



SUBSYSTEM NAME: ***Administrative Tools Subsystem in a Judicial Management System***

GROUP NAMES:

1. *Mohammed Qasabah*
2. *Mazen Al-ammari*
3. *Mohanned Shaaf*
4. *Mohammed Al-howshabi*



Table of Contents

Tools Required:..... 3

1 Task 1: Create Use Case Diagram (30 minutes).....4

2 Task 2: Create an Entity-Relationship Diagram (ERD) (40 minutes)..... 5

3 Task 3: Design a Class Diagram (30 minutes)..... 6

4 Task 4: Create a Sequence Diagram (30 minutes)..... 7



Creating UML and ERD Diagrams

This lab provides hands-on experience in creating UML and ERD diagrams for subsystem modeling. It ensures students can visualize and design the architecture of their assigned subsystem effectively, bridging the gap between analysis and implementation.

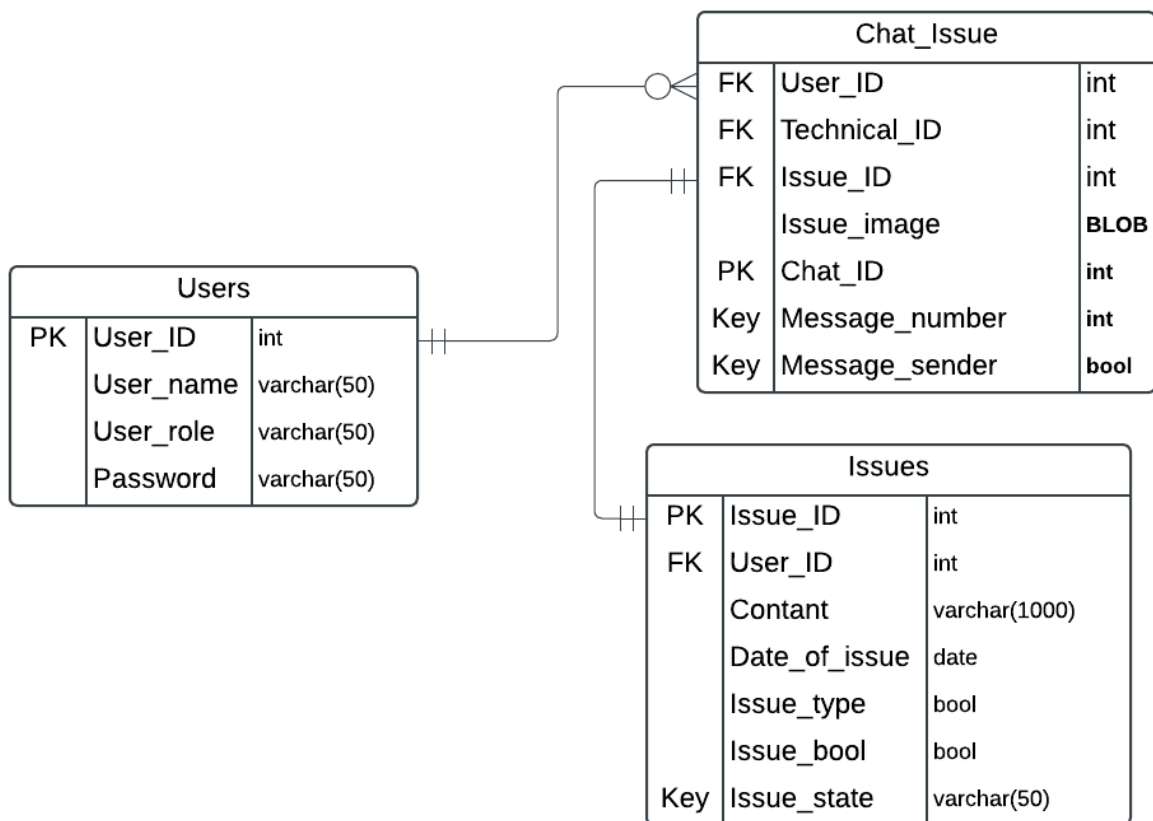
Tools Required:

- draw.io (Diagrams.net)



2 Task 2: Create an Entity-Relationship Diagram (ERD) (40 minutes)

- Identify the key entities within the subsystem and their relationships.
 - Example: For "Document Management," entities may include Document, Case, User, and Access Log.
- Define attributes for each entity and primary/foreign keys for relationships.
- Ensure cardinality (1:1, 1:N, N:M) is correctly represented.



