ASSIGNMENT - 3

Title: Prepare Activity Model

Problem Statement:

- Prepare an activity model, identify activity states and action states.
- Draw activity diagram with Swimlanes using UML 2.0 notations for major Use Cases.

Objective:

- To Identify activities involved within the proposed system.
- Design the activity diagram.

Theory:

Activity Diagrams

In UML, an activity diagram provides a view of the behavior of a system by describing the sequence of actions in a process. Activity diagrams are similar to flowcharts because they show the flow between the actions in an activity; however, activity diagrams can also show parallel or concurrent flows and alternate flows.

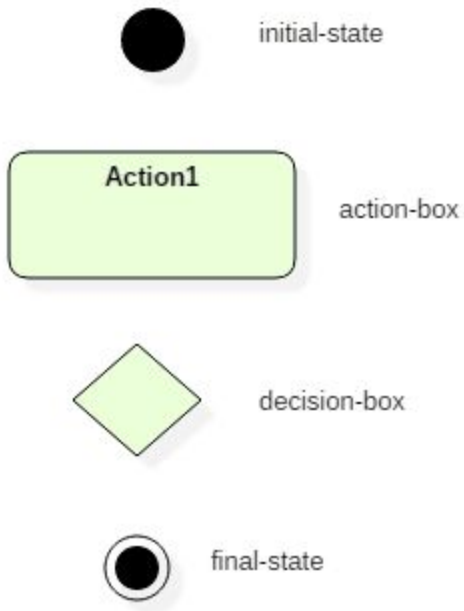
In activity diagrams, you use activity nodes and activity edges to model the flow of control and data between actions.
Activity diagrams are helpful in the following phases of a project:

- Before starting a project, you can create activity diagrams to model the most important workflows.
- During the requirements phase, you can create activity diagrams to illustrate the flow of events that the use cases describe.
- During the analysis and design phases, you can use activity diagrams to help define the behavior of operations.

Activity Diagram Notations

Activity diagrams symbols can be generated by using the following notations:

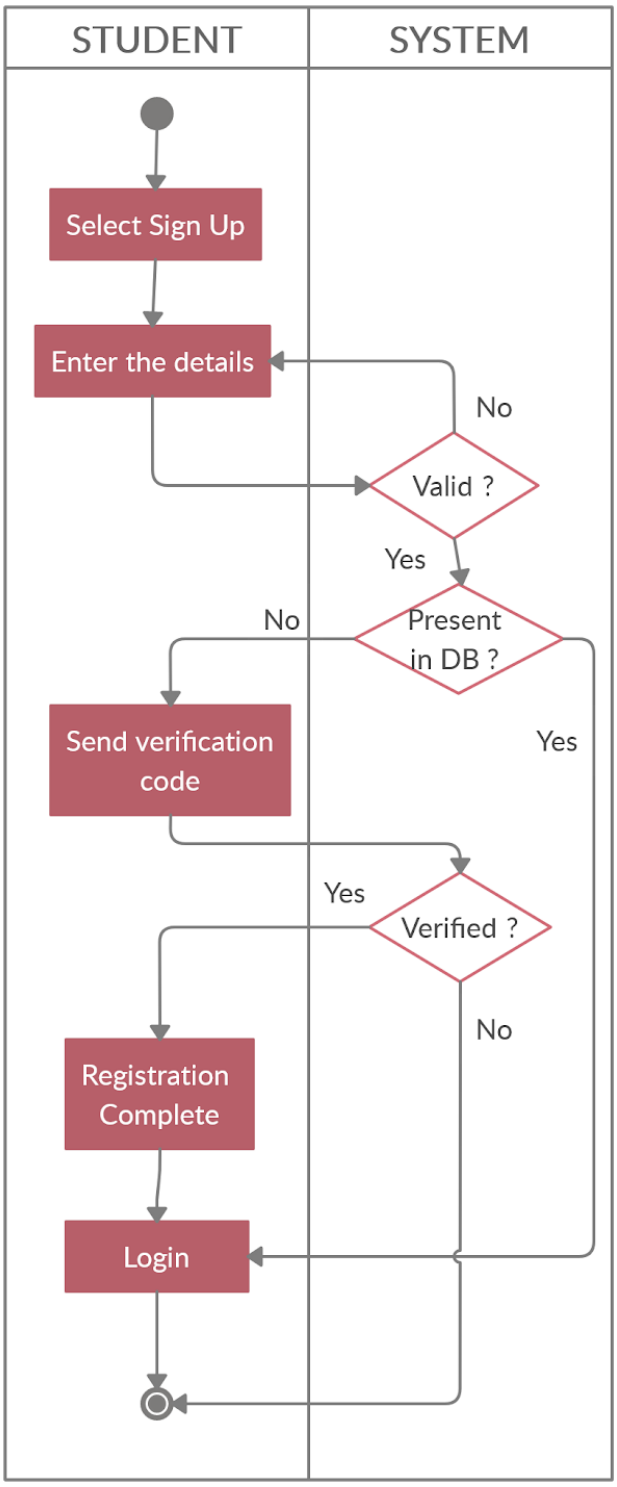
- Initial states: The starting stage before an activity takes place is depicted as the initial state
- Final states: The state which the system reaches when a specific process ends is known as a Final State
- State or an activity box:
- Decision box: It is a diamond shape box which represents a decision with alternate paths. It represents the flow of control.



