**TECHNICAL\_PROJECT**

**PROJECT\_TITLE: TechSync Appliance Scheduler**

**CONTRIBUTORS: Vanshika, Mohammad Amanat Karim**

**INTRODUCTION:**

**The main goal of this database is to make it easy to set up, manage, and keep track of repair  
appointments for appliances. This is helpful for both the people who fix the appliances and the customers who need them fixed. The database is built around four main tables:**

* **Customer: This entity keeps all the important information about the customers, like their names, where they live, and how to get in touch with them.**
* **Technician: This entity has information about the repair people, like how many years of experience they have and how to reach out to them. This helps the system find the technician for each repair job.**
* **Appointment: This entity keeps track of all the repair appointments. It includes who the customer is, who the repair person is, and how the servicing would function.**
* **Servicing: This entity describes the different names of repairs that can be done. It tells you how much each repair will cost and links it to the technician who will accomplish the job.**

**By using these entities together, the database can give you up-to-the-minute information on who's going to do repairs, what kinds of repairs can be done, and how much they will cost. This makes everything run more smoothly and helps everyone involved.**

**ENTITIES :**

**Table Customer :**

**Attributes:**

* **CustomerID (PK) (INT) (IDENTITY)**
* **CustName (VARCHAR) (NOT NULL)**
* **CustAddress (VARCHAR)**
* **PhoneNumber (BIGINT) (NOT NULL)**
* **Email (VARCHAR) UNIQUE**
* **Problem\_Description (VARCHAR) (NOT NULL)**

**Table Technician:**

**Attributes:**

* **TechnicianID (PK) (INT) (IDENTITY)**
* **TechName (VARCHAR) (NOT NULL)**
* **PhoneNumber (BIGINT) (NOT NULL)**
* **Email (VARCHAR) UNIQUE**
* **Years\_of\_Experience (INT)**

**Table Appointment:**

**Attributes:**

* **AppointmentID (PK) (INT) (IDENTITY)**
* **AppointmentNumber (INT)**
* **PaymentStatus (VARCHAR)**
* **Notes (VARCHAR)**
* **CustomerID (FK) (INT)**
* **TechnicianID (FK) (INT)**
* **ServicingID (FK) (INT)**

**Table Servicing:**

**Attributes:**

* **ServiceID (PK) (INT) (IDENTITY)**
* **ServiceName (VARCHAR)**
* **Cost (FLOAT)**
* **ServiceDuration (VARCHAR)**
* **TechicianID (FK) (INT)**

**RELATIONSHIPS :**

* **‘Customer’ and ‘Appointment’ are in a One-to-Many relationship via ‘CustomerID’.**
* **‘Technician’ and ‘Appointment’ are in a One-to-Many relationship via ‘TechnicianID’.**
* **‘Servicing’ and ‘Appointment’ are in a One-to-Many relationship via ‘ServicingID’.**
* **‘Technician’ and ‘Servicing’ are in a One-to-Many relationship via ‘TechnicianID’.**