

**B.M.S. COLLEGE OF ENGINEERING
BENGALURU**

Autonomous Institute, Affiliated to VTU



Lab Record

Object Oriented Analysis and Design

Submitted in partial fulfillment for the 6th Semester
Laboratory Bachelor of Technology in
Computer Science and Engineering

Submitted by:

ROHITH Y V 1BM17CS080

Department of Computer Science and Engineering
B.M.S. College of Engineering
Bull Temple Road, Basavanagudi, Bangalore
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1.College Information System

1.1 Activity Diagram

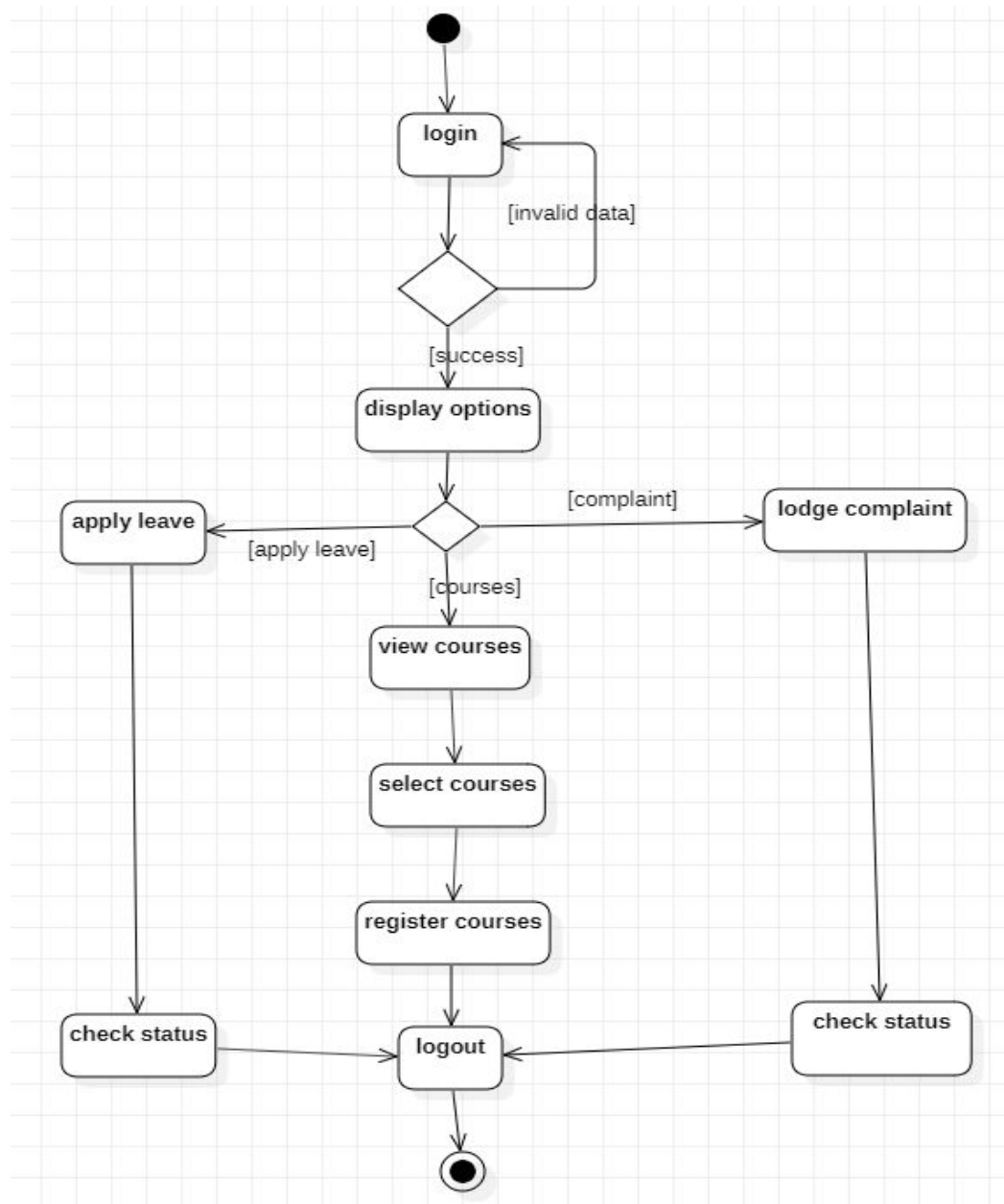


Figure 1.1 : Activity Model

This activity diagram shows the activities involved when the system handles different users and how they are managed. The user level and permissions are checked and accordingly, they are handled by the system