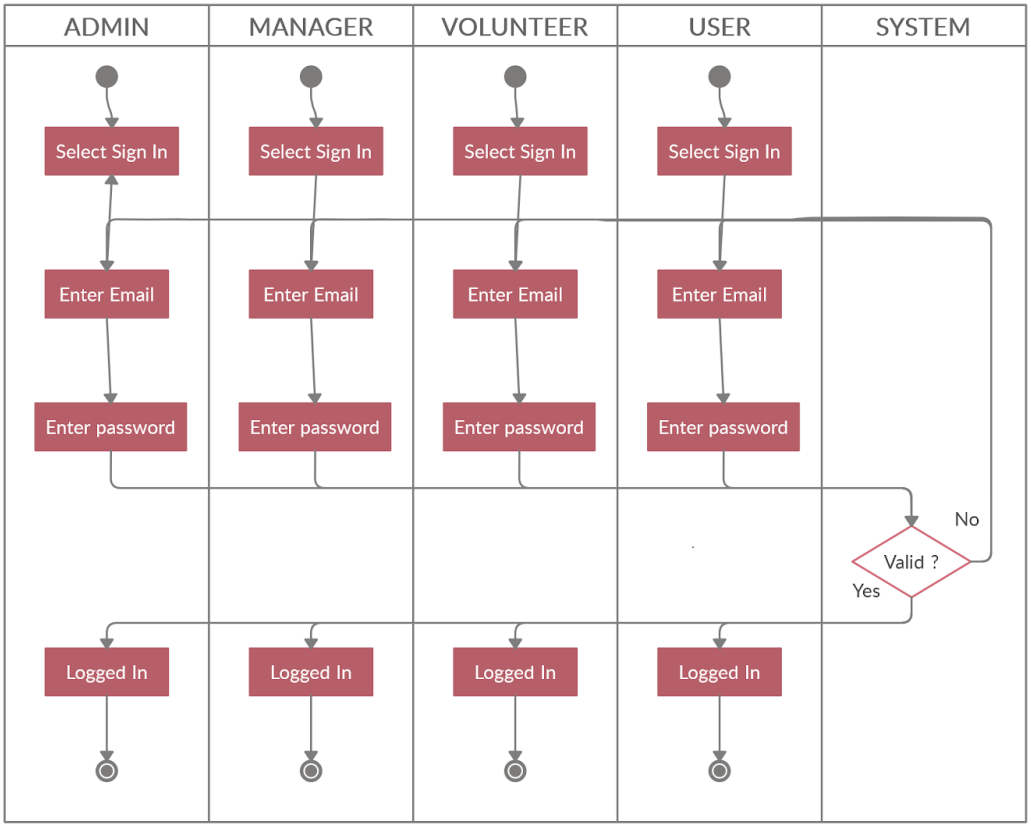
Activity Diagram Notation and Symbol

Activity Diagrams for Event Registration System

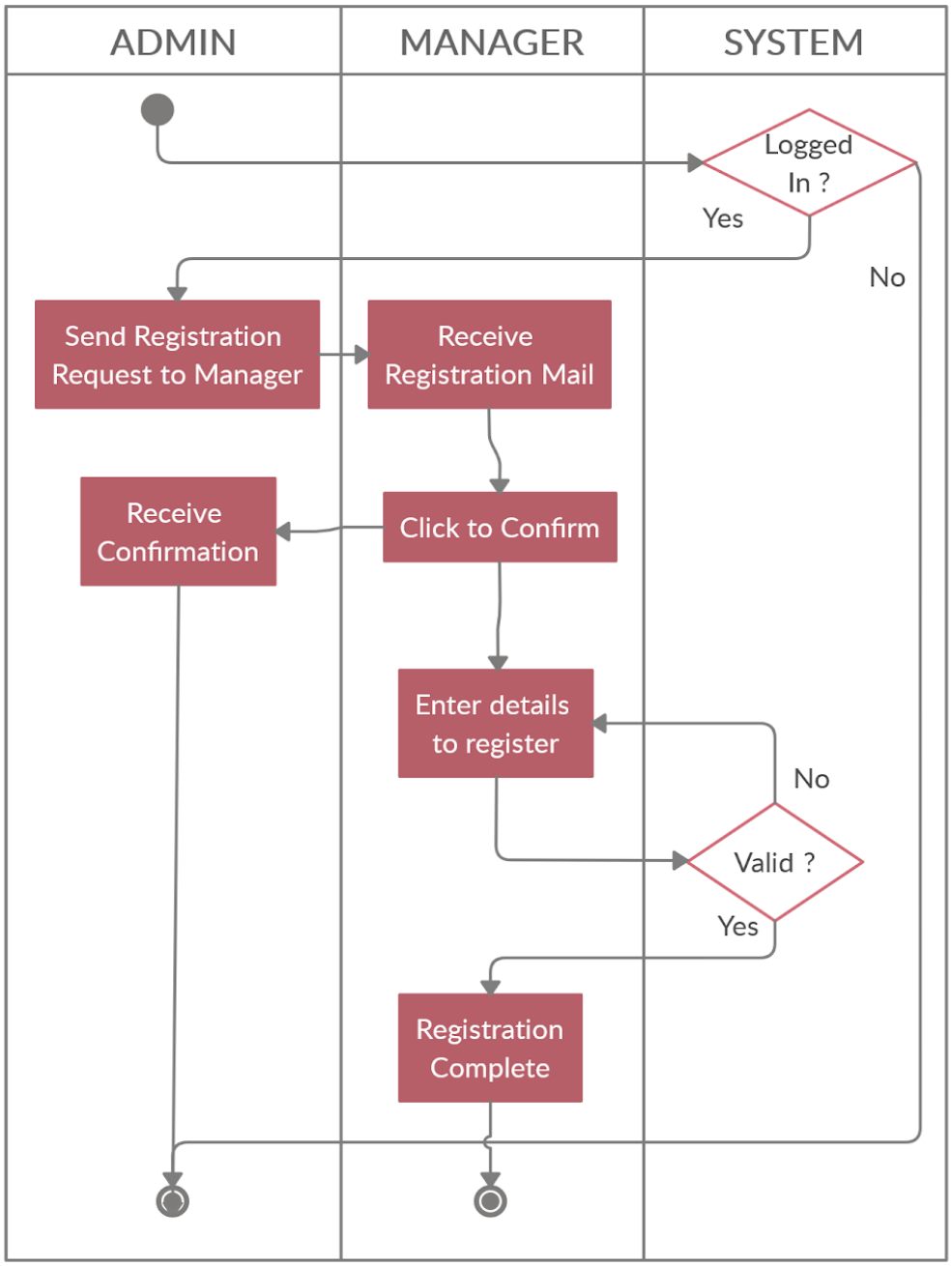
