g., `stop\_id`, `line\_id`).

**3. Primary Keys:**

- Use `id` or `key` as suffixes for primary keys (e.g., `fact\_id`, `time\_key`).

**4. Time Attributes:**

- Use consistent naming like `datetime`, `hour`, `is\_peak\_hour`.

**Project Standards**

**1. Version Control:**

- Use Git for all project code and schema changes.

- Use branches named by feature (e.g., `feature/etl-rider-volume`).

**2. ETL Design:**

- Modular ETL scripts using dbT.

- Each fact table has a dedicated ETL script.

**3. Documentation:**

- Maintain documentation for all dimension and fact table definitions.

- Use Power BI dashboards to visually track KPIs and testing results.

**4. Testing:**

- Validate data at each ETL stage.

- Regularly audit metrics like rider counts and delay times for accuracy.