1.2 Advanced Activity Diagram

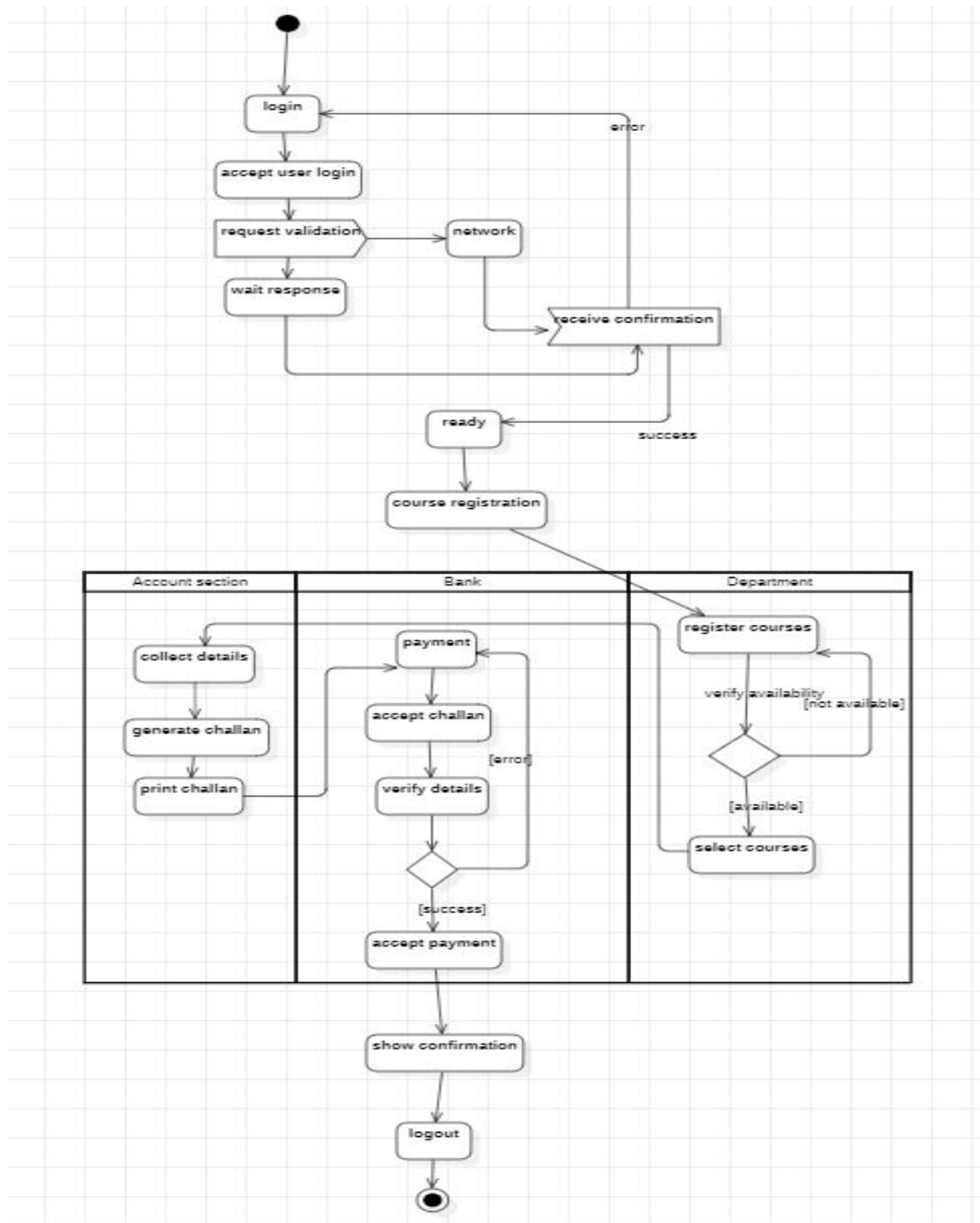


Figure 1.2 : Advanced activity model

The advanced activity diagram shows the states reached by the system when a student logs in and joins an online class. It is also shown how the attendance report is generated and managed by the system.

2. Hostel Management System

2.1 Activity Diagram

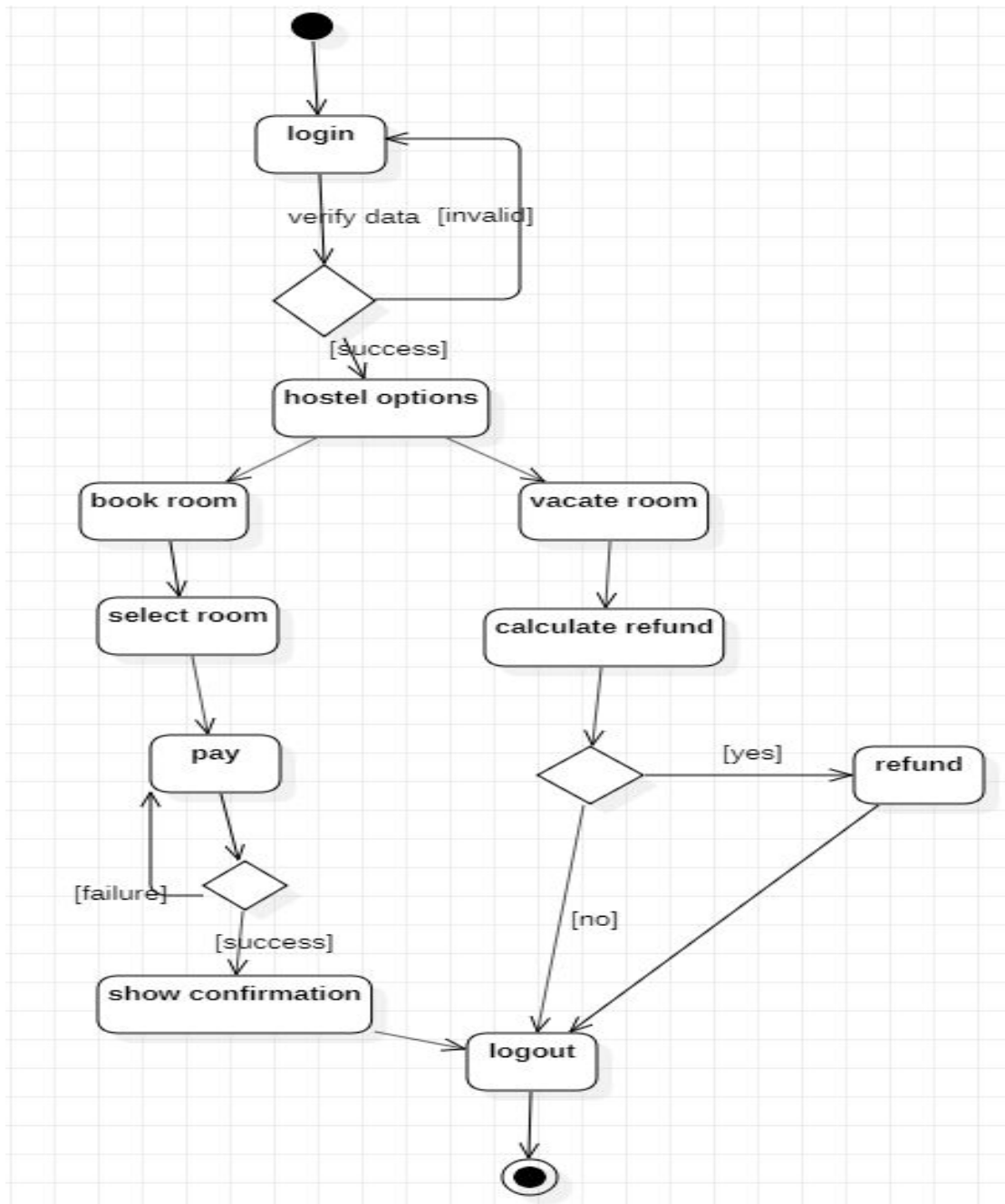


Figure 2.1 : Activity model

The activity diagram shows the activities involved in allocating rooms to students by the admin. The admin logs into the system and then allocates rooms to students.

