

# Deliverable #3 Template

SE 3A04: Software Design II – Large System Design

**Tutorial Number:** T03

**Group Number:** G07

**Group Members:**

- Farid Bastoros
- Neha Bhatla
- Omar Alam
- Luka Mahrt-Smith
- Aidan Lao

## IMPORTANT NOTES

- You do NOT need to provide a text explanation of each diagram; the diagram should speak for itself
- Please document any non-standard notations that you may have used
  - *Rule of Thumb*: if you feel there is any doubt surrounding the meaning of your notations, document them
- Some diagrams may be difficult to fit into one page
  - It is OK if the text is small but please ensure that it is readable when printed
  - If you need to break a diagram onto multiple pages, please adopt a system of doing so and thoroughly explain how it can be reconnected from one page to the next; if you are unsure about this, please ask me
- Please submit the latest version of Deliverable 1 and Deliverable 2 with Deliverable 3
  - They do not have to be a freshly printed versions; the latest marked versions are OK
- If you do NOT have a Division of Labour sheet, your deliverable will NOT be marked

# **1 Introduction**

## **1.1 Purpose**

This document outlines key aspects of the Mushroom Identification App’s architecture, featuring state chart diagrams, sequence diagrams, and a comprehensive class diagram. It is designed for internal stakeholders, such as project managers, developers, domain experts, and investors. Reviewing earlier deliverables is recommended, as having technical knowledge can aid in fully grasping the details presented.

## **1.2 System Description**

The mushroom identification app is a mobile application that uses image recognition and user input to help users identify different mushroom species. It provides information about each species, including whether they are edible or toxic, and allows users to contribute to a shared database. This document builds on Deliverable 2 by adding technical detail through state charts, sequence diagrams, and a class diagram that show the system’s internal structure.

## **1.3 Overview**

This document is organized by diagram type to clearly represent different aspects of the system. Section 2 contains state charts for key controller classes, Section 3 includes sequence diagrams for main use cases like mushroom identification and account registration, and Section 4 has a detailed UML class diagram showing class relationships and structure.

## 2 State Charts for Controller Classes

State chart diagrams are provided as SVG files and may be zoomed into to reveal more detail.