1) Register User



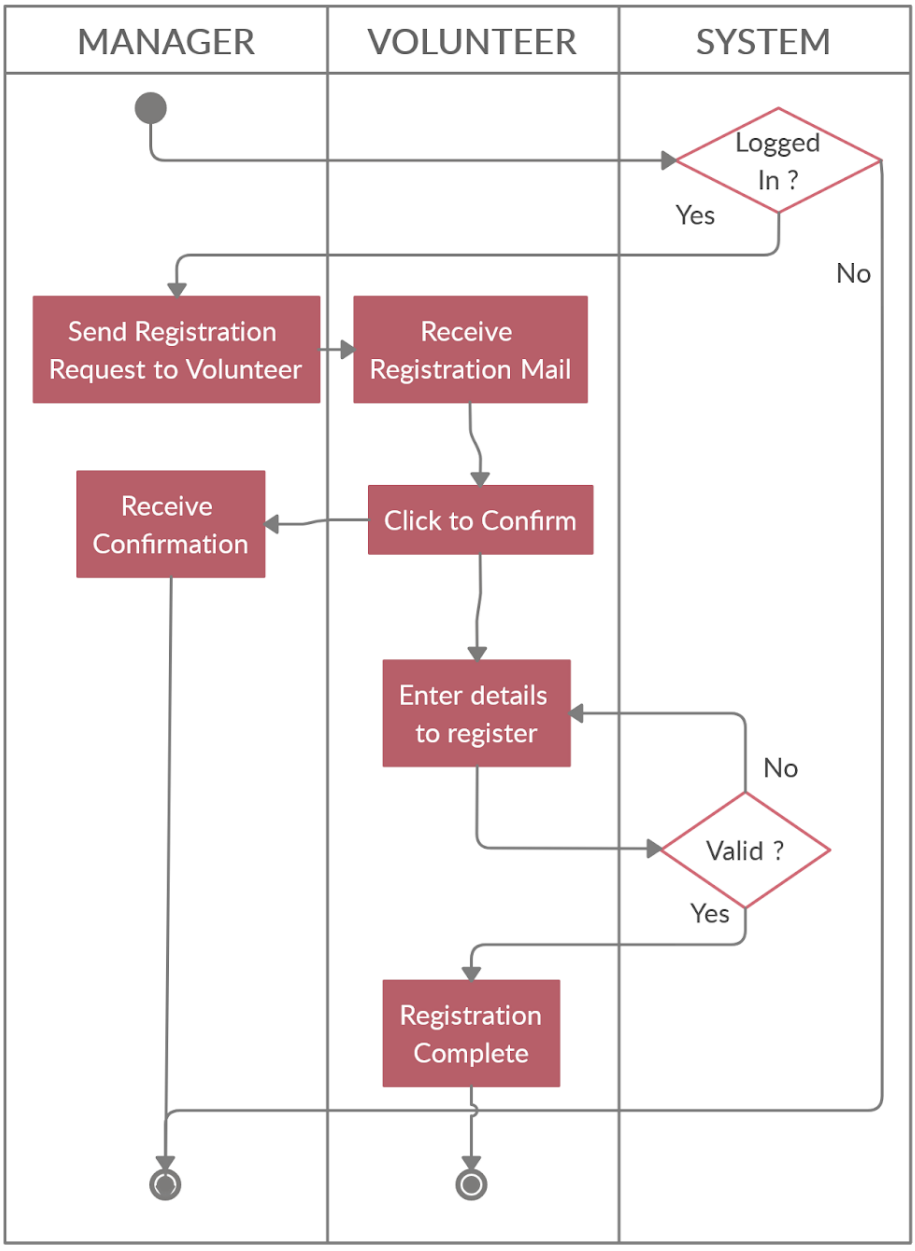
2) Login


ADMIN
MANAGER
VOLUNTEER
USER
SYSTEM
Select Sign In
Select Sign In
Select Sign In
Select Sign In
Enter Email
Enter Email
Enter Email
Enter Email
Enter password
Enter password
Enter password
Enter password
No
Valid ?
Yes
Logged In
Logged In
Logged In
Logged In