2.2 Advanced Activity Diagram

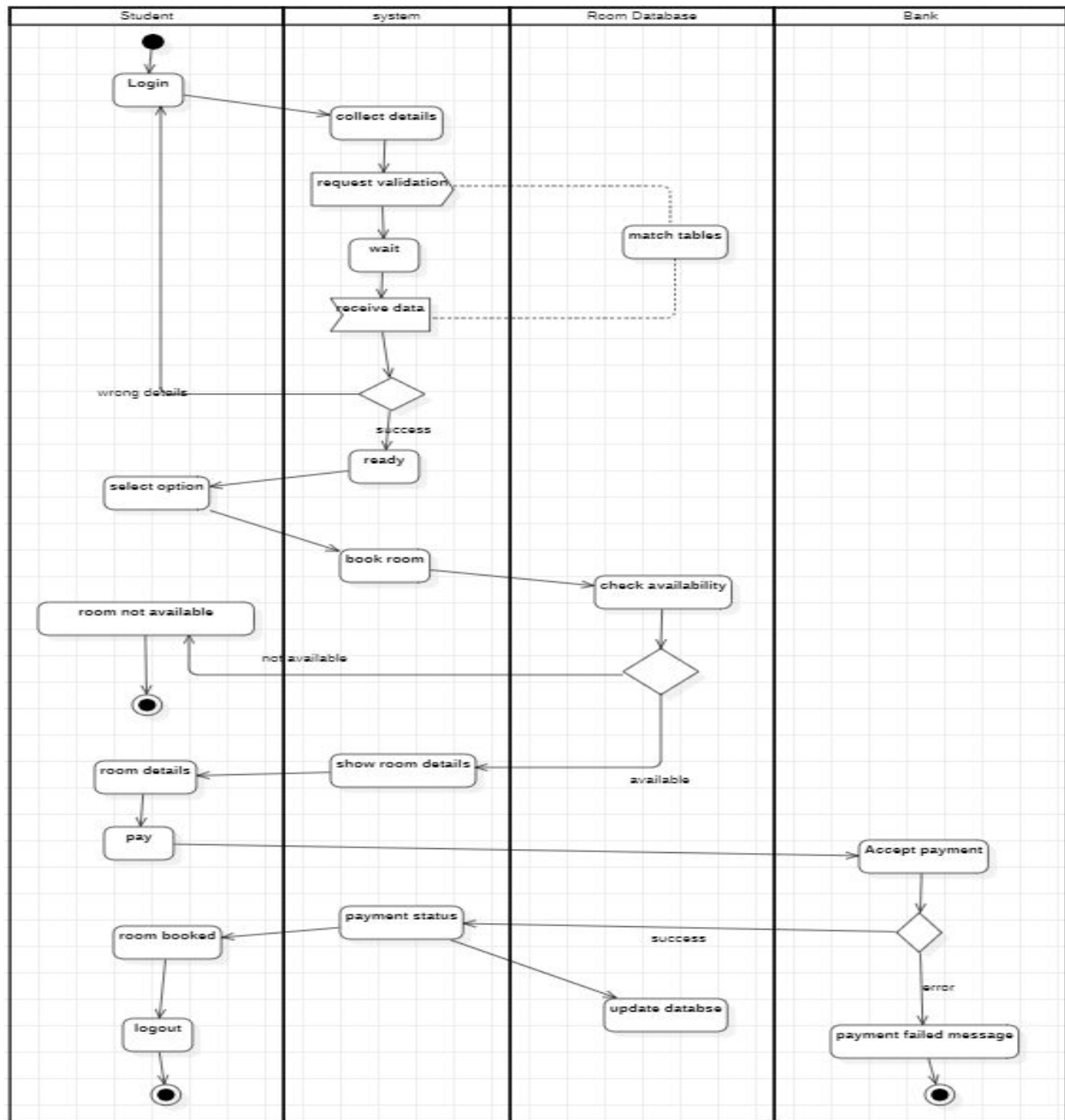


Figure 2.2 : Advanced Activity model

The advanced activity diagram is showing the process of room allocation as shown above. It includes additional functionalities like paying of fees by a student, verification of the payment by the system, and then allocating the room to the student. The student can also view the allocated room.

3. Stock Maintenance System

3.1 Activity Diagram

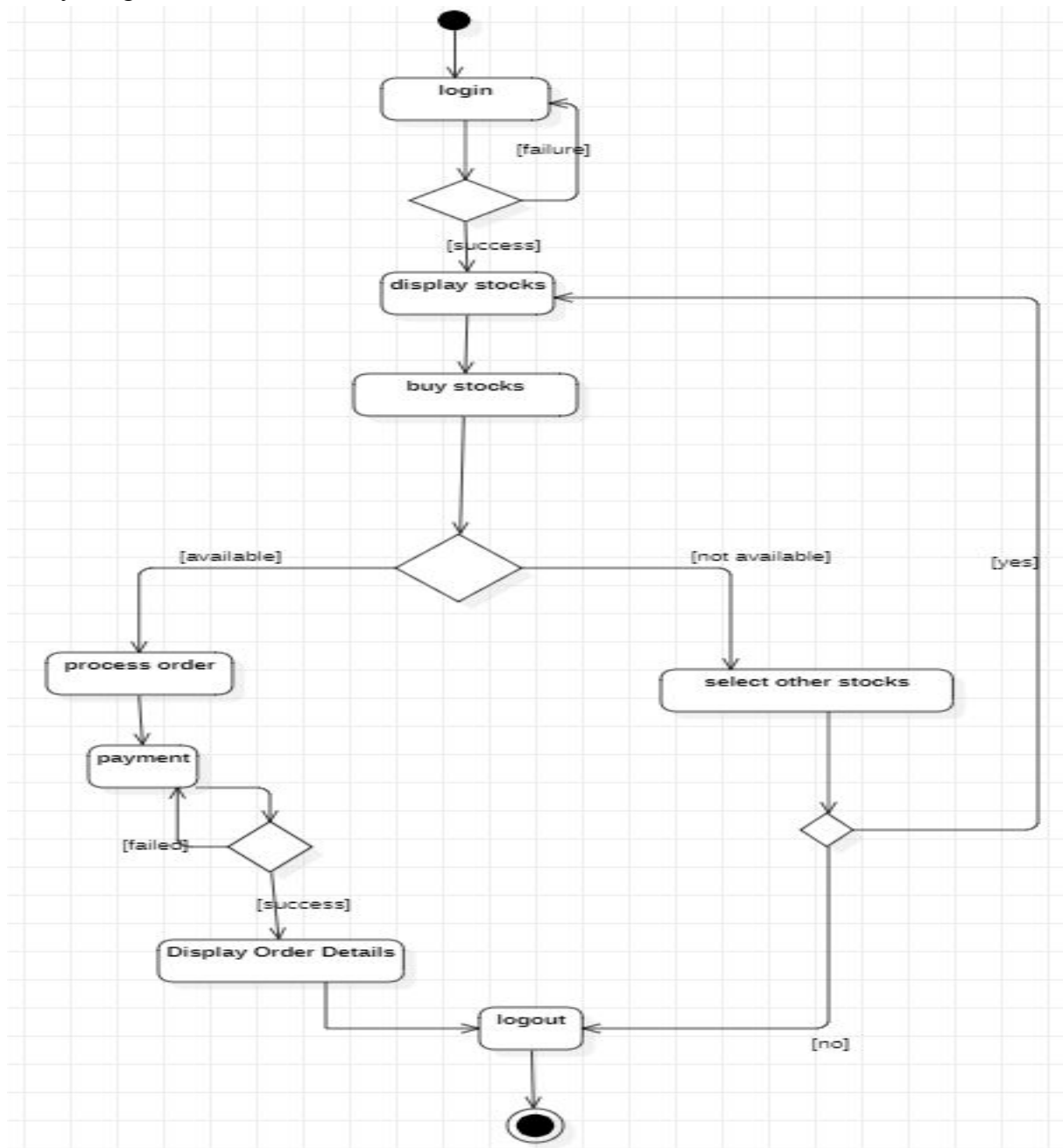


Figure 3.1 : Activity model

This activity diagram shows the activities involved in the system when an order is placed by the user. It also shows the different validity checks performed by the system to successfully place the order for the user.

