	Bansilal Ramnath Agarwal Charitable Trust's Vishwakarma Institute of Information Technology **Department of Artificial Intelligence and Data Science**

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Class: SY	Division: B	Roll No: 272028
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Aim: - Activity diagram.

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* Activity diagram:

1. Introduction to Activity diagram?

→ 1. Activity diagram are a types of UML (Unified Modelling language) diagram used to describe the behaviour of a system or process
2. They are often used in software engineering to model workflows, business processes, or software behaviour
3. An activity diagram is a graphical representation of the step involved in a process or system, including the order in which they occur and the condition that determines their execution.
4. It consist of nodes and edges, where nodes represent activities and edges represent the sequence of these activities

2. Component of Activity Diagram

Ans 1. Activities : It is a behaviour that is divided into one or more action. Activities are network of node connected.

2. Activity Position : A high level grouping of a set of related action. A single Partition are refer to many things such as class, use case, component or in test case.

3. Fork and join nodes : using a fork and join nodes concurrent flows within an activity can be generated. A Fork node has one incoming edges and numerous outgoing edges.

4. Pios: An activity diagram that has a lot of flows gets very complicated and pois is used to cleasing up the things.

3) Applicability of Activity Diagram.

→ It is suitable for modelling how a collection of use cases co-ordinate represent business workflows.

1). Identify co-ordinate ~~represent business workflows~~ use cases through the examination of business workflows.

2. Identify Poe and post condition for use cases.

3) Model work flows between / within use cases.

4) Difference between flowchart, sequence diagram and activity diagram:

