**Requirements**

**Nonfunctional Requirements**

**1. Operational Requirements**

1.1Database should create an external backup at the end of each day

1.2 System should be compatible with any web browser

1.3 Mobile patient website access

**2. Performance Requirements**

2.1 Authenticating with the database should take less than 3 seconds

2.2 Querying for a specific doctor's weekly schedule should happen in less than 4 seconds

2.3 Inserting a new appointment into the database should take 5 seconds or less

(name, date, time, doctor)

2.4 Inserting a new account into the database should take 14 seconds or less

(include billing information)

(first name, last name, e-mail address, phone, address, emergency contact name, emergency contact phone, allergies, health problems, reason for visit, preferred doctor option, prescription, insurance/payment option)

2.5 Website support 1000 ip addresses accessing at one time.

**3. Security Requirements**

3.1 Appointments can only be modified by the patient who created them or the doctor assigned to them.

3.2 Only management can create or modify doctor schedules

3.3 Must define input validation for all user database queries to protect against SQL injections. Define a rule for each input field.

3.4 Patients should be able to pull up doctor availability information.

3.5 Secretaries should only be able to modify schedules of doctors they are assigned to

**4. Cultural and Political Requirements**

4.1 No cultural or political requirements

4.2 English and Spanish

**Functional Requirements**

**1. Patient Account Management**

1.1 Create new patient account

1.2 Update patient identification information

1.3 Update patient billing information

1.3.1 Upgrade employee access level.

1.3.2 Update patient contact information

1.4 Update patient history information (current treatment included)

1.4.1 Populate spreadsheet with patient information from database.

1.5 Update patient medical information (Primary doctor and attending specialist included)

1.5.1 Auto-read thermometer to populate data in patient information chart.

1.6 Employee account privilege management.

1.7 Downgrade employee access level.

1.8 Patient medical record/ medical history request

**3 Employee Account Management**

**2 In patient information logging**

**3 Schedule Management**

3.1 Add doctor to schedules

3.2 Add nurse to a schedules

3.3 Remove doctor from a schedule

3.4 Create schedules

3.4.1 Management posts weekly schedule to database

3.5 View/retrieve schedules

**4 Manage Appointments**

3.1 Schedule a new appointment.

3.1.1 Retrieve patient information.

3.1.2 Retrieve doctor availability.

3.1.3

**5 Database Management**