

CSE3001 – LAB SUBMISSION 9 – Dr Hepsiba Mabel V 19BCE1221 – ARVIND CB

1. A flowchart is a type of diagram that represents a workflow or process. A flowchart can also be defined as a diagrammatic representation of an algorithm, a step-by-step approach to solving a task.

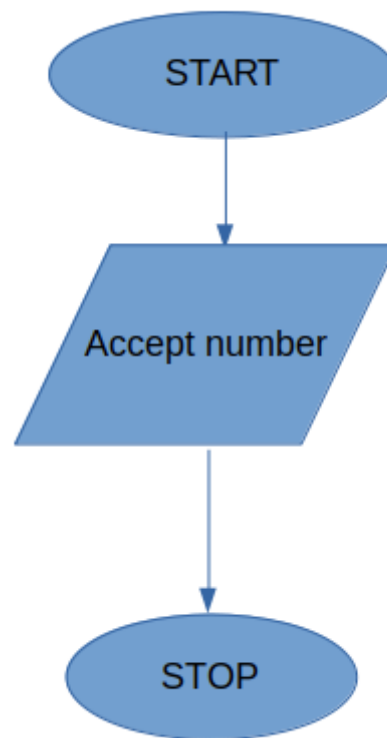


Fig 1. Simple flowchart for accepting a number

2. Activity diagrams are graphical representations of workflows of stepwise activities and actions with support for choice, iteration and concurrency.

Activity diagrams are intended to model both computational and organizational processes (i.e., workflows), as well as the data flows intersecting with the related activities.

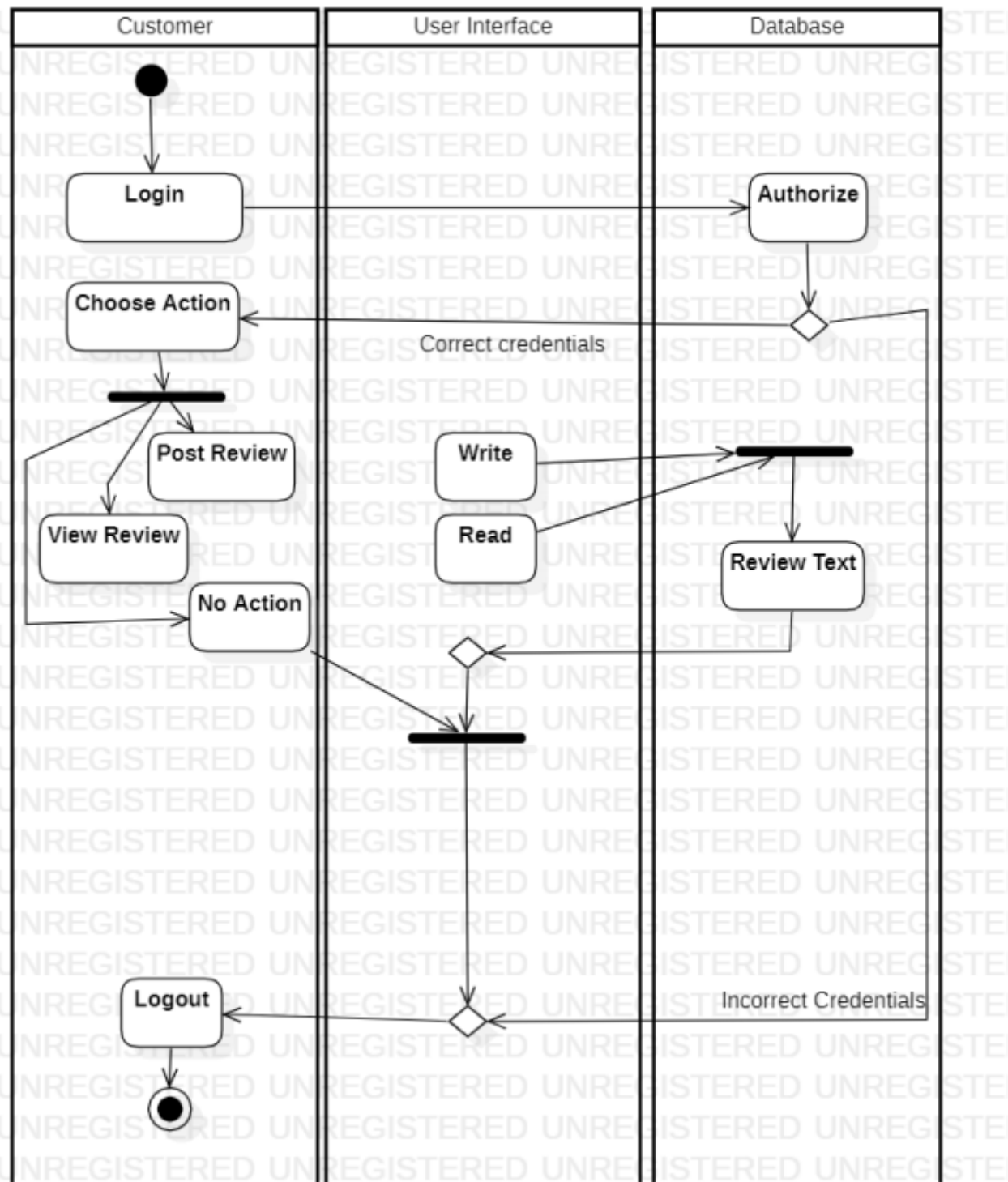


Fig 2. An activity diagram showing the working of an interactive portal

3. Difference between activity diagram and flowchart

ACTIVITY DIAGRAM	FLOWCHART
1. It is a graphical representation of workflows of stepwise activities and actions with support for choice, iteration and concurrency	1. It is a diagrammatic representation that illustrates a solution model to a given model.
2. It helps to understand the business process or	2. It helps to analyze and design a program

workflow of the system	
3. It is associated with UML	3. It is associated with programming

Most commonly activity diagrams are used to:

- Model the workflow in a graphical way, which is easily understandable.
- Model the execution flow between various entities of a system.
- Model the detailed information about any function or an algorithm which is used inside the system.

Flowchart is used to:

- Document and analyze a process.
- Standardize a process for efficiency and quality.
- Communicate a process for training or understanding by other parts of the organization.

4. A Sequence diagram is two-dimensional in nature. On the horizontal axis, it shows the life of the object that it represents, while on the vertical axis, it shows the sequence of the creation or invocation of these objects.

Because it uses class name and object name references, the Sequence diagram is very useful in elaborating and detailing the dynamic design and the sequence and origin of invocation of objects. Hence, the Sequence diagram is one of the most widely used dynamic diagrams in UML.

Uses:

- Used to model and visualise the logic behind a sophisticated function, operation or procedure.
- They are also used to show details of UML use case diagrams.
- Used to understand the detailed functionality of current or future systems.
- Visualise how messages and tasks move between objects or components in a system.