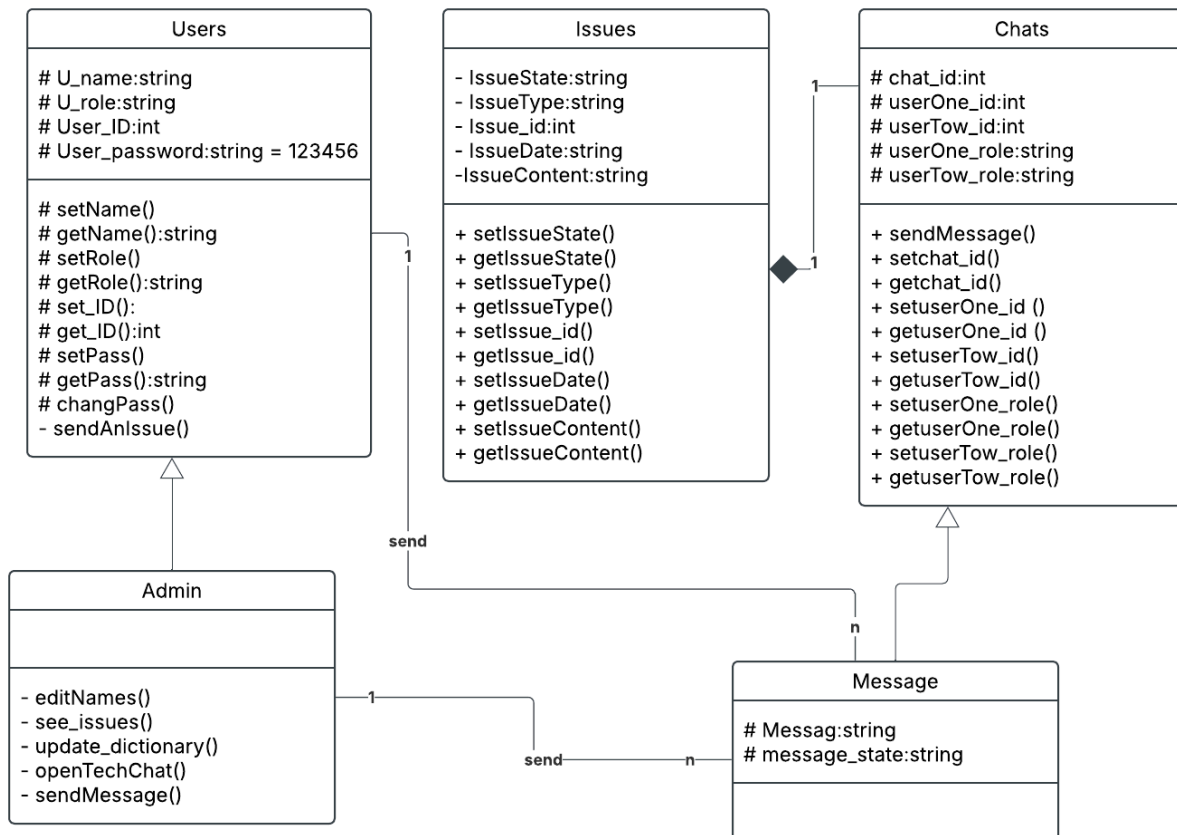
Deliverable: A complete ERD showing the relationships between entities in the assigned subsystem.



3 Task 3: Design a Class Diagram (30 minutes)

- Identify key classes, their attributes, and methods for the subsystem.
 - Example: For "Security and Role Management," classes may include User, Role, and Permission.
- Define relationships such as inheritance, aggregation, and composition.
- Include visibility markers (public, private, protected) for attributes and methods.

Deliverable: A **Class Diagram** detailing the structure of the subsystem.





4 Task 4: Create a Sequence Diagram (30 minutes)

1. Select one core functionality of the subsystem.
 - Example: For "Courtroom Scheduling," the functionality could be "Assign Judge to a Hearing."
2. Illustrate the interaction between objects/actors over time.
 - Include lifelines, messages, and activation boxes.

Deliverable: A **Sequence Diagram** showing the flow of actions for the selected functionality.