3.2 Advanced Activity Diagram

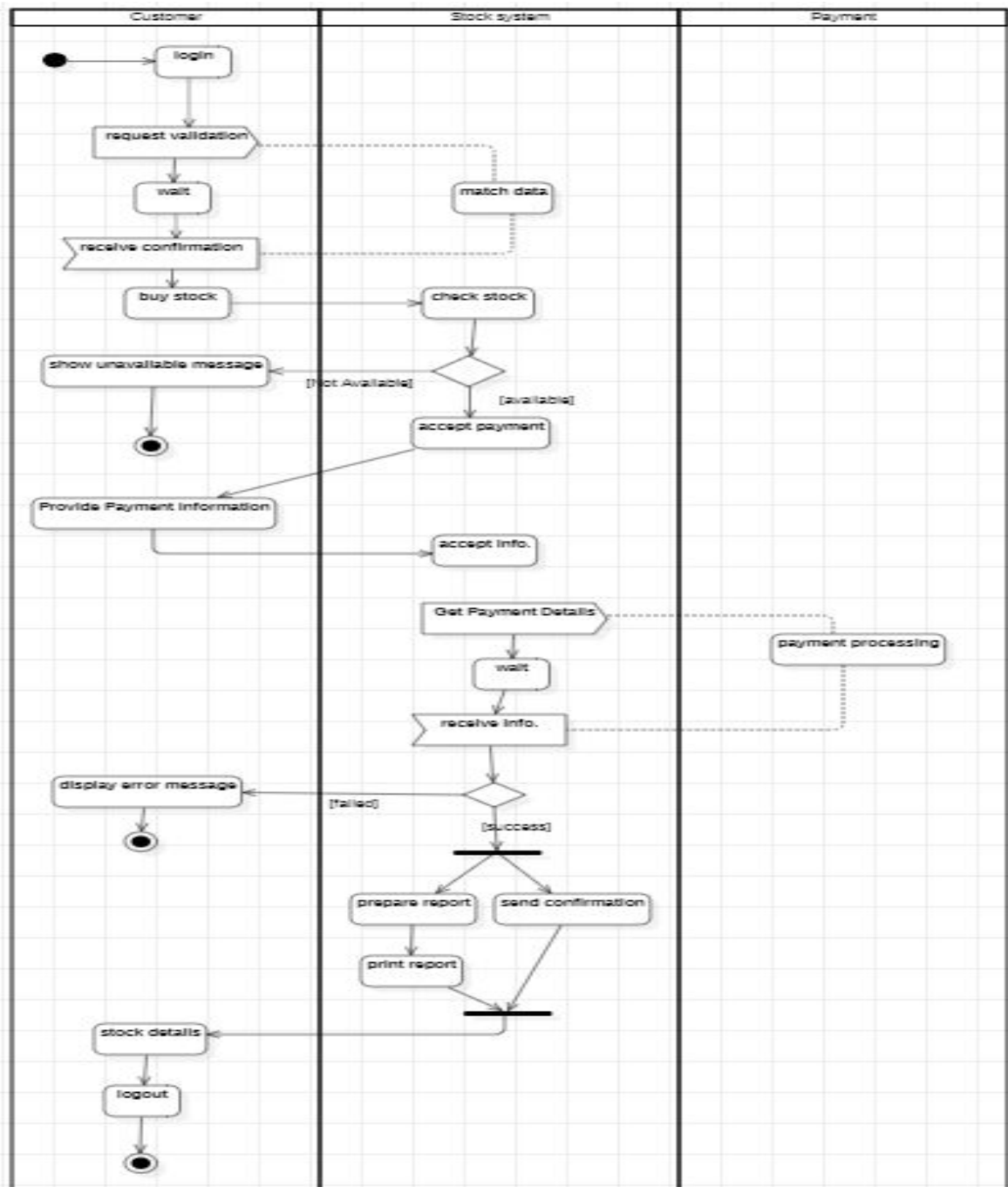


Figure 3.2 : Advanced Activity model

This activity diagram shows the process of restocking of an item once the item is out of stock. The manager of the stock checks the quantity and initiates the restocking process. If there is enough quantity the restocking process is cancelled.

4.Coffee Vending Machine

4.1 Activity Diagram

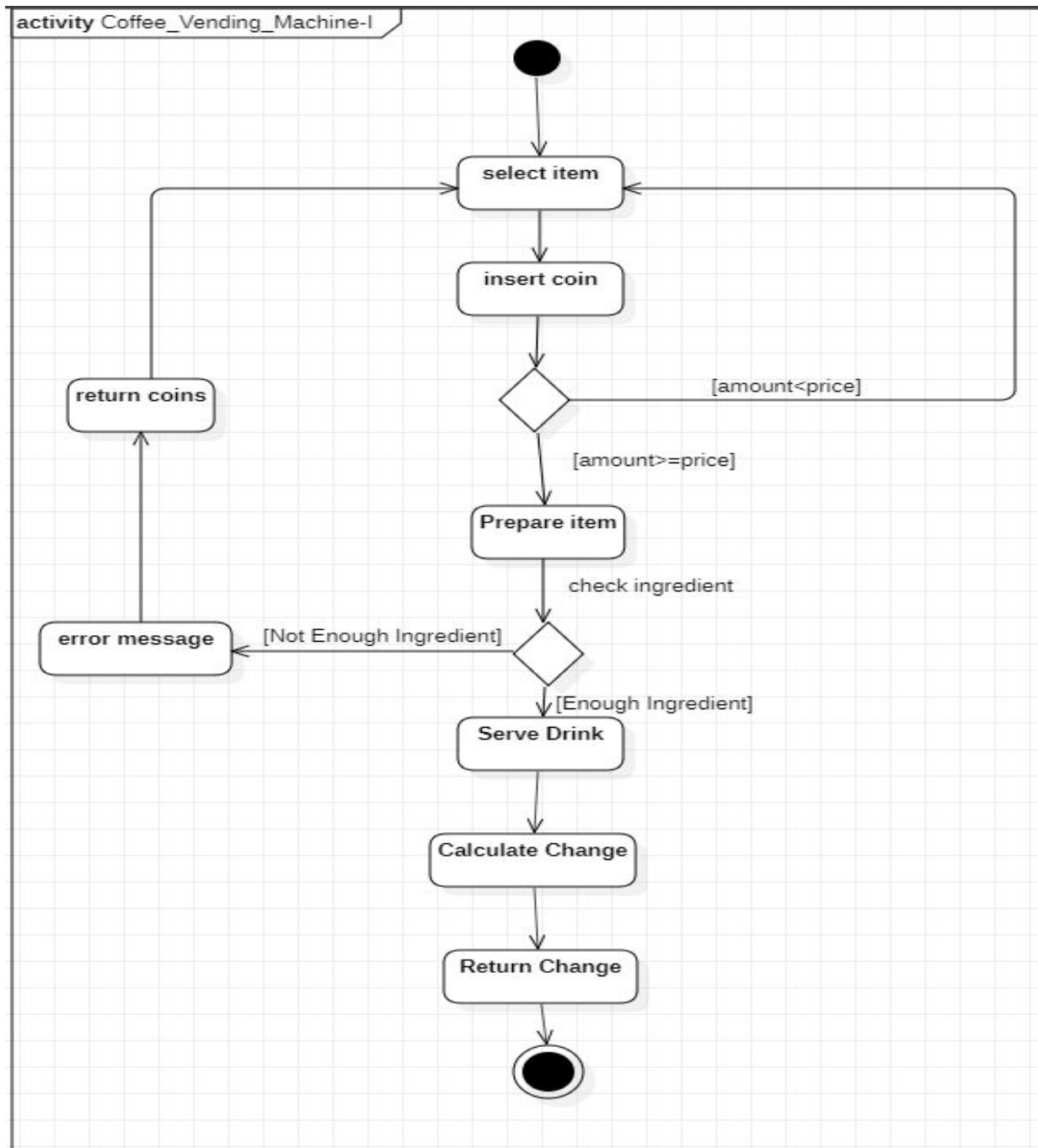


Figure 4.1 : Activity model

The activity diagram shows the various activities involved in selection of a coffee type, payment of the amount, dispensing the coffee and also the change (if any)

