CSI1007 - Software Engineering Principles Laboratory

Lab Assessment – 3

22MIC0009

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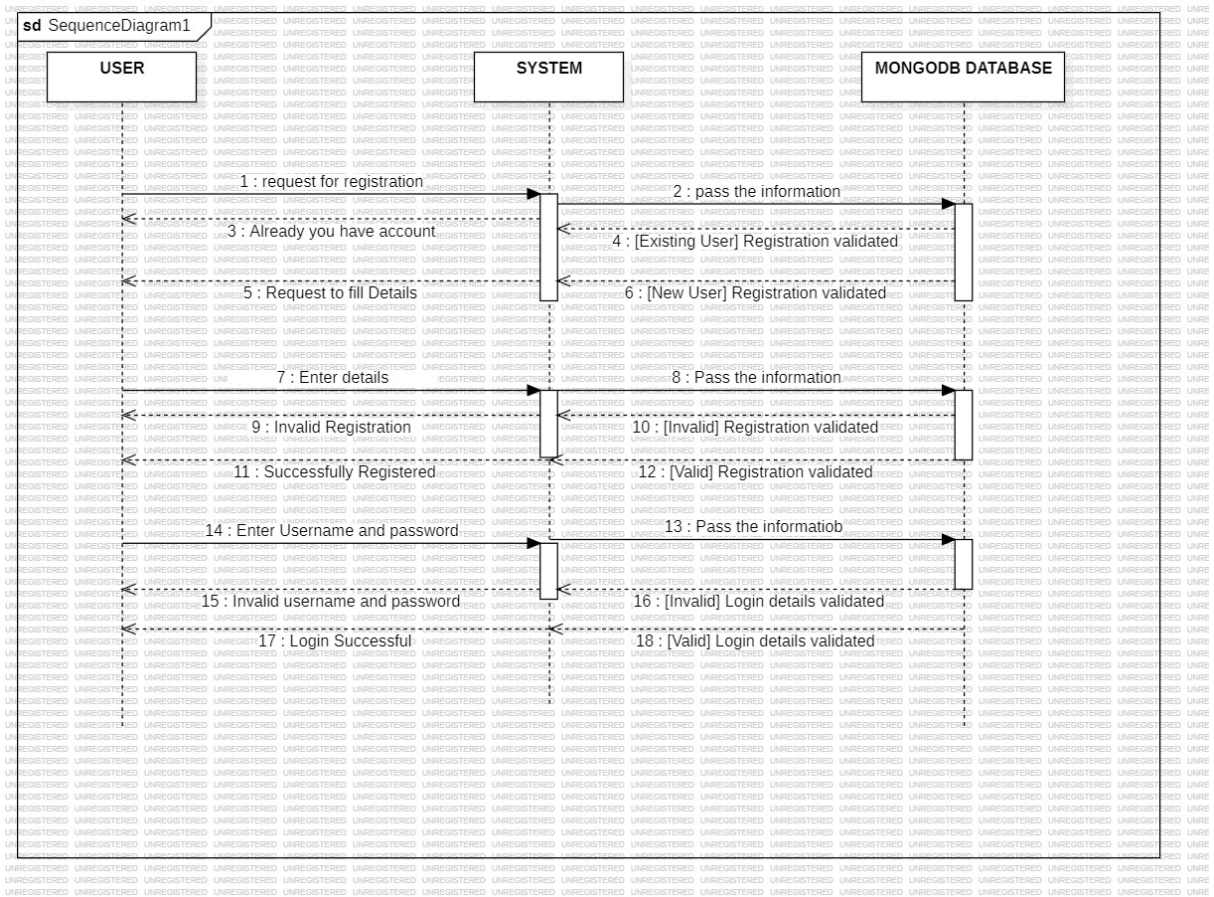
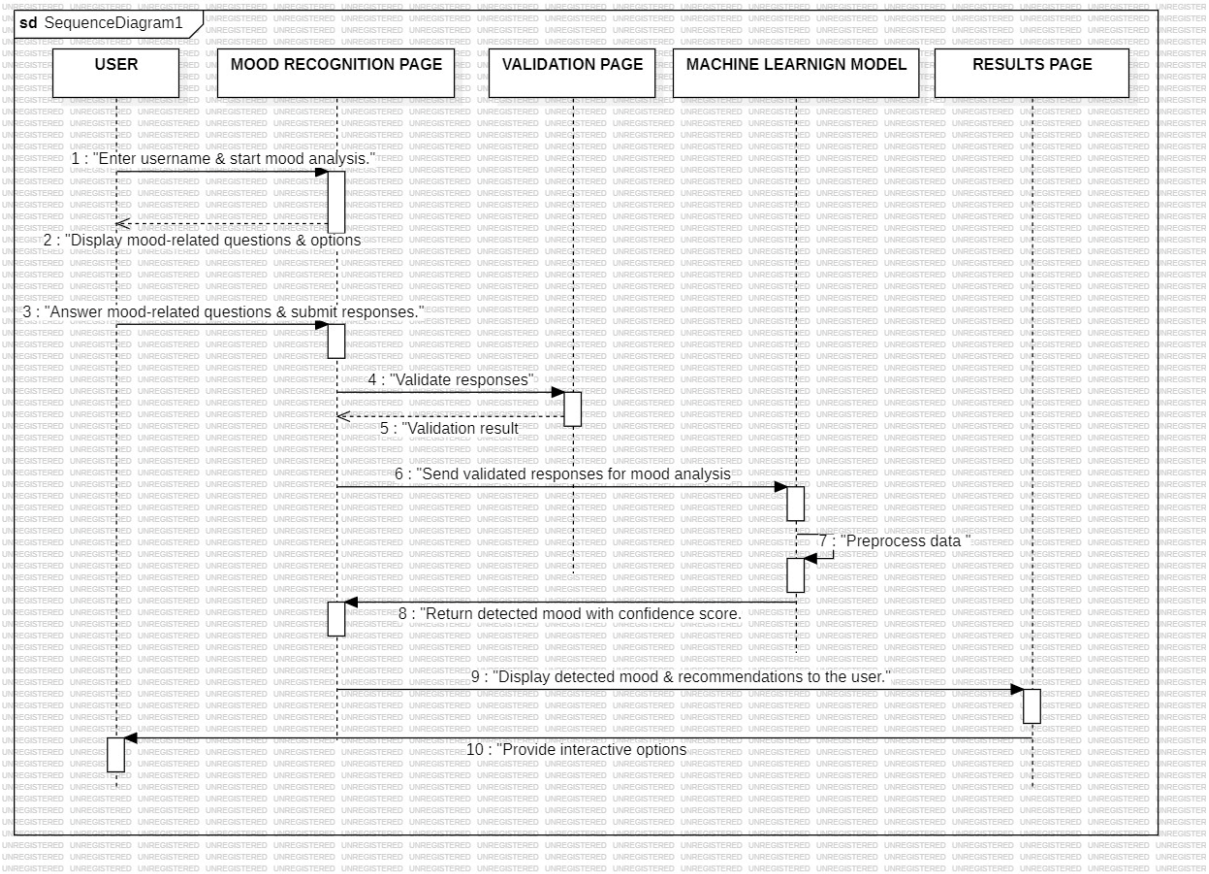
1) Draw sequence diagrams to visualize the interactions within your project for 2 scenarios.

