IV. UML ACTIVITY DIAGRAM

ACTIVITY DIAGRAM

• It is a dynamic diagram, that shows the activity and event, that causes the object to be in a particular state

USE

- Used to model an entire business process
- Used to represent class's method implmentation

ELEMENTS OF ACTIVE DIAGRAM

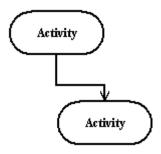
1. Action states

- Action states represent the no interruptible actions of objects.
- Represented by a rectangle with rounded edges



2. Action Flow

Action flow arrows illustrate the relationships among action states.



3. Initial State

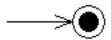
• A filled circle followed by an arrow represents the initial action state.

• Starting point of the flow



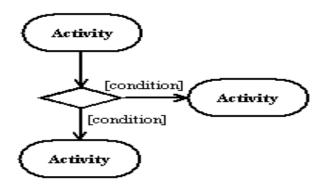
4. Final State

• An arrow pointing to a filled circle nested inside another circle represents the final action state.



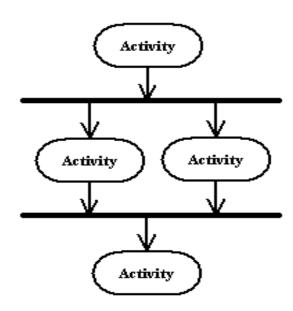
5. Branching

- A diamond represents a decision with alternate paths.
- The outgoing alternates should be labeled with a condition or guard expression.
- We can also label one of the paths "else."



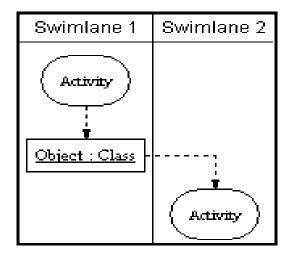
6. Synchronization

- A synchronization bar helps illustrate parallel transitions.
- Synchronization is also called **forking and joining**.



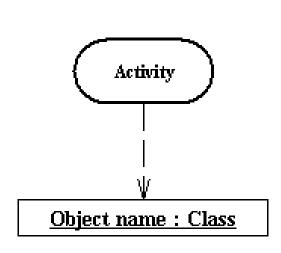
7. Swimlanes

• Swimlanes group related activities into one column.



8. Object Flow

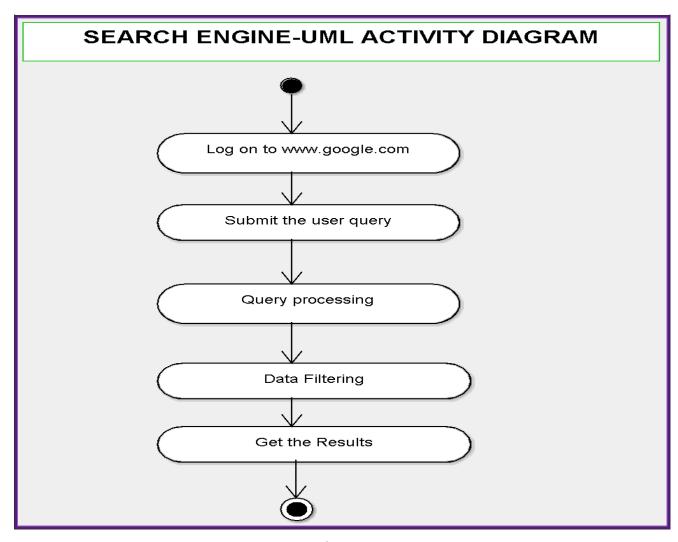
- Object flow refers to the creation and modification of objects by activities.
- An object flow arrow from an action to an object means that the action creates or influences the object.
- An object flow arrow from an object to an action indicates that the action state uses the object.