4.2 Advanced Activity Diagram

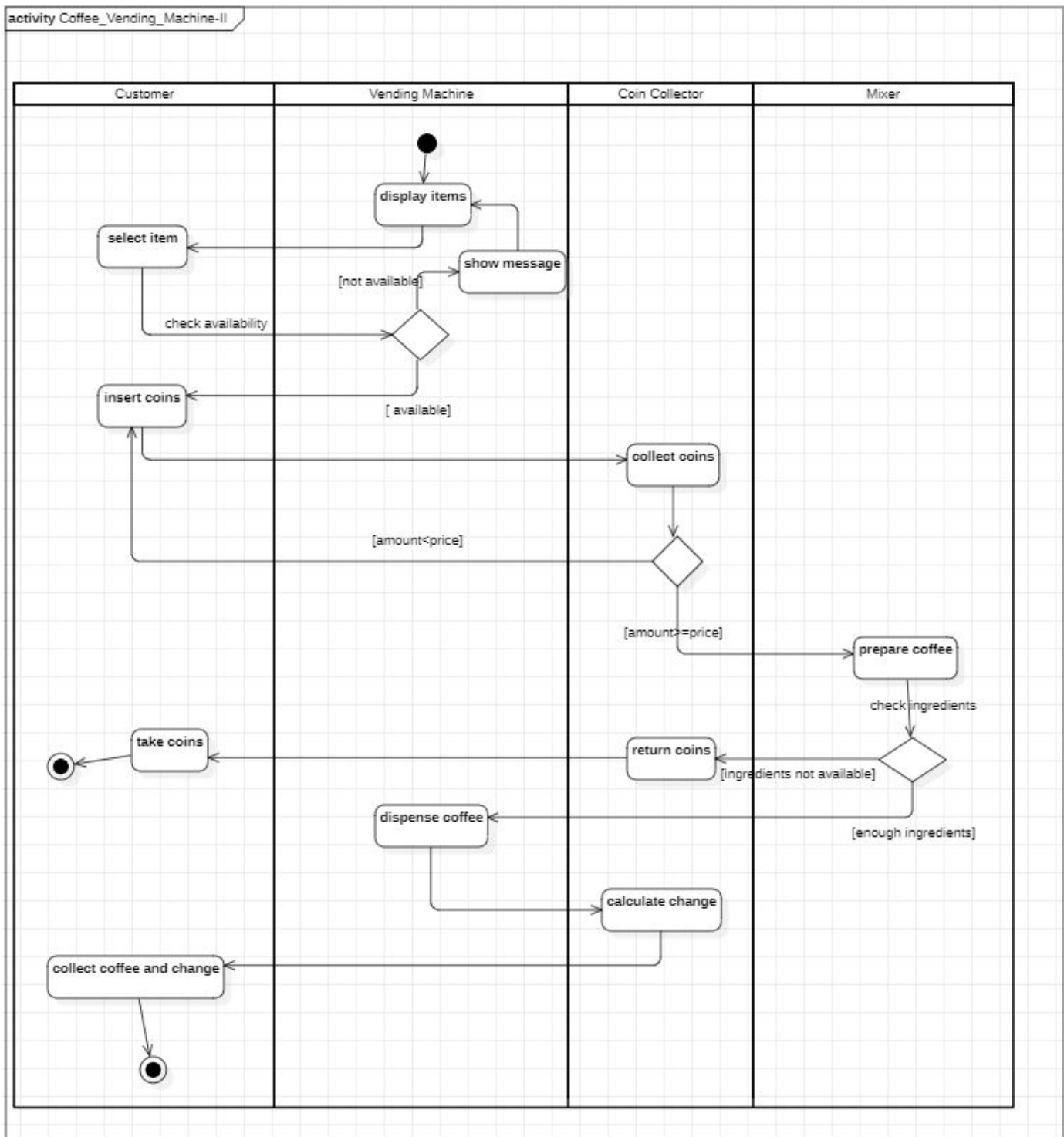


Figure 4.2 :Advanced Activity model

The activity diagram shows the process of dispensing coffee using swimlanes, which describe the object responsible for the particular activity.