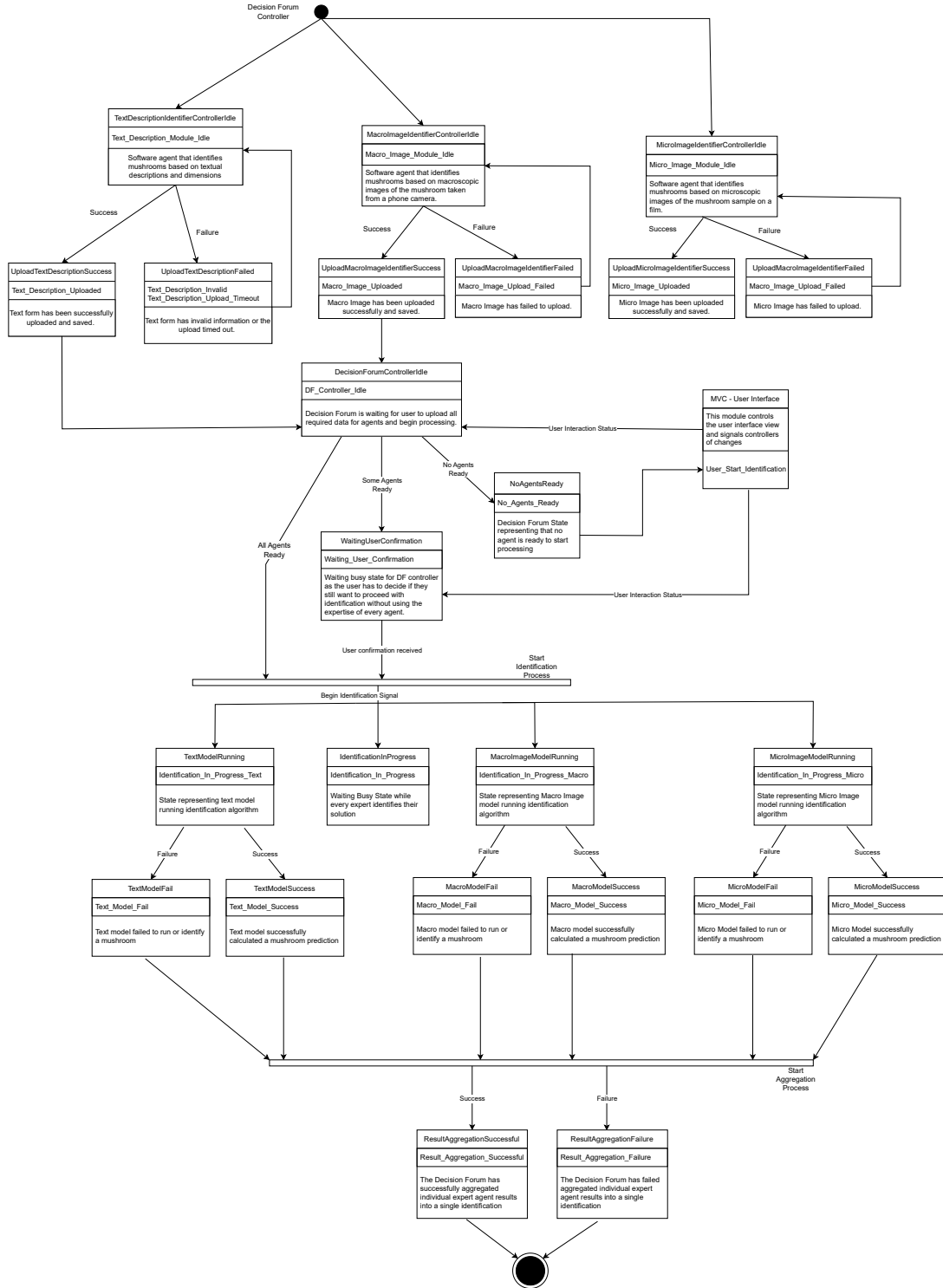


Figure 1: State Chart Diagram for the Decision Forum Controller

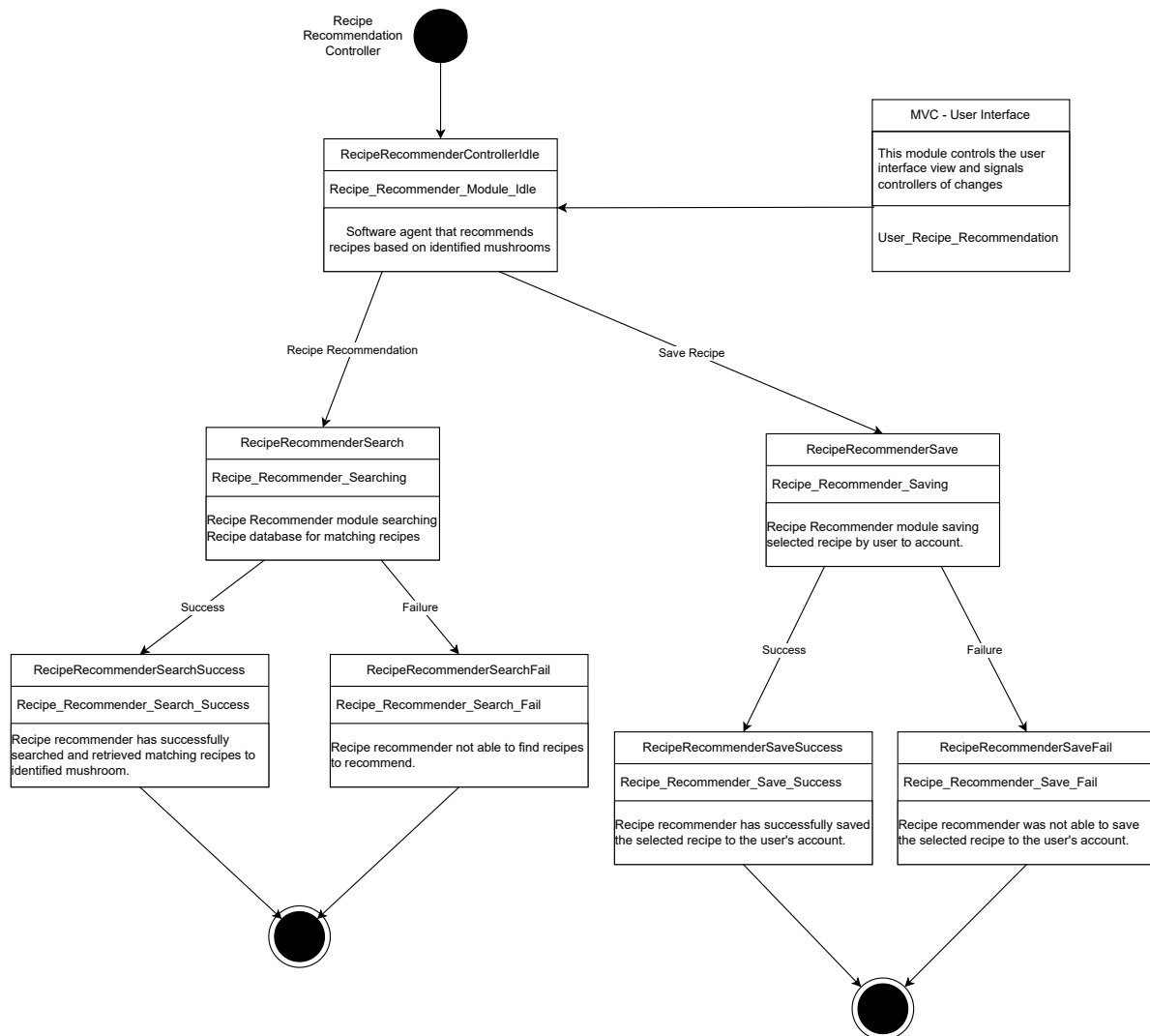


Figure 2: State Chart Diagram for the Recipe Recommendation Controller

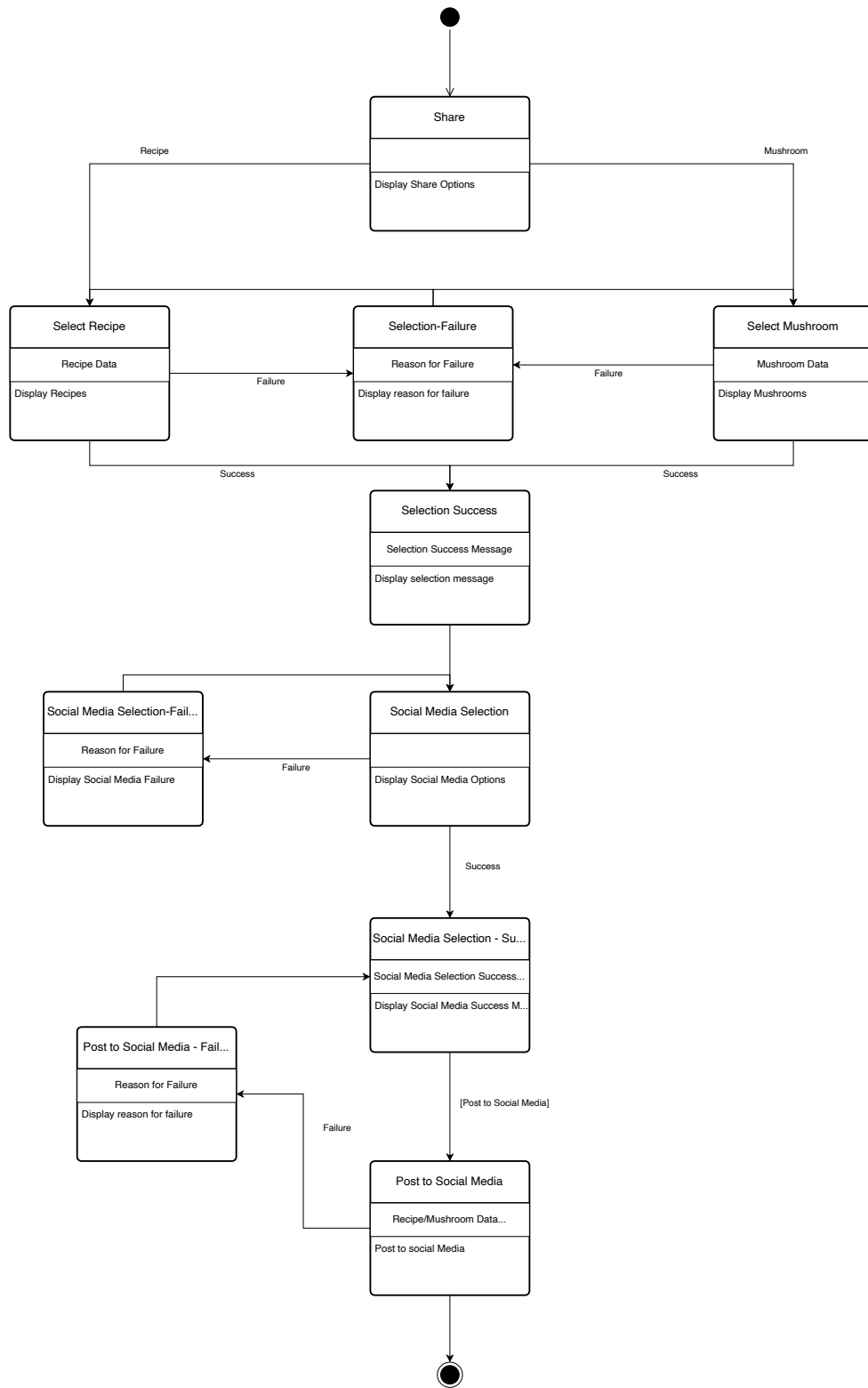


Figure 3: State Chart Diagram for the Social Media Manager Controller

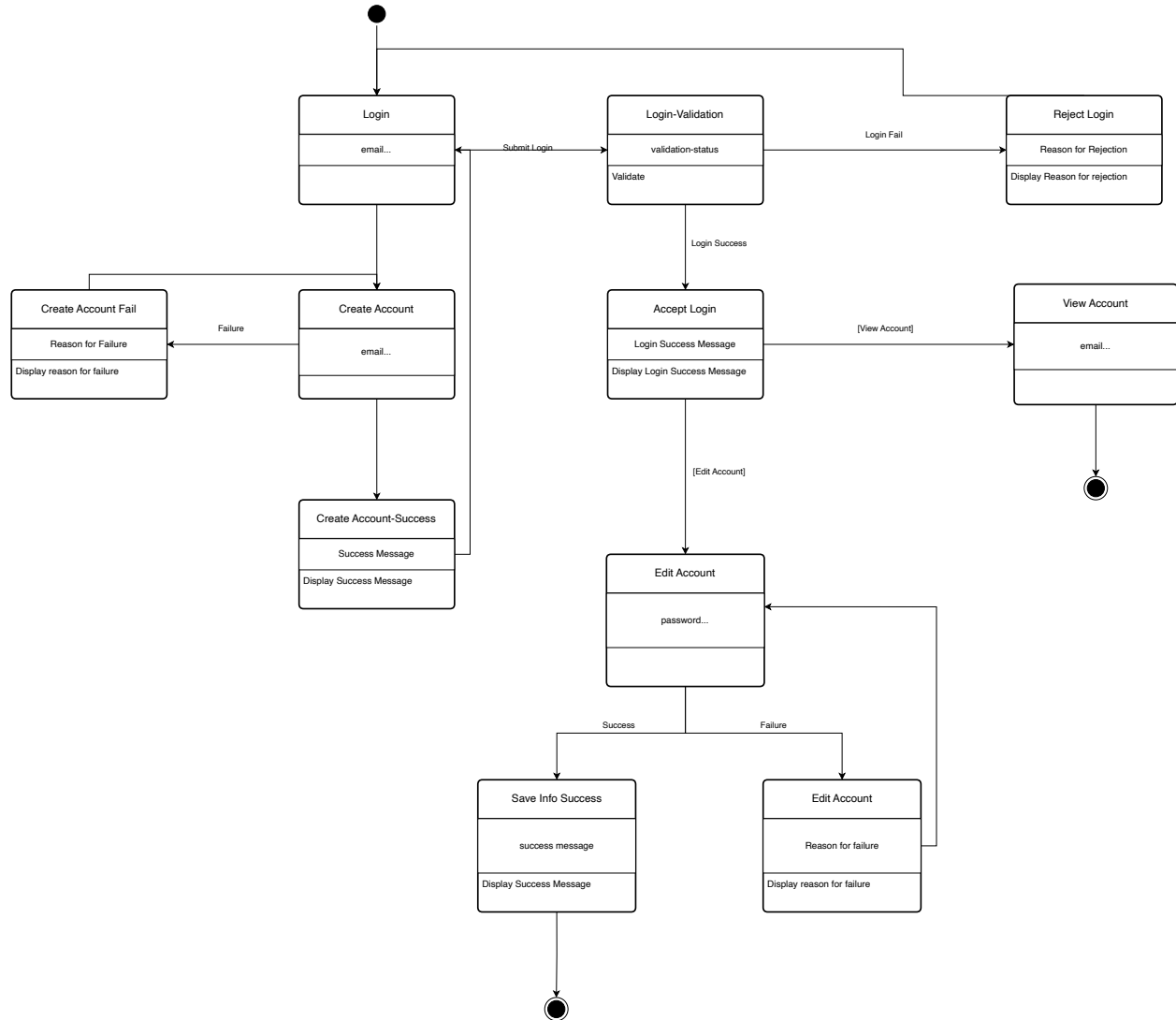


Figure 4: State Chart Diagram for the Account Manager Controller

### 3 Sequence Diagrams

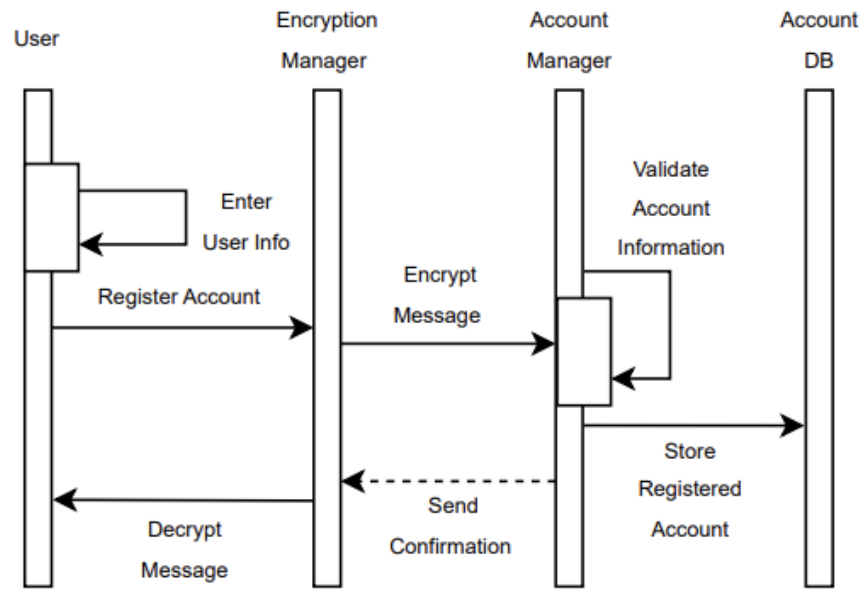


Figure 5: Register Account Sequence Diagram

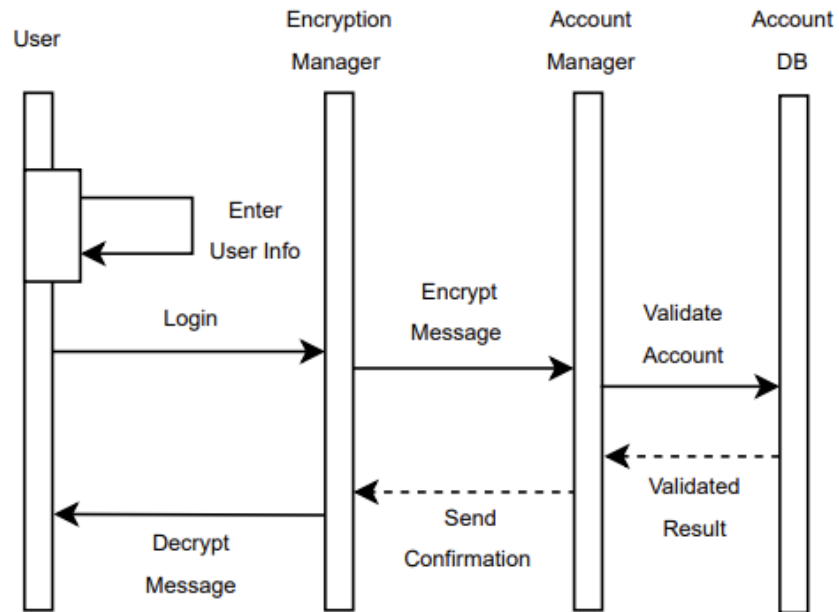


Figure 6: Login Sequence Diagram

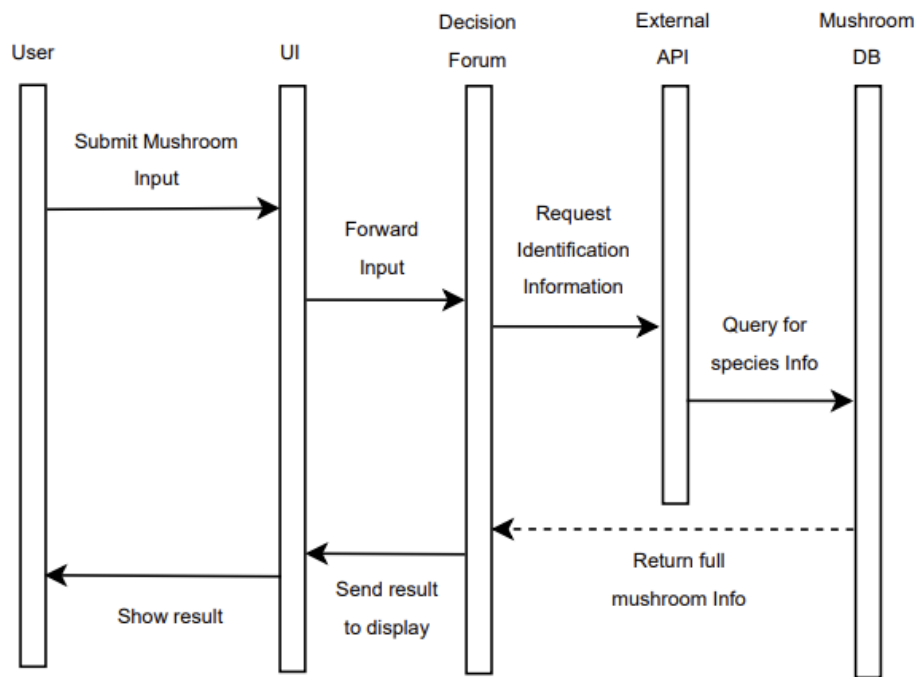


Figure 7: Identify Mushroom Sequence Diagram

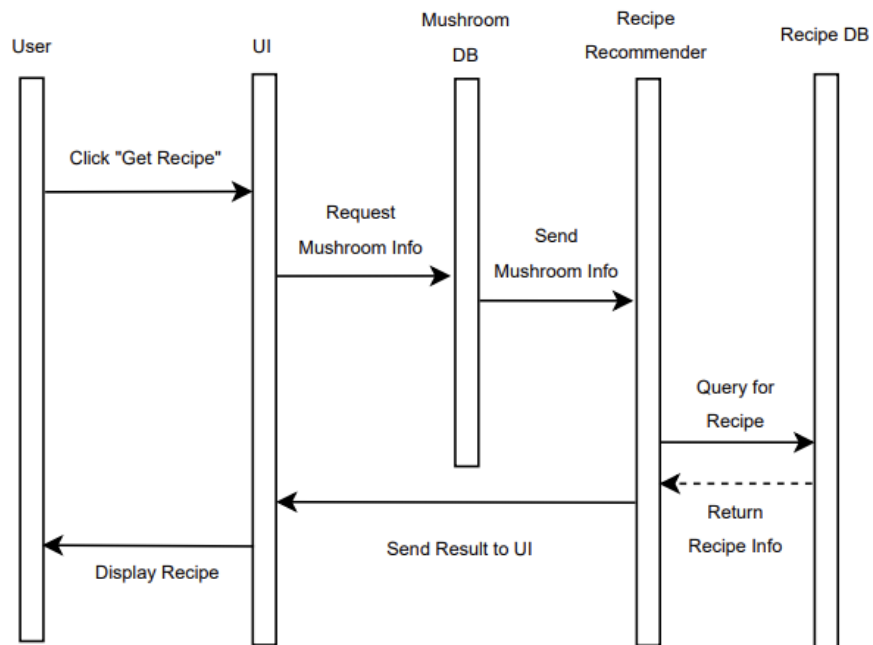


Figure 8: Get Recipe Sequence Diagram



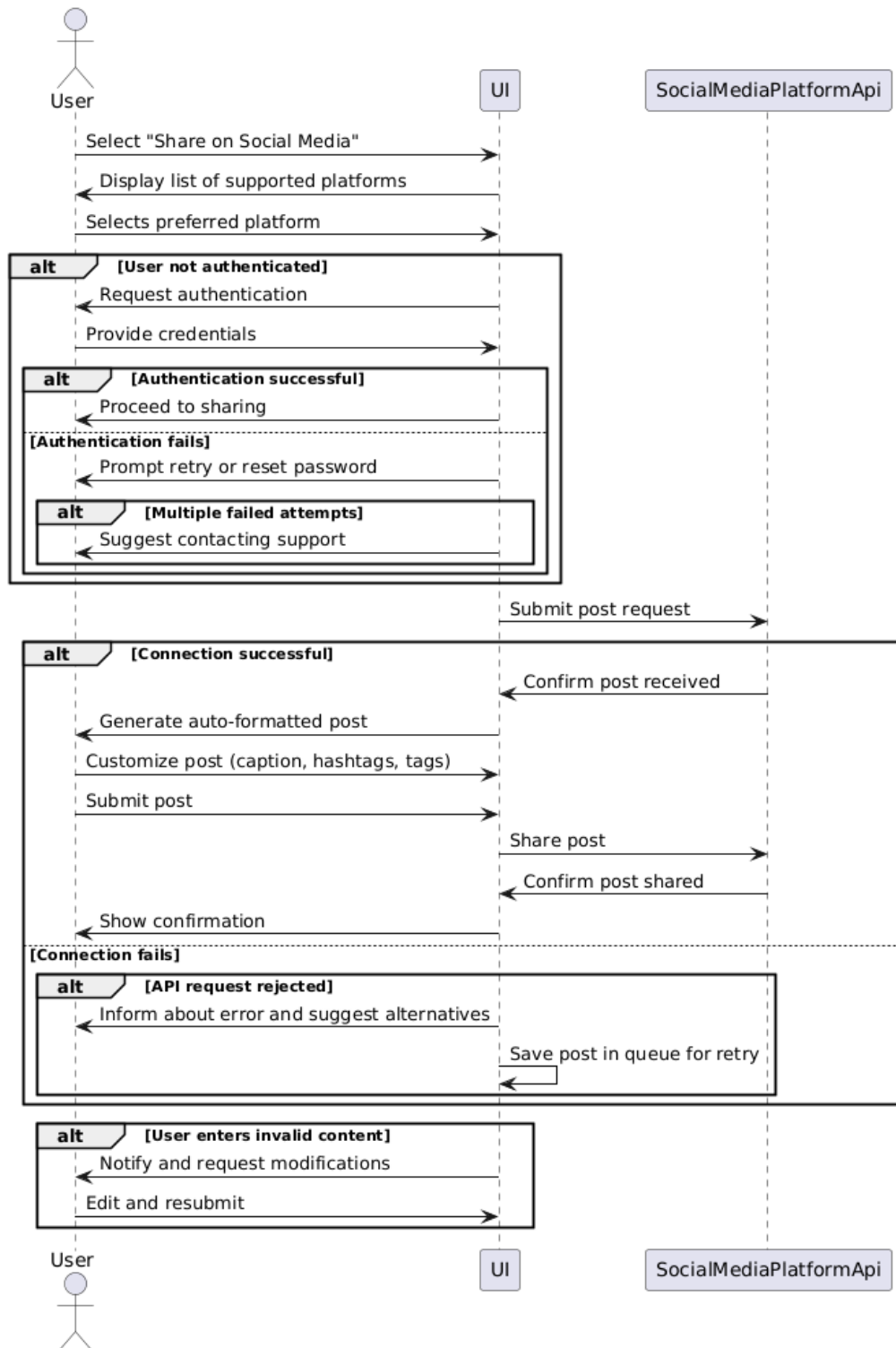


Figure 9: Share to Social Media Diagram

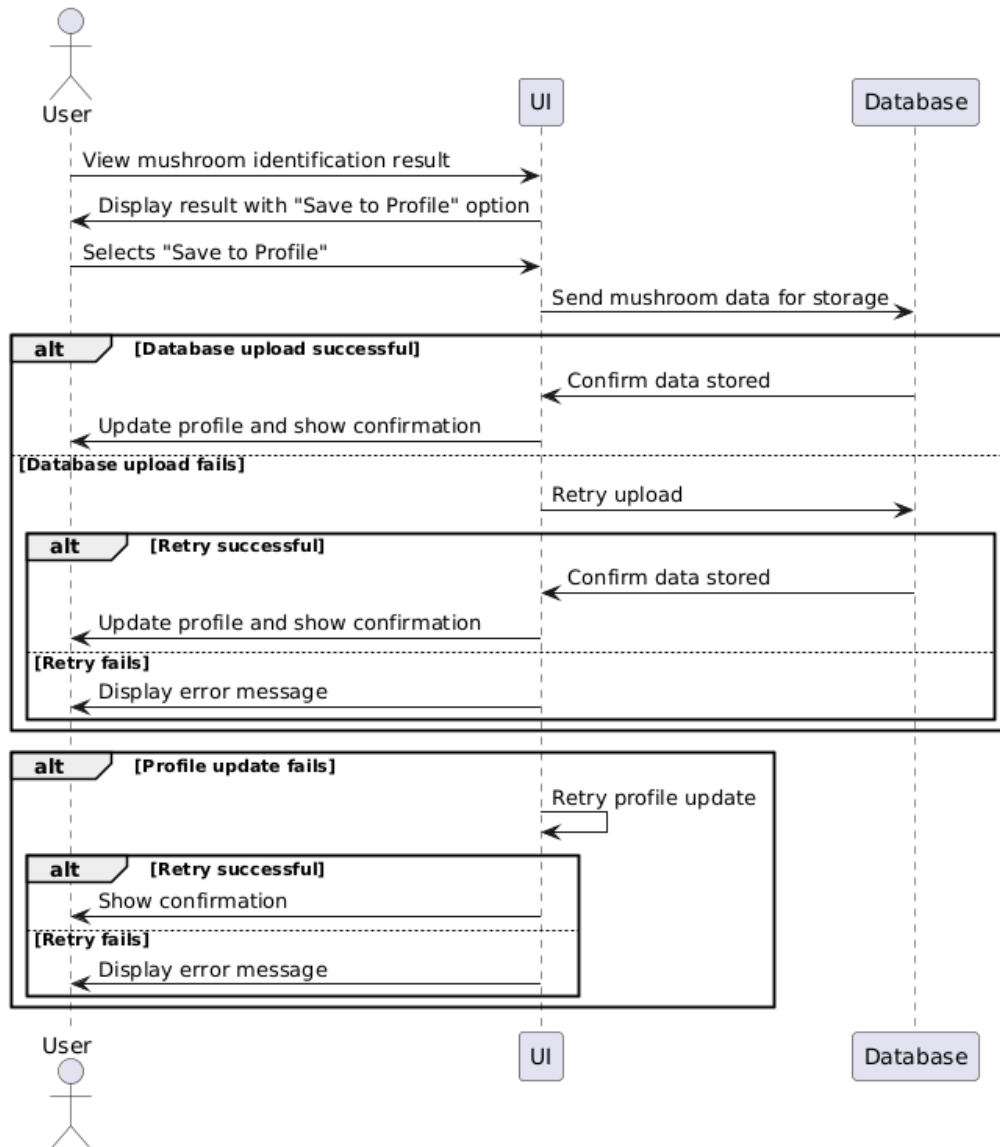


Figure 10: Save Mushroom to Account Diagram

## 4 Detailed Class Diagram

The diagrams is provided as SVG file and may be zoomed into to reveal more detail.

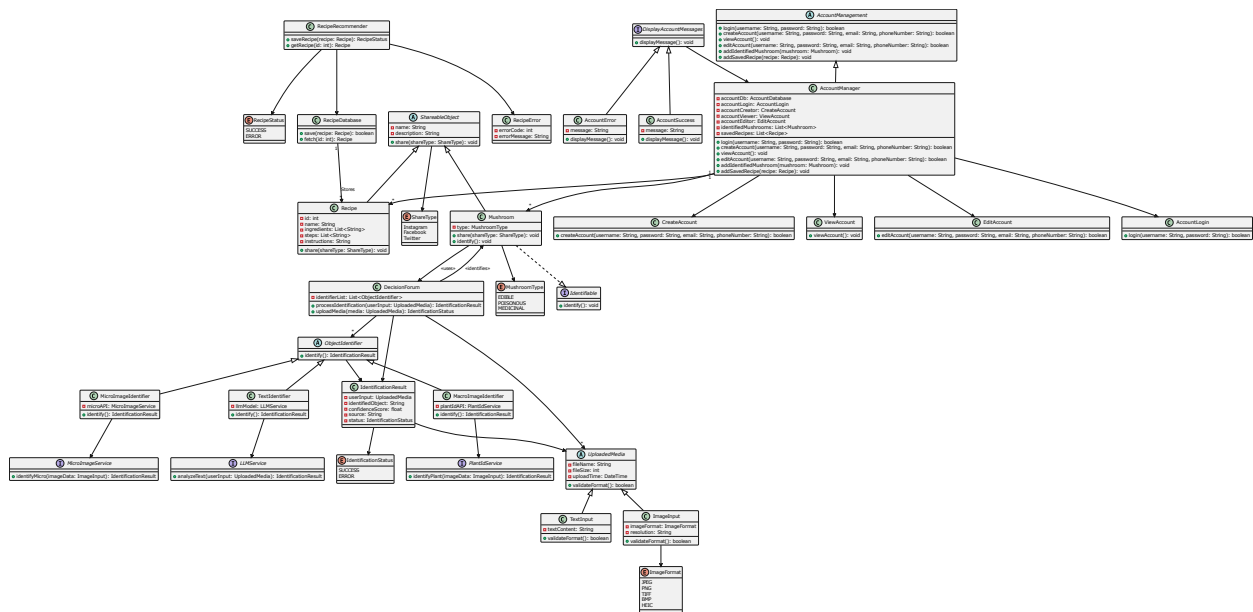


Figure 11: Detailed Class Diagram

## A Division of Labour

Include a Division of Labour sheet which indicates the contributions of each team member. This sheet must be signed by all team members.

- Farid Bastoros:

- Section 4 - Detailed Class Diagram



- Neha Bhatla:

–



- Omar Alam:

- State chart diagrams for the Decision Forum Controller and Recipe Recommendation Controller.
- Latex formatting and editing.



- Luka Mahrt-Smith:

–



- Aidan Lao:

–