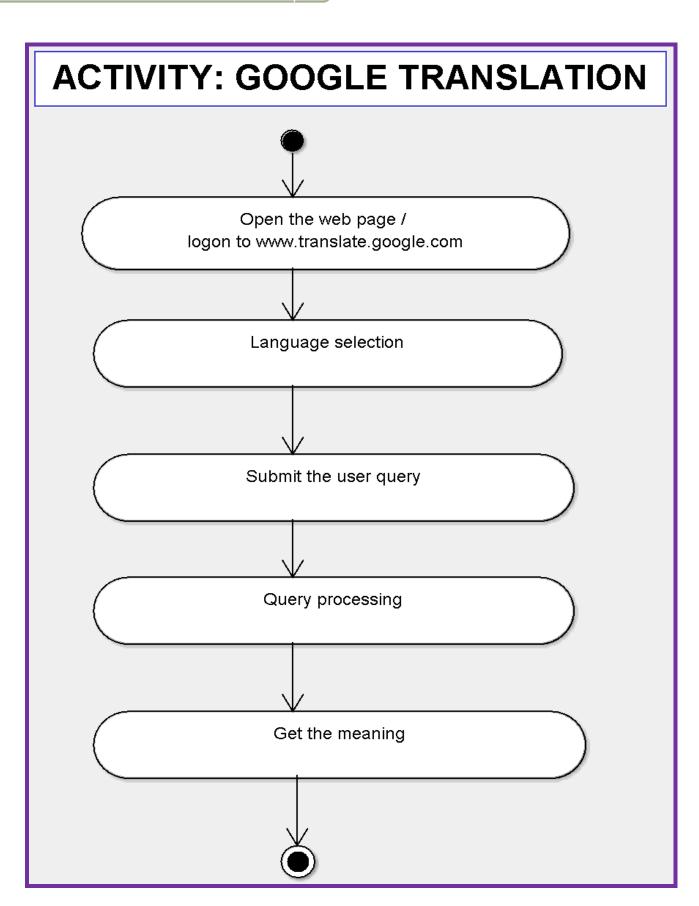
V. EXAMPLES OF ACTIVITY DIAGRAM

1. SEARCH ENGINE:

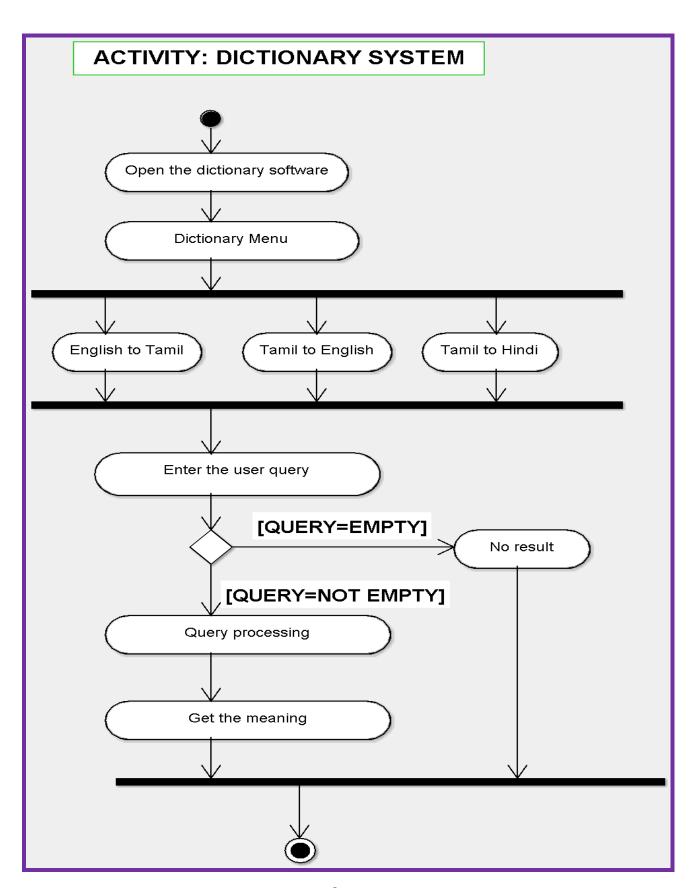


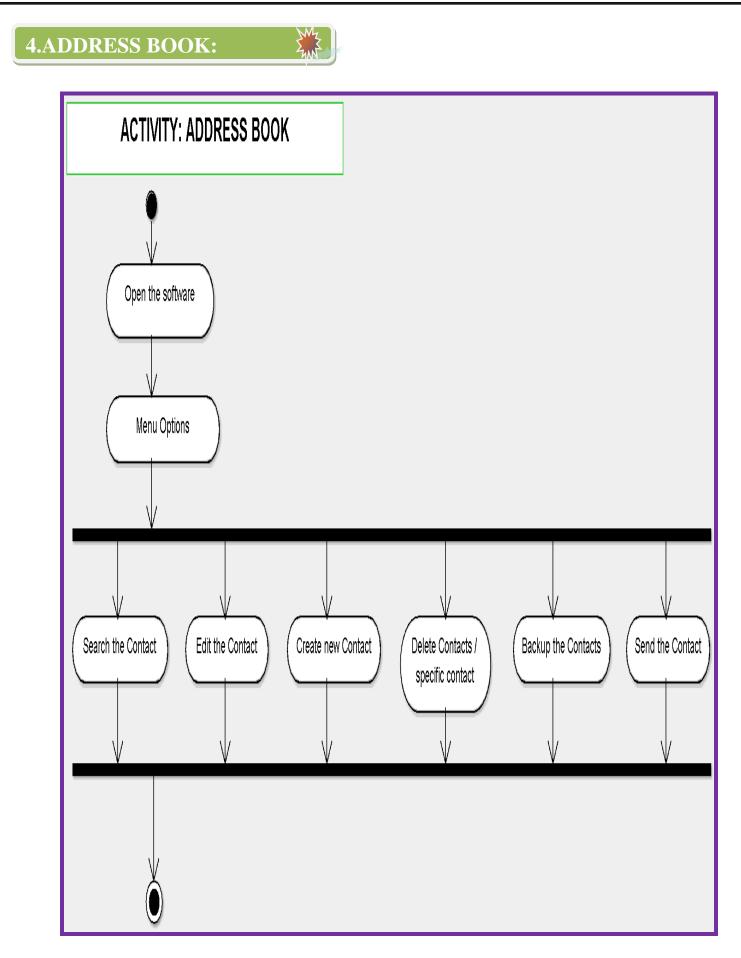


