**Transforming Healthcare: Streamlined Patient Care Coordination Through Comprehensive Database Model**

Milestone:    CONCEPTUAL MODELLING

# Group 10
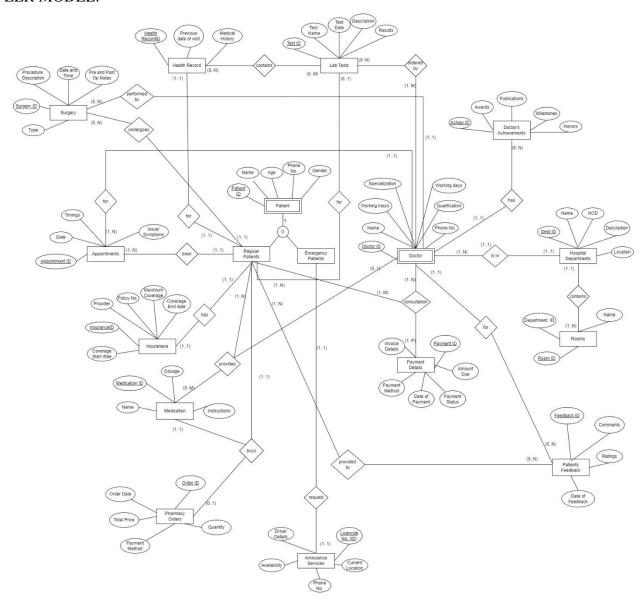# Manikandan Mohan
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**Percentage of Effort Contributed by Student1: 50%**

**Percentage of Effort Contributed by Student2:    50%**

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**Signature of Student 2: Kiran Tamilselvan**

**Submission Date: 10/15/2023**

# CONCEPTUAL MODELLING

EER MODEL:

## UML DIAGRAM:

performed by

(0..*)

**SURGERY**
- -Surgery_id: Integer
- -Type: String
- -Procedure Desc: String
- -Date and Time: DateTime
- -Pre-op Notes: String
- -Post_op Notes: String

- +get Treatment_id()
- +set Treatment_id()
- +get Timing_surgery()
- +set Timing_surgery()

**HEALTH RECORDS**
- -Health Record ID: Integer
- -Previous date visit:
- -Medical History: String

- +get Lab_id()
- +set Lab_id()
- +get medication()
- +set medication()

**LABORATORY TESTS**
- -Lab Test_id: Integer
- -Test name: String
- -Description: String
- -Test Date: Date
- -Results: String

- +get Lab Test_id()
- +set Lab Test_id()
- +get Results()
- +set Results()

for

(0..*)    (0..*)    (0..1)

Ordered by

(1..1)

**DOCTOR PERSONAL ACHIEVEMENTS**
- -Achievement_id: Integer
- -Professional Awards: String
- -Honors: String
- -Publications: String
- -Personal Milestones: String

- +get Achievement_id()
- +set Achievement_id()
- +get Professional Awards()
- +set Professional Awards()

(1..*)

(1..1)

has    (0..N)

**PATIENTS**
- -Patient_id: Integer
- -Patient name: String
- -Age: Integer
- -Gender: String
- -Phone number:
- -Address: String

- +get patienti_id()
- +set patient_id()
- +get Age()
- +set Age()

(1..*)

**DOCTORS**
- -Doctor_id: Integer
- -Doctor name: String
- -Specialization: String
- -Qualification: String
- -working hours:  String
- -working days: String

- +get Doctor_id()
- +set Doctor_id()
- +get Doctor name()
- +set Doctor name()

(1..1)    (1..1)

for    for

(1..1)

**APPOINTMENTS**
- -Date: Date
- -Timings: String
- -Symptoms: String

- +get Date()
- +set Date()
- +get Symptoms()
- +set Symptoms()

(1..*)    (1..*)

Undergoes

(1..*)

(1..1)

**HOSPITAL DEPARTMENT**
- -Department_id: Integer
- -Department name: String
- -Head of department: String
- -Description: String
- -Location: String

- +get Department_id()
- +set Department_id()
- +get Department()
- +set Department()

is in    (1..*)    (1..1)

(0..1)    (1..*)    (1..1)

**REGULAR PATIENTS**
...

(1..*)    (1..1)

Consultation

**EMERGENCY PATIENTS**
...

(1..1)    (1..1)

(1..1)

book

**INSURANCE**
- -Insurance_id: Integer
- -Policy number: Integer
- -max coverage:Integer
- -coverage start_date: Date
- -coverage end_date: Date

- +get Insurance_id()
- +set Insurance_id()
- +get policy number()
- +set policy number()

has    (1..1)    (1..*)

for

**PAYMENTS**
- -Payment_id: Integer
- -Amount Due: Integer
- -Payment status: String
- -Date of payment: Date
- -Payment type: String
- -Invoice details: String

- +get payment_id()
- +set payment_id()
- +get invoice()
- +set invoice()

(1..*)

(1..1)

contains    (1..1)

**ROOMS**
- -Rooms_id: Integer
- -Room name: String

- +get Rooms_id()
- +set Rooms_id()
- +get Room name()
- +set Room name()

Buys

Provides

Provided by    Request

(0..*)    (1..1)

(0..1)

(1..1)

(0..*)    (0..*)

**MEDICATIONS**
- -Medication_id: Integer
- -Medication name: String
- -Dosage: String
- -Instructions: String

- +get medication_id()
- +set medication_id()
- +get dosage()
- +set dosage()

**PHARMACY ORDER**
- -Order_id: Integer
- -Medication: String
- -Quantity: Integer
- -Total price: Integer
- -Payment method: String

- +get order_id()
- +set order_id()
- +get quantity()
- +set quantity()

**AMBULANCE SERVICES**
- -Ambulance_id: Integer
- -Driver name: String
- -License: String
- -Current Location: String
- -Contact information: Integer

- +get Ambulance_id()
- +set Ambulance_id()
- +get Current location()
- +set Current location()

**PATIENT FEEDBACK & RATINGS**
- -Feedback_id: Integer
- -Ratings: Integer
- -Comments: String
- -Date of Feedback: Date

- +get Feedback_id()
- +set Feedback_id()
- +get Ratings()
- +set Ratings()