Software Development (A2)

There are six (6) tables that have been made for the assignment.

**Patients Table**

This is the one of the tables that was made first. This table stores relevant information of the patient.

Its attributes are: email, username, password, patientID, firstName, lastName, sex, phoneNo, address and doctorID.

The primary key of the table is patientID and the foreign key is doctorID which is the primary key of the Doctor table as each patient is assigned a doctor so there needs to be a relationship between the tables. The email, username and password are stored because this is what the patient will use to log into the system to access their information. The names, sex, phone number and address are relevant as part of the patient’s medical history but is also needed as basic information to register for the system.

**Doctors Table**

This table stores relevant information of the Doctor.

Its attributes are: doctorID, firstName, lastName, sex, speciality and dob.

The primary key of this table is doctorID. Names, sex, speciality and date of birth are stored so the system has some information about the doctors the same as the patients but the specialty is especially important as the patients will need to be able to choose the right doctors for them, and the staff will be able to choose the right doctors for patients if necessary.

**Bookings Table**

This table stores information of patients who make bookings for doctor visits.

Its attributes are: bookingID, PatientID, DoctorID, Room, Day, Month and Year.

The primary key of the table is bookingID while the foreign keys are PatientID and DoctorID as the patient is booking a visit with a doctor which creates a relationship between this table, the patient table and the doctor table. The room, day, month and year store the most important information to the patient as the they need the information to know when they booked their visit. As for the doctor, they will need it to check on their upcoming bookings and to make sure they don’t get double booked.

**Messages Table**

This table stores relevant information for a particular interface.

Its attributes are: messageID, messageBody and pID.

The messageID acts as the primary key while pID is the foreign key that references the PatientID in the Patient table. The message body is used to send patients a confirmation message when they book doctor visits, change their doctors, etc. with the pID forming that relationship and ensuring the message is sent to the right patient.

**Logging Access Table**

This table stores relevant information for a particular interface.

Its attributes are: PatientID, dateAccessed and Functionality.

The primary key is a composite of all data types in this table, the PatientID, dateAccessed, and Functionality. This is because this is the only way to guarantee a unique entry into this table, as any given functionality can be accessed multiple times on different dates. The patientID also acts as the foreign key as it is the only ID of the table but also because it holds information from the Patients table, giving both tables the needed relationship. The most important attributes are dateAccessed and functionality as they are needed to track when and what the patient has accessed from the system.

**VPDetails Table (View Doctor Visit Details and Prescriptions Table)**

This table stores information on a patients visit details and prescriptions.

Its attributes are: PatientID, DoctorID, BookingID, visitDetails and Prescriptions.

The PatientID, DoctorID and BookingID are both the primary keys (composite) and foreign keys of the table as the information in this table is relevant to the Patient, Doctor and Booking tables. The visitDetails attribute holds information from the doctor about any relevant details from their patients visits for them (patients) to see. The prescription lists the patients’ prescriptions given by their doctor, which is important if this was mentioned in the visit details as the result of the meeting or just an ongoing treatment.