**Project Report: Home Cleaning Service Database System**

**Brooklyn Renaissance Plaza**

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**1. Project Overview**

This project involves the design and implementation of a database system for a Home Cleaning Service. The system aims to efficiently manage customer information, employee records, appointments, and payment details. The project was implemented using Microsoft Access for the frontend and MySQL for SQL scripting.

**2. Entities and Relationships**

The main entities in the database include:

* **Customer:** Stores customer contact information.
* **Employee:** Contains details of cleaning staff.
* **Appointment:** Manages service scheduling.
* **Payment:** Tracks payment transactions.

Relationships:

* A customer can have multiple appointments.
* Each appointment is handled by one employee.
* Each appointment can have one or more payments associated with it.

An Entity-Relationship (ER) diagram was created and screenshots of the diagram are included in the GitHub repository.

**3. Technologies Used**

* Microsoft Access (.accdb)
* MySQL Workbench for SQL scripting
* GitHub for version control and submission

**4. Challenges Faced**

* Encountered error code 1046 and 1007 in MySQL due to database selection issues.
* Needed to ensure correct use of USE statements before running SQL commands.
* Designing proper foreign key constraints without violating integrity rules.
* Managing different file formats (.accdb, .sql, .png) in a single GitHub repo.

**5. Outcome**

Successfully created a functional relational database that supports all core operations required for the home cleaning service. All necessary files have been organized and uploaded to GitHub for evaluation.

**Conclusion & Reflection**

* Gained hands-on experience in translating business requirements into a working database system.
* Learned practical debugging in MySQL and schema design best practices.
* Understood the importance of correct data relationships and structured queries for data retrieval.