**UoK MUSANZE CAMPUS**

**NAMES: DUKUZEMARIYA YVONNE DATE:30/01/2025**

**REGNo:2301000382**

**MODULE: DATABASE MANAGEMENT SYTEM**

**INDIVIDUAL ASSIGNMENT**

**Personal Health Assistant**

The Personal Health Assistant is a comprehensive application designed to help users manage their health-related data. It includes functionalities to maintain user profiles, track health records, and manage medication schedules. The aim is to provide users a centralized platform to monitor their health and medication intake, ensuring they stay informed about their health status and medication requirements.

**Entity-Relationship Diagram (ERD)**

|  |
| --- |
| Health Record |
| Record*\_ID (PK)*  *User\_*ID (FK)  Date  Weight  Height  Blood*\_Pressure*  *Notes* |

|  |
| --- |
| *Medication Management* |
| *Medication\_*ID (PK)  User*\_ID (FK)*  *Medication\_*Name  Start*\_Date*  *End\_*Date |

|  |
| --- |
| User Profile |
| User*\_ID (PK)*  *First\_*Name  Last*\_Name*  *Date\_*of*\_Birth*  *Email*  *Phone\_*Number |

**Logical Data Model (LDM)**

User profile: User*\_ID (PK), First\_*Name, Last*\_Name, Date\_*of*\_Birth,Email,Phone\_*Number

Health Record: Record*\_ID (PK),User\_*ID (FK),Date,Weight*,*Height*,*Blood*\_Pressure,Notes*

*Medication Management: Medication\_*ID (PK),User*\_ID (FK)*,*Medication\_*Name,Start*\_Date*,*End\_*Date

**Physical Data Model (PDM)**

The physical data model would generally specify the actual data types and sizes to be used in the database, matching the data types shown in the LDM.

**User Profile**

User\_ID: INT (Primary Key),First\_Name: VARCHAR(50)

Last\_Name: VARCHAR(50), Date\_of\_Birth: DATE

Email: VARCHAR(100),Phone\_Number: VARCHAR(15)

**Health Record**

Record\_ID: INT (Primary Key),User\_ID: INT (Foreign Key)

Date: DATE

Weight: VARCHAR (5,2),Height: VARCHAR (5,2)

Blood\_Pressure: VARCHAR(20)

Notes: TEXT

**Medication Management**

Medication\_ID: INT (Primary Key),User\_ID: INT (Foreign Key)

Medication\_Name: VARCHAR(100)

Start\_Date: DATE, End\_Date: DATE

**Data Dictionary**

| **Table** | | | **Field Name** | | **Data Type** | **Description** |
| --- | --- | --- | --- | --- | --- | --- |
| **User Profile** | | | User\_ID | | INT | Unique identifier for each user. |
|  | | | First\_Name | | VARCHAR(50) | User's first name. |
|  | | | Last\_Name | | VARCHAR(50) | User's last name. |
|  | | | Date\_of\_Birth | | DATE | User's date of birth. |
|  | | | | Email | VARCHAR(100) | User's email address. |
|  | | Phone\_Number | | | VARCHAR(15) | User's contact number. |
| **Health Record** | | Record\_ID | | | INT | Unique identifier for each health record. |
|  | | Date | | | DATE | Date of the health record entry. |
|  | | Weight | | | VARCHAR (5,2) | User's weight. |
|  | | Height | | | VARCHAR (5,2) | User's height. |
|  | | Blood\_Pressure | | | VARCHAR(20) | Blood pressure reading. |
|  | | Notes | | | TEXT | Additional notes for health records. |
| **Medication Management** | | Medication\_ID | | | INT | Unique identifier for each medication entry. |
|  | | Medication\_Name | | | VARCHAR(100) | Name of the medication. |
|  | Start\_Date | | | | DATE | Date when medication starts. |
|  | End\_Date | | | | DATE | Date when medication ends. |