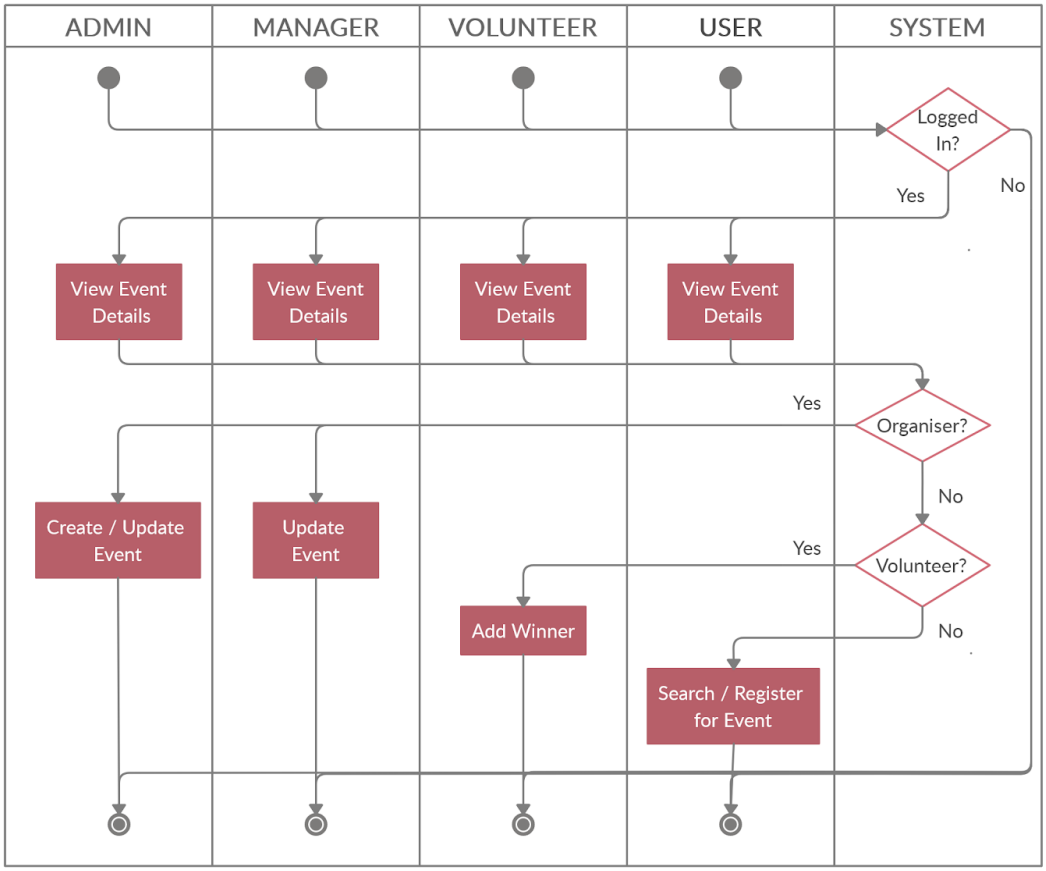
3) Add Manager



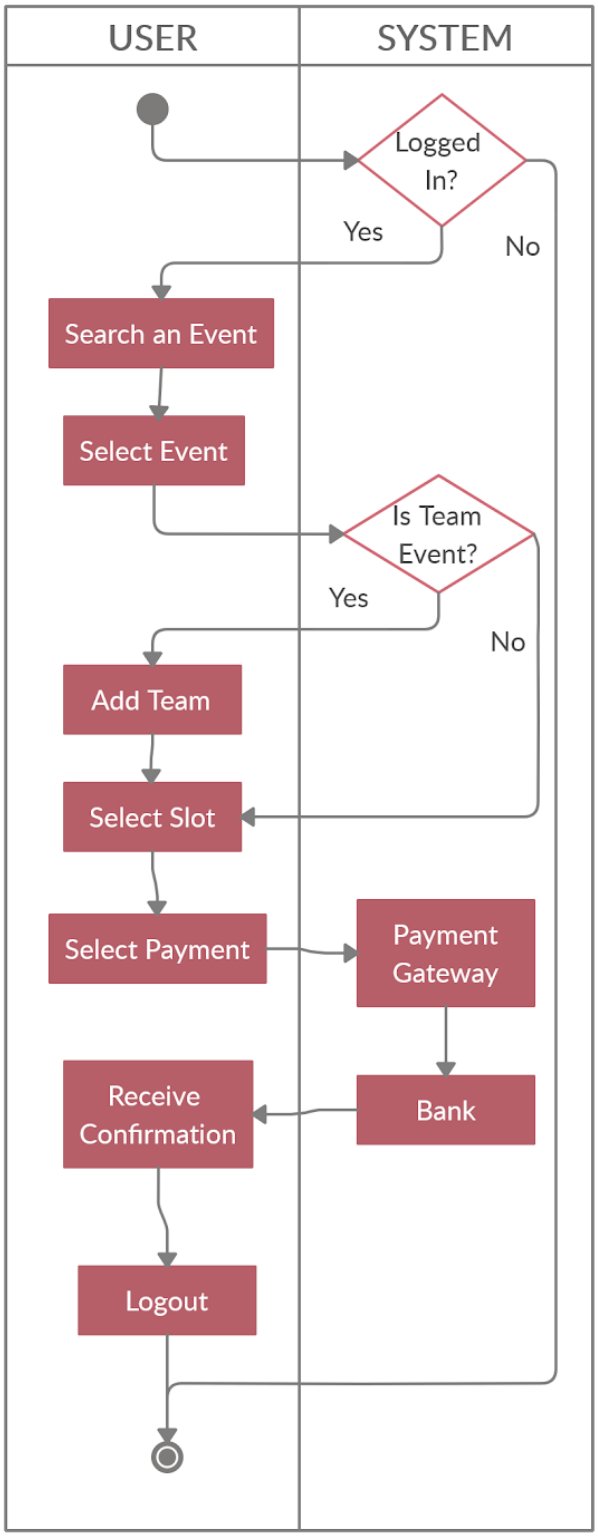
4) Add Volunteer



5) Create / Update Event



6) Select Event



Conclusion:

We have thus implemented accepted standards and procedures to develop an Activity Model for the project idea we have picked (Event Registration System). The purpose of Activity Model is to model business processes and workflows.