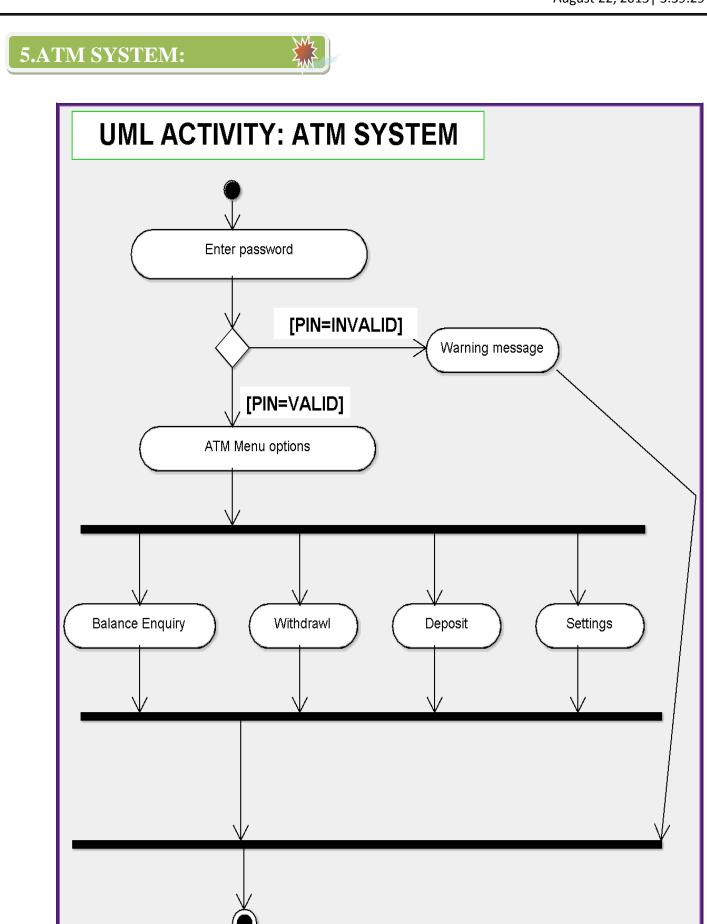






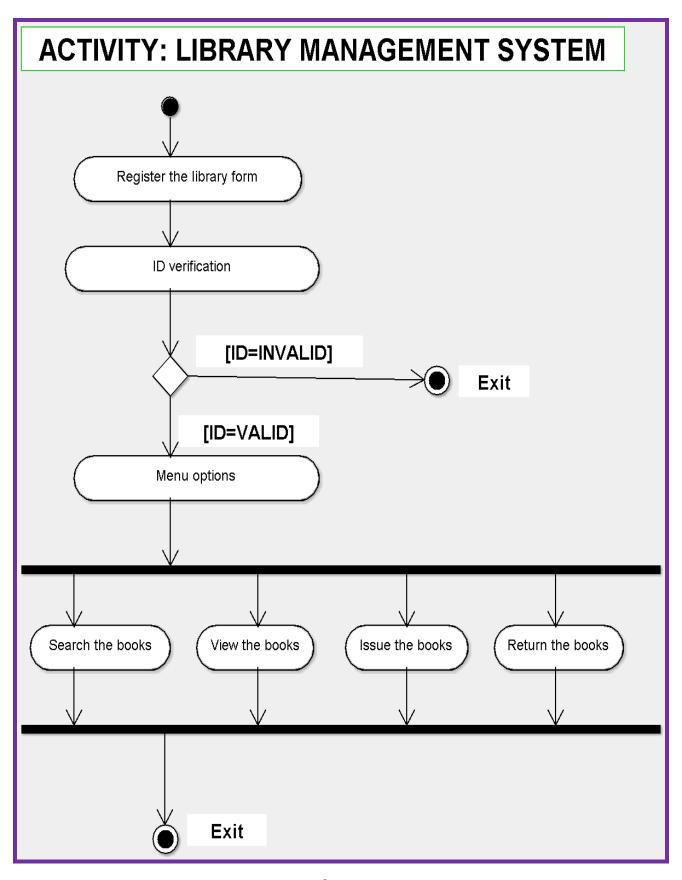






1. LIBRARY MANAGEMENT SYSTEM: 📉





1. HOSPITAL MANAGEMENT SYSTEM:

