Sunday Ogbonnaya Onwuchekwa

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Jenny’s Salon Database – Statement of Work

**History**

Jenny’s Salon currently operates two salons at different locations. As an ambitious entrepreneur, she plans to establish her salon in all the regions. However, she uses some form of manual and electronic system of record keeping for tracking the day-to-day transactions of the salons. Therefore, she stores invoices of her transactions with her suppliers in a folder and uses spreadsheets for storing both the carbon copies of customer receipts and customer information. Due to an increase in the number of clients, she has not given much attention to record keeping. Additionally, transferring customer receipt information into another spreadsheet has become time-consuming, tedious and error-prone.

A robust database can mitigate the frustration associated with her current systems of record keeping. The database can consistently and efficiently improve her business processes and operations, and aid her in formulating a more sophisticated advertising strategy.

**Scope**

The database will manage data from Jenny’s current salons and have functionalities for maintaining future ones. It will store customer information, such as name, email, and phone numbers. Furthermore, a list of employees of the salon will be maintained and their jobs tracked. Similarly, suppliers and their associated products and invoices will be stored and tracked. The database will also track each salon’s daily transactions, and generate daily, weekly, monthly, quarterly, and annual reports. The database will track dates, costs (including taxes), products, services, and employees for each transaction, and generate a receipt or an invoice for each transaction by the customers and suppliers. It will enforce referential integrity and delete cascade among the tables.

**Objectives**

* Mitigation of frustrations associated with transferring data, which has become time-consuming, tedious and error-prone.
* Enhancement of business processes and operations, and formulation of a more sophisticated advertising strategy.
* Management of all kind of reports needed by the salons and their employees.
* Tracking and generation of transactional data, receipts, and invoices for each transaction by customers and suppliers
* Improvement in data integrity by enforcing referential between tables.
* Storing of employees, customers, products, and transactional data.

**Constraints**

The database will not manage employee payrolls or money paid to suppliers. It will not keep track of customers’ credit card information. It will not prevent fraudulent activities by the employee nor keep track of equipment maintenance. It will also not cater for the training of employees.

**Timelines**

* **Gathering Data:** This task consists of studying the existing system, interviewing the salon’s stakeholders—clients and employees—to ascertain the system requirements. *Timeframe:* *2 weeks.*
  + **Deliverable:** A document containing system requirements and information gathered.
* **Analyzing Data:** Analyzing the information gathered to define business procedures and the parameters of data modeling. *Timeframe: 2 weeks.*
  + **Deliverable:** A preliminary list of business procedures and parameters of data modeling.
* **Normalized Data Model:** Finalization of the data model with approved entities, attributes, and relationships. Compilation of existing data for migration. *Timeframe: 1 week.*
  + **Deliverable:** An Entity-Relationship Diagram (EER Diagram)
* **Physical Database:** Converting the EER diagram into a Relational Database Management System (RDBMS) comprising of tables, columns with associated data types, keys, relationships, and constraints. *Timeframe: 1 week.*
  + **Deliverable:** Database framework for review and approval
* **Testing:** Migration of existing data for use as sample data for System Internal Test (SIT) and User Acceptance Test (UAT). Testing of the database for business procedures, the integrity of data, generation of reports, and security. *Timeframe: 2 weeks.*
  + **Deliverable:** A documented test results and sample report for revision.
* **Implementation:** Adjustment of the database to with the test results and removal of sample data. Installation of the database on Jenny’s Salon server and the migration of existing data. Conducting of connection test to ensure that unauthorized users cannot access the system. Finally, Building a user-friendly form for inserting and accessing data and reports. *Timeframe: 2 weeks.*
  + **Deliverable:** A functional database