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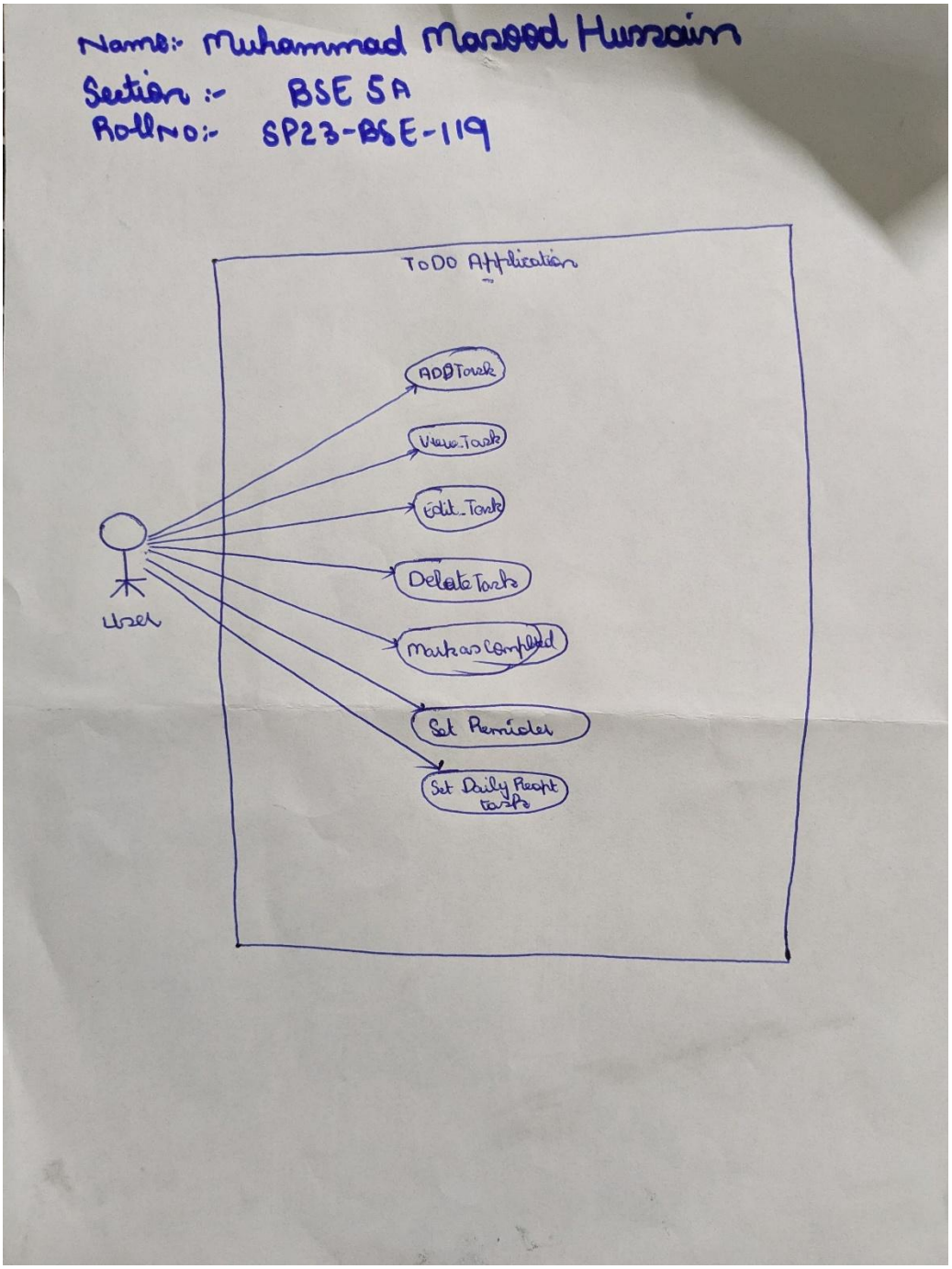
# Contents