5. Online Shopping System

5.1 Activity Diagram

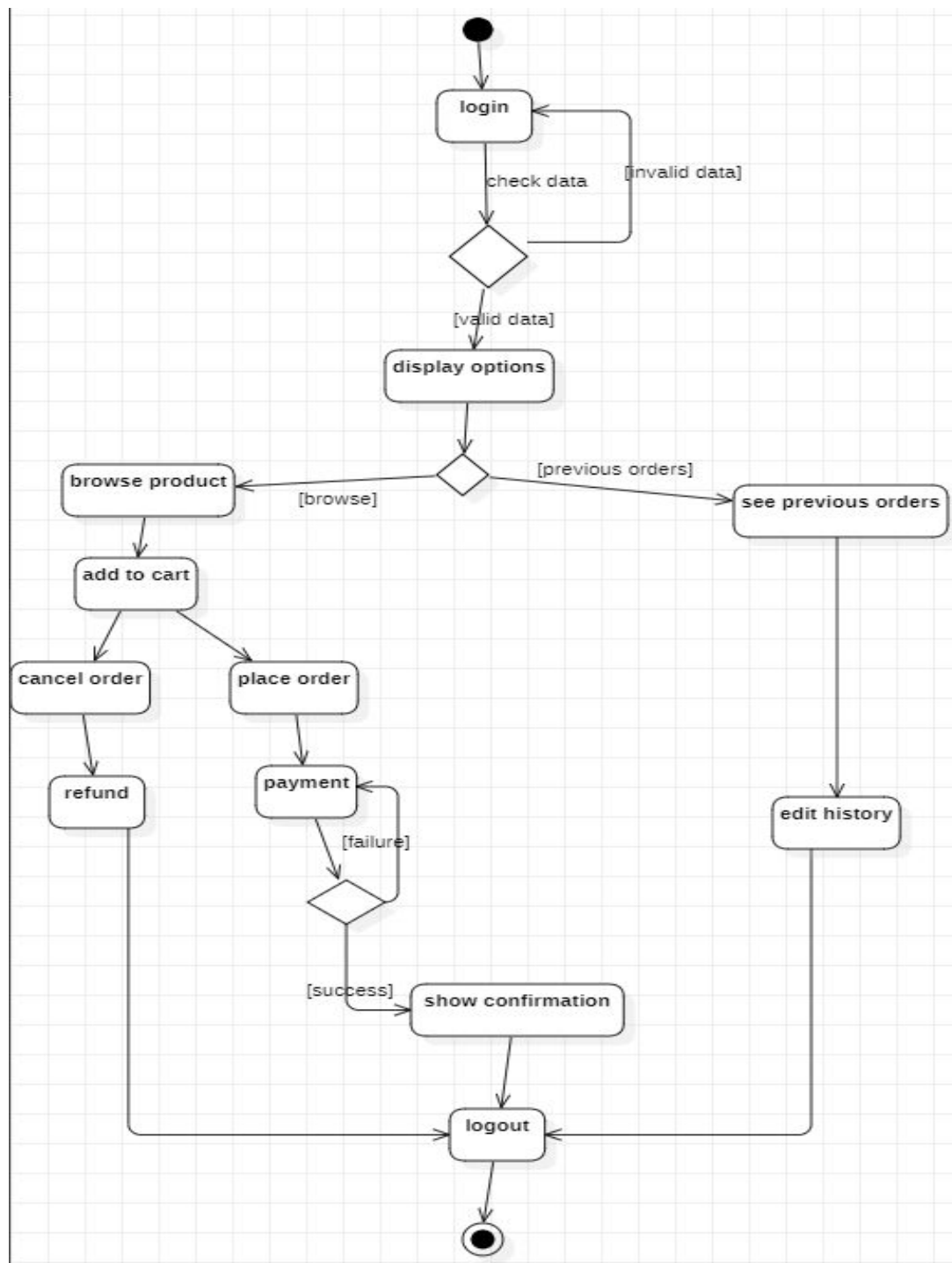


Figure 5.1 : Activity model

The activity diagram shows the various activities involved in searching for an item, selecting the item, adding it to the cart, and finally purchasing the item. On successful payment, an order is placed.

5.2 Advanced Activity Diagram

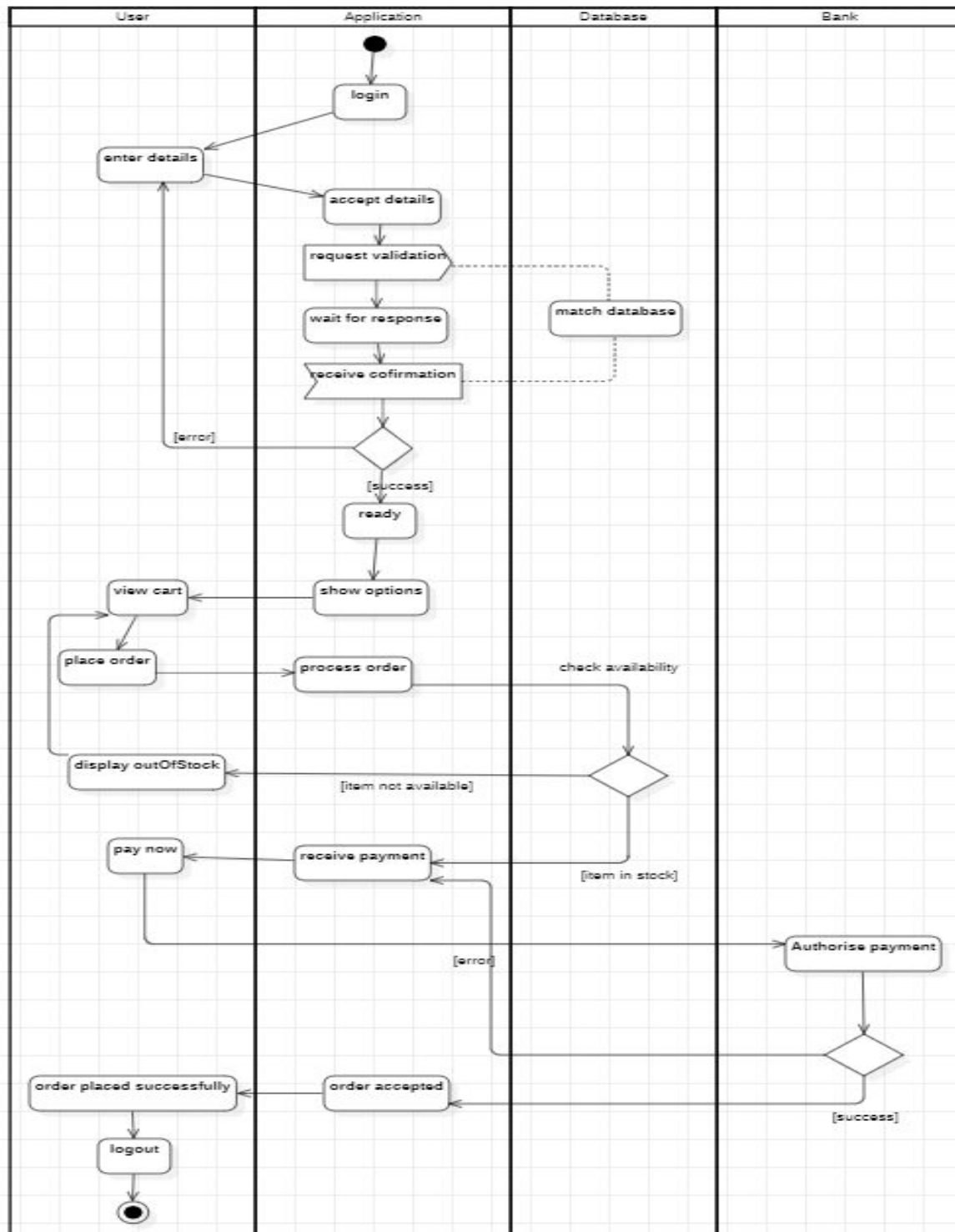


Figure 5.2 :Advanced Activity model

The activity diagram uses swimlanes to show the various activities involved in placing an order. The swimlanes show the activities for which each object is responsible.

