**Vehicle Renting Management System**

**Title: Vehicle renting management system**

**Problem Statement/Objective:**

* To build a Car Rental Management System that tracks the status of renting vehicles in different stores. Including vehicle management, user management, renting, and return records.
* The system has an admin user who can add, and delete vehicles and check the renting record, and regular client users who can register, log, check vehicles, and rent and return vehicles.

**Proposed Solution/Approach:**

**Data Model and Database Design:**

* **Tables:** Design tables for vehicles, Clients
* **Relationships**: Use a relational structure to associate each car with their user.
* **Storage:** Consider using an SQLite database for simplicity.

**Core Features:**

1. **For clients:**

* **Client register and log:** client name, email, phone
* **Vehicle check:** show vehicle information such as Maker, model, price, status
* **Renting:** When **a** client selects a vehicle, the system response to the availability and record.

1. **For Admin user:**

* **Vehicle management:** add, delete or update vehicle information
* **Record check:** show all renting and return record

1. **Data storage**

Use SQL to store below table：

* **Clients**：store client info。
* **Vehicles**：store vehicle info。
* **RentingRecord**：store renting and return info。

**Python Library used for data analysis and report:**

* **Activity Summaries:** Use **pandas** to analyze and create summaries including vehicle occupancy and revenue generated by each vehicle
* **Data Store:** Use **sqlite3** to manage database.
* **Datetime:** to record renting and return time
* **Visualization:** Use **matplotlib** or **seaborn** to create charts that visualize patterns,

**Challenges：**

Not familiar with Python library and database use.