**Team Members:** Fiza Virk, Carley Youngquist, Connor Stomp

**Communication and Meetings**

* We will primarily communicate through Microsoft Teams for quick updates and discussions as well as sharing files.
* Weekly team meetings will be held on Zoom at a mutually agreed upon time each week which changes depending on the groups schedule and here we will discuss updates on out assigned tasks and progress we have made.

**Collaboration**

* We will be using the university provided Git repository for project collaboration.
* All team members are responsible for uploading all important files regularly messages explaining each file.
* The TA has access to the repository for monitoring.

**Strengths and Weaknesses**

* **Strengths:** Our team has strong communication skills and there is support among members.
* **Weaknesses:** We all have challenging schedules, which is why planning meetings is difficult in advance.

**Use-cases (currently we have not developed further on the base use-cases but will when we have a well formatted design of the project)**

* **(Authentication & Authorization) A&A Roles**
  + Logon - All
  + Admin/Patient/Provider Account Admin/ - Patient
  + Public access – Home page - Public
  + Change password / Security QA - Individual
* **Admin Functions**
  + Physician Schedule / Availability - Admin
  + Bed Create/Delete/Modify - Admin
  + Create Bill rates - Admin
  + Invoice Patient - Admin
* **Patient Functions**
  + Make/Change/View appointment - Patient
  + Make payments - Patient
* **Provider/Physician/Nurse Functions**
  + Bed - Assign to Patient - Physician
  + Discharge Patient - Physician
  + After Visit Summary-SOAP - Physician
  + Prescribe Labs tests - Physician
  + Prescribe Meds - Physician
  + Notification

**Functions and Data Elements:**

* **Function:** Patient Registration
  + Description: Records patient demographic and insurance information.
  + Data Elements:
    - PatientID (Input, Persisted; Data type: Integer, Validations: Unique, Domain: System-generated)
    - FirstName (Input, Persisted; Data type: String, Validations: Required, Domain: Free text)
    - LastName (Input, Persisted; Data type: String, Validations: Required, Domain: Free text)
    - DOB (Input, Persisted; Data type: Date, Validations: Required, Domain: Date format)
    - Address (Input, Persisted; Data type: String, Validations: Required, Domain: Free text)
    - BedID(Input, Persisted; Data type: String, Validations: Required, Domain: Numeric)
    - InsuranceID (Input, Persisted; Data type: String, Validations: Required, Domain: Alphanumeric)
* **Function:** Appointment Scheduling
  + Description: Schedules appointments for patients with providers.
  + Data Elements:
    - AppointmentID (Output, Persisted; Data type: Integer, Validations: Unique, Domain: System-generated)
    - PatientID (Input, Persisted; Data type: Integer, Validations: Required, Domain: Existing Patient ID)
    - PhysicianID (Input, Persisted; Data type: Integer, Validations: Required, Domain: Existing Physician ID)
    - AppointmentDate/Time (Input, Persisted; Data type: DateTime, Validations: Required, Domain: DateTime format)
    - ReasonforVisit (Input, Persisted; Data type: String, Validations: Optional, Domain: Free text)
* **Function:** Billing and Invoicing
  + Description: Generates invoices for patient services.
  + Data Elements:
    - InvoiceID (Output, Persisted; Data type: Integer, Validations: Unique, Domain: System-generated)
    - PatientID (Input, Persisted; Data type: Integer, Validations: Required, Domain: Existing Patient ID)
    - CoverageDesc (Input, Persisted; Data type: String, Validations: Required, Domain: Description of what the Insurance covers)
    - Copay (Input, Persisted; Data type: Decimal, Validations: Required, Domain: Numerical value)
    - Deductible (Input, Persisted; Data type: Decimal, Validations: Required, Domain: Numerical value)
    - CoInsurance (Input, Persisted; Data type: Decimal, Validations: Required, Domain: Percentage)
    - OutofPocketMax (Input, Persisted; Data type: Decimal, Validations: Required, Domain: Numerical value)
    - Charge Amount (Output, Persisted; Data type: Decimal, Validations: Required, Domain: Numerical value)
    - Payment Method (Input, Persisted; Data type: String, Validations: Conditional, Domain: List of payment methods)
* **Function:** Medical Record Management
  + Description: Stores and manages patient medical information.
  + Data Elements:
    - RecordID (Output, Persisted; Data type: Integer, Validations: Unique, Domain: System-generated)
    - Patient D (Input, Persisted; Data type: Integer, Validations: Required, Domain: Existing Patient ID)
    - VisitDate (Input, Persisted; Data type: Date, Validations: Required, Domain: Date format)
    - Diagnosis (Input, Persisted; Data type: String, Validations: Required, Domain: Standardized codes/free text)
    - Treatment (Input, Persisted; Data type: String, Validations: Required, Domain: Free text)
    - Medications (Input, Persisted; Data type: String, Validations: Optional, Domain: List of Medications)
    - LabResults (Input, Persisted; Data type: BLOB/File, Validations: Optional, Domain: File upload)