6. Railway Reservation System

6.1 Activity Diagram

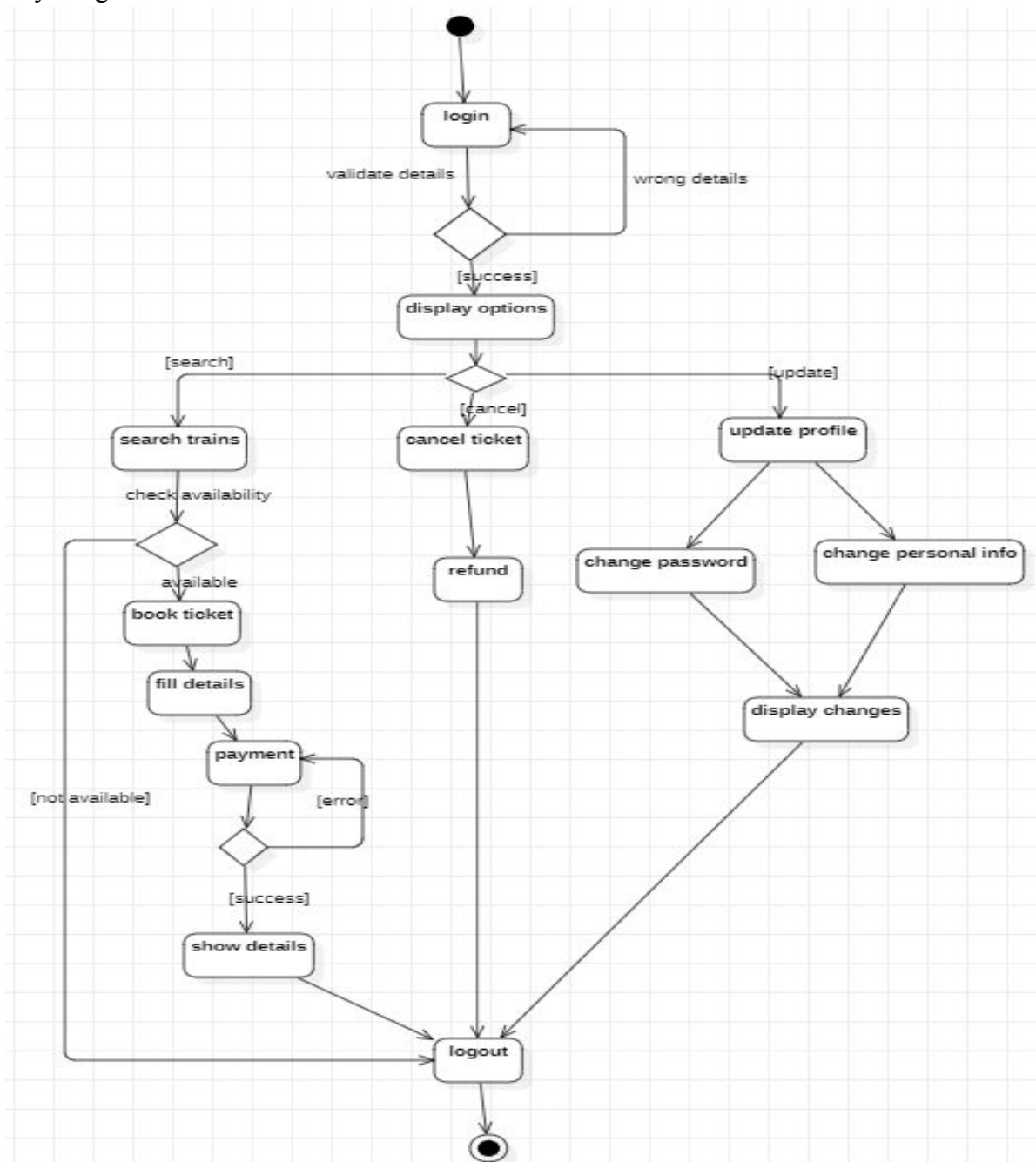


Figure 6.1 : Activity model

The activity diagram shows the various activities involved in reserving a ticket as well as cancelling a ticket.

6.2 Advanced Activity Diagram

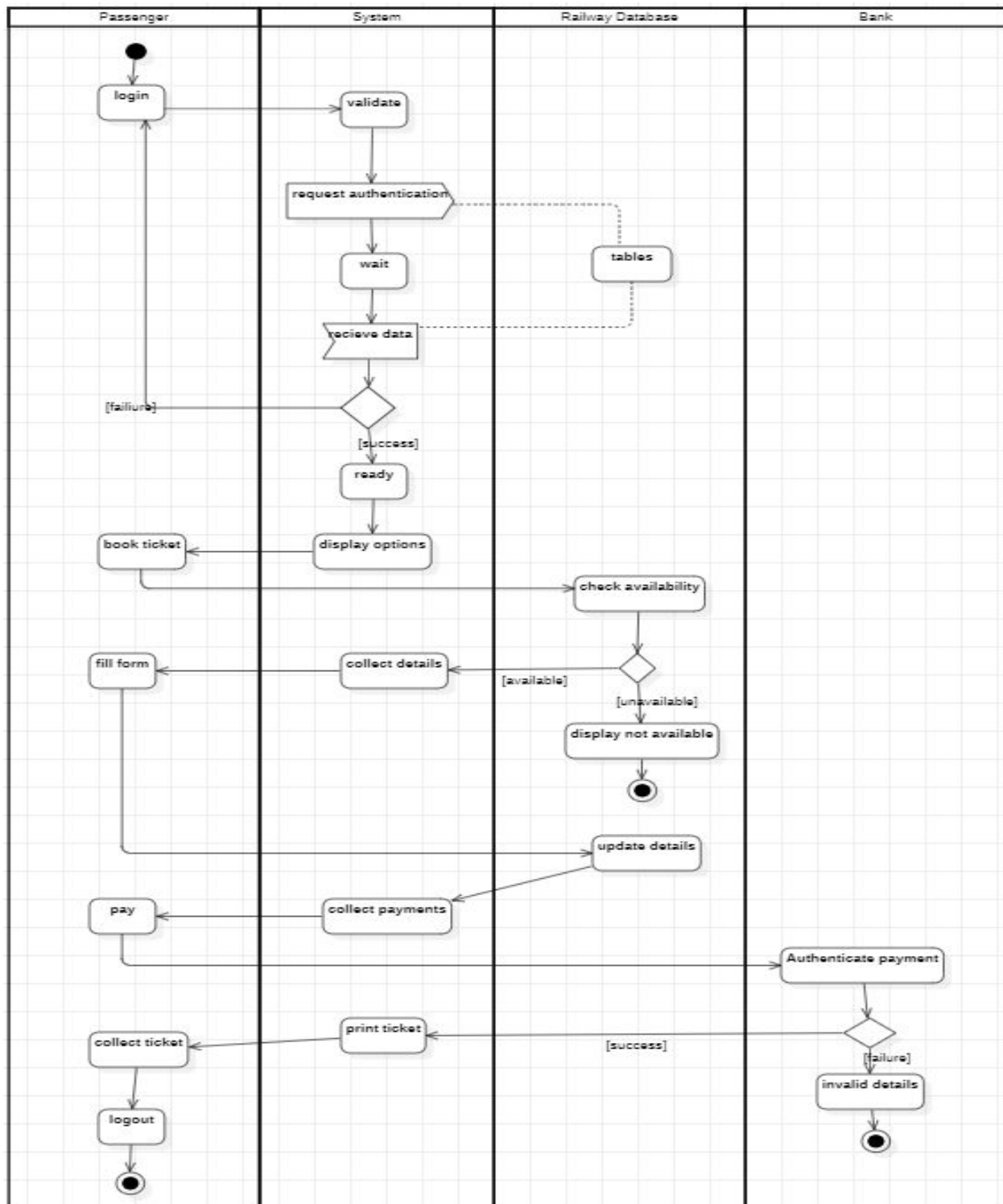


Figure 6.2 :Advanced Activity model

The activity diagram organises the different activities involved in reserving a ticket into swimlanes. With such an organization, it gives a better understanding of the flow of control in the system when a user attempts to reserve a train ticket.

