Software Requirements Discovery and Domain Modeling

Task 1.1

Functional Requirements:
- Dentist Registration: Register dentists with First Name, Last Name, Contact Phone, Email, Specialization, and a unique ID.
- Patient Registration: Register patients with First Name, Last Name, Contact Phone, Email, Mailing Address, and Date of Birth.
- Appointment Booking: The Office Manager books appointments, sending confirmation emails to Patients.
- Appointment Viewing for Dentists: Dentists can view a list of their appointments, including patient details.
- Appointment Viewing for Patients: Patients can view their appointments, including dentist information.
- Appointment Modification: Patients can request to cancel or change their appointments.
- Appointment Limit for Dentists: Limit dentists to a maximum of 5 appointments per week.
- Outstanding Bill Check: Prevent new appointments for Patients with outstanding, unpaid bills.
- Surgery Information Availability: Provide information about each Surgery location, including name, address, and telephone.

Task 1.2

Dentist

dentistID: Integer
firstName: String
lastName: String
contactPhone: String
email: String
specialization: String

Appointment

appointmentID: Integer
date: Date
time: Time
dentistID: Integer (FK)
patientID: Integer (FK)
surgeryID: Integer (FK)

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Surgery

surgeryID: Integer
name: String
locationAddress: String
telephoneNumber: String

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Patient

patientID: Integer
firstName: String
lastName: String
contactPhone: String
email: String
mailingAddress: String
dateOfBirth: Date

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