Login Process Sequence Diagram



ML-Based Mood Recognition Sequence Diagram



2. Create comprehensive test cases for 2 key scenarios in your project

Test Case 1: Memory Upload Functionality

Test Case ID: TC001
Test Scenario: Verify that a user can upload and view a memory successfully.
Test Case Description: Ensure that users can upload an image, text, or task to the memory section and view it correctly.

Test Steps:

1. Open the **Memoir Dashboard**.
2. Click on the **"Add Memory"** button.
3. Upload an image (memory.jpg).

4. Enter text ("Birthday celebration at the park").
5. Click the **"Save"** button.
6. Navigate to the selected date on the calendar.
7. Verify if the uploaded memory appears correctly.

Test Data:

- **Image:** memory.jpg
- **Text:** "Birthday celebration at the park"

Test Expected Result:

- The uploaded memory (image and text) should be visible on the selected date in the calendar.

Actual Result:

- Memory was successfully uploaded and displayed on the calendar.

Test Case 2: Memory Sharing Feature

Test Case ID: TC002
Test Scenario: Verify that a user can share a memory with another user.
Test Case Description: Ensure that shared memories can be accessed by users with the correct link.

Test Steps:

1. Open the **Memoir Dashboard**.
2. Click on an existing memory.
3. Click **"Share Memory"** and copy the generated link.
4. Open the shared link in a new browser/tab.
5. Verify that the memory is accessible.
6. Try accessing the memory with an incorrect or expired link.

Test Expected Result:

- Users with the correct link should be able to view the shared memory.
- Users with an incorrect or expired link should receive an error message.

Actual Result:

- The memory was accessible using the correct link.
- An incorrect or expired link displayed an error message: **"Memory not found or expired"**.

Pass/Fail: Pass

Test Case 3: Mood Recognition Functionality

Test Case ID: TC003
Test Scenario: Verify that the ML-based mood recognition feature accurately detects a user's mood based on input responses.
Test Case Description: Ensure that the system correctly analyzes user responses to psychological questions and displays the appropriate mood.

Test Steps:

1. Open the **Mood Recognition Page**.
2. Answer a set of psychological questions.
3. Click the **"Analyze Mood"** button.
4. Verify that the detected mood is displayed correctly.
5. Compare the detected mood with the expected outcome based on the responses.

Test Data:

Case 1 (Happy Mood):

- Responses: Positive emotions, high energy, optimistic answers.
- Expected Mood: **"Happy"**

Case 2 (Sad Mood):

- Responses: Negative emotions, low energy, pessimistic answers.
- Expected Mood: **"Sad"**

Case 3 (Stressed Mood):

- Responses: Anxiety-related responses, work pressure, overwhelming feelings.
- Expected Mood: **"Stressed"**

Test Expected Result:

- The system should correctly recognize the mood based on the input responses and display a corresponding message such as **"You seem happy today!"** or **"You may be feeling stressed, here are some relaxation tips."**

Actual Result:

- The system correctly detected **Happy, Sad, and Stressed** moods based on the responses.

Pass/Fail: Pass