Functional Requirements:

1. User Authentication:

* The system shall provide secure authentication mechanisms for Dentists, Patients, and Office Managers.
* Dentists and Patients shall have separate login interfaces to access their respective functionalities.

1. Dentist Registration:
   * The Office Manager shall be able to register Dentists into the system.
   * Each Dentist shall have a unique ID generated by the system.
   * Dentist details including First Name, Last Name, Contact Phone Number, Email, and Specialization shall be recorded.
2. Patient Registration:

* The Office Manager shall be able to enroll Patients into the system.
* Each Patient shall have a unique ID generated by the system.
* Patient details including First Name, Last Name, Contact Phone Number, Email, Mailing Address, and Date of Birth shall be recorded.

1. Appointment Booking:

* Patients shall be able to request appointments via phone or online form.
* Office Manager shall be able to book appointments for Patients.
* Appointment details including Patient information, Dentist assigned, date, time, and location shall be recorded.
* Upon booking, a confirmation email shall be sent to the Patient.

1. Appointment Viewing (Dentists):

* Dentists shall be able to sign in and view a listing of their appointments.
* The listing shall include details of the Patients they are scheduled to see.

1. Surgery Information:

* The system shall provide information about each Surgery, including its name, location address, and telephone number.

1. Appointment Viewing (Patients):

* Patients shall be able to sign in and view their upcoming appointments.
* The appointments shall include information about the assigned Dentist.

1. Appointment Modification (Patients):

* Patients shall be able to request changes or cancellations to their appointments.
* Upon modification, the system shall update the appointment details accordingly.

1. Appointment Limitation (Dentists):

* Dentists shall not be assigned more than 5 appointments in any given week.

1. Billing Restriction:

* The system shall prevent Patients from requesting new appointments if they have outstanding, unpaid bills for dental services.