**Database Design ERD and Data Dictionary**

**ERD**

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**Data Dictionary**

**WARDS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Required** | **Data Type** | **Maximum Length** | **Range/List** |
| WardID | Yes | Auto-number | 8 | Primary Key  1 – 99 inclusive |
| WardName | Yes | Text | 10 | - |
| WardLocation | Yes | Text | 8 | - |
| WardCapacity | Yes | Integer | 2 | 1 – 20 inclusive |

**PATIENTS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Required** | **Data Type** | **Maximum Length** | **Range/List** |
| PatientID | Yes | Auto-number | 8 | Primary Key  1 - 99999999 inclusive |
| LastName | Yes | Text | 25 | - |
| FirstName | Yes | Text | 25 | - |
| StreetAddress | Yes | Text | 50 | - |
| Suburb | Yes | Text | 20 | - |
| City | Yes | Text | 20 | - |
| EmailAddress | Yes | Text | 30 | - |
| PhoneNumber | No | Text | 15 | - |
| InsuranceCode | Yes | Text | 15 | - |

**DOCTORS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Required** | **Data Type** | **Maximum Length** | **Range/List** |
| DoctorID | Yes | Auto-number | 8 | Primary Key |
| LastName | Yes | Text | 25 | - |
| FirstName | Yes | Text | 25 | - |
| StreetAddress | Yes | Text | 50 | - |
| Suburb | Yes | Text | 20 | - |
| City | Yes | Text | 20 | - |
| PhoneNumber | Yes | Text | 15 | - |
| Specialty | Yes | Text | 15 | - |
| Salary | Yes | Integer | 6 | 20,000.00 - 200,000.00 inclusive |

**RESEARCH TOPICS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Required** | **Data Type** | **Maximum Length** | **Range/List** |
| ResearchTopicID | Yes | Auto-number | 5 | Primary Key  1 – 999 inclusive |
| Description | Yes | Text | 100 | - |
| ResearchLevel | Yes | Integer | 2 | 1 – 10 inclusive |
| ProjectOutcome | Yes | Text | 25 | journal article, conference paper, conference poster, book chapter, and book |

**MEDICATION**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Required** | **Data Type** | **Maximum Length** | **Range/List** |
| MedicationID | Yes | Auto-number | 8 | Primary Key |
| MedicationName | Yes | Text | 25 | - |
| MedicationCost | Yes | Currency | 8 | 0.50 – 9999.00 inclusive |

**ADMISSIONS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Required** | **Data Type** | **Maximum Length** | **Range/List** |
| AdmissionID | Yes | Auto-number | 8 | Primary Key |
| Description | Yes | Text | 100 | - |
| WardID | Yes | Text | 8 | Foreign Key |
| Patient | Yes | Text | 50 | - |
| AdmissionDate | Yes | Date | 10 | Format: DD/MM/YYYY |
| Status | Yes | Text | 8 | current, complete |

**PRESCRIPTION**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Required** | **Data Type** | **Maximum Length** | **Range/List** |
| MedicationName | Yes | Text | 25 |  |
| PrescriptionDate | Yes | Date | 10 | Format: DD/MM/YYYY (Today’s Date) |
| Amount | Yes | Text | 8 | 1 – 150 inclusive |
| Admission | Yes | Text | 50 | - |

**RESEARCH PROJECTS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Required** | **Data Type** | **Maximum Length** | **Range/List** |
| ResearchProjectID | Yes | Auto-number | 5 | Primary Key  1 – 999999 inclusive |
| Doctor | Yes | Text | 50 | - |
| ResearchTopic | Yes | Integer | 100 | 1 – 10 inclusive |
| ProjectOutcome | Yes | Text | 25 | journal article, conference paper, conference poster, book chapter, and book |
| EndDate | Yes | Date | 10 | Format: DD/MM/YYYY |
| Budget | Yes | Currency |  |  |