# MID LAB

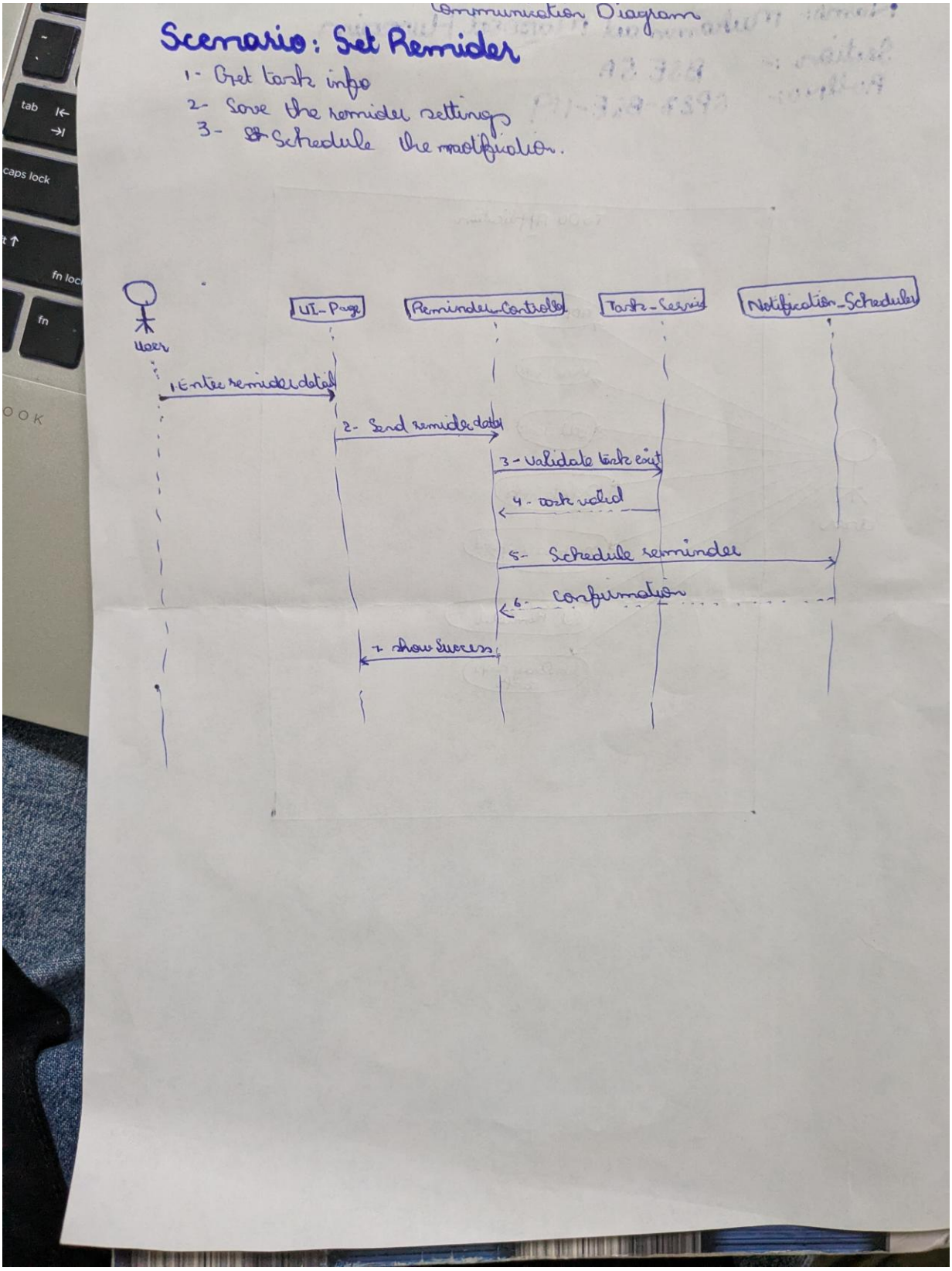
## CASE STUDY:

TODO Application A very simple mobile app that lets you add action items for the day along with schedule and reminder options (ringing, notification, SMS or email). You can also add daily repeating action items one time, and it remains for infinite days. for example, Prayers, Zikr etc.

USECASE DIAGRAM:



## Communication diagram



## Name of principles/pattern

### MVC (Model-View-Controller) Pattern

- Separates the application into **Model (data/services)**, **View (UI)**, and **Controller (logic/flow)**.
- Makes the app more **modular, testable, and maintainable**.

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### SOLID Principles

- Especially:
    - **Single Responsibility Principle**: Each class/component should handle only one responsibility (e.g., task manager, reminder scheduler).
    - **Open/Closed Principle**: Easy to extend the app (e.g., add new reminder types) without modifying existing code.
    - **Dependency Inversion Principle**: Allows better decoupling using interfaces between modules like UI and backend.

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### DRY Principle (Don't Repeat Yourself)

- Ensures reusable logic for tasks, reminders, and notifications, reducing redundancy in code.