7.Graphics Editor

7.1 Activity Diagram

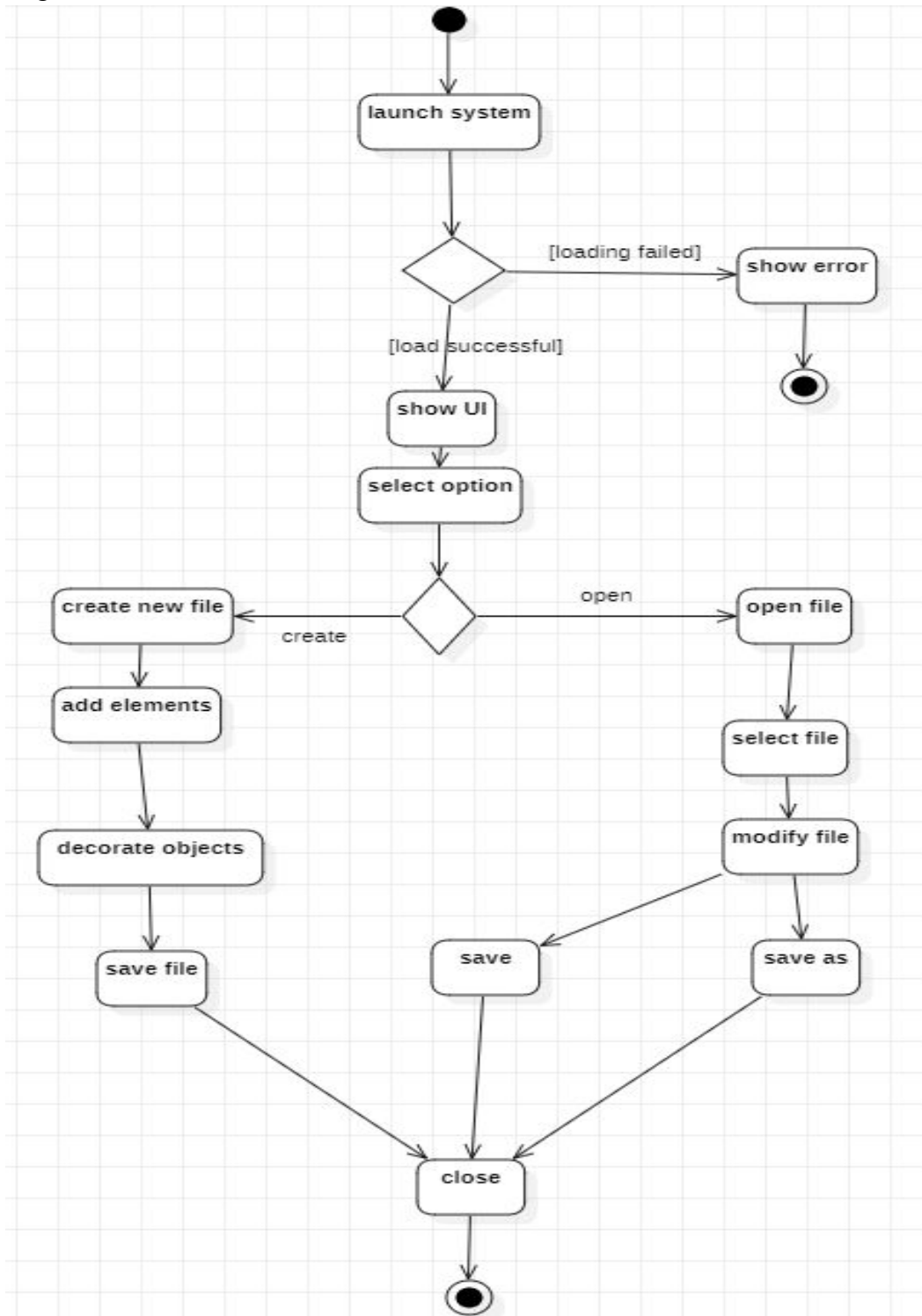


Figure 7.1 : Activity model

The activity diagram shows the activities involved when a user opens a new document, edits an existing document, and saves a document. The activities involved in creating and drawing objects are also shown.

7.2 Advanced Activity Diagram

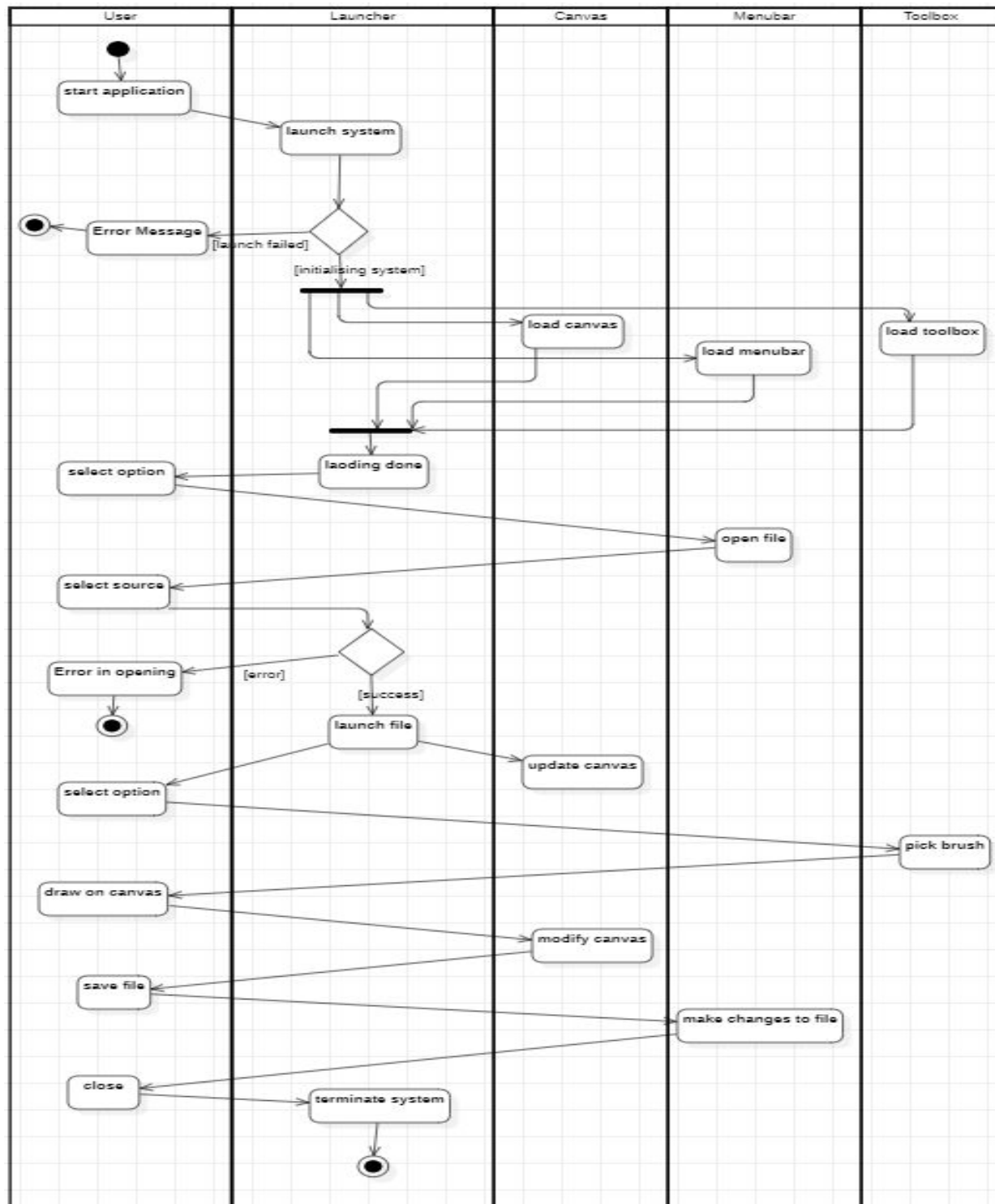


Figure 7.2 :Advanced Activity model

The activity diagram organises the different activities involved in the system into swimlanes. With such an organization, it gives a better understanding of the flow of control in the system when a user opens a new document, edits an existing one, saves a document, and creates and draws objects in the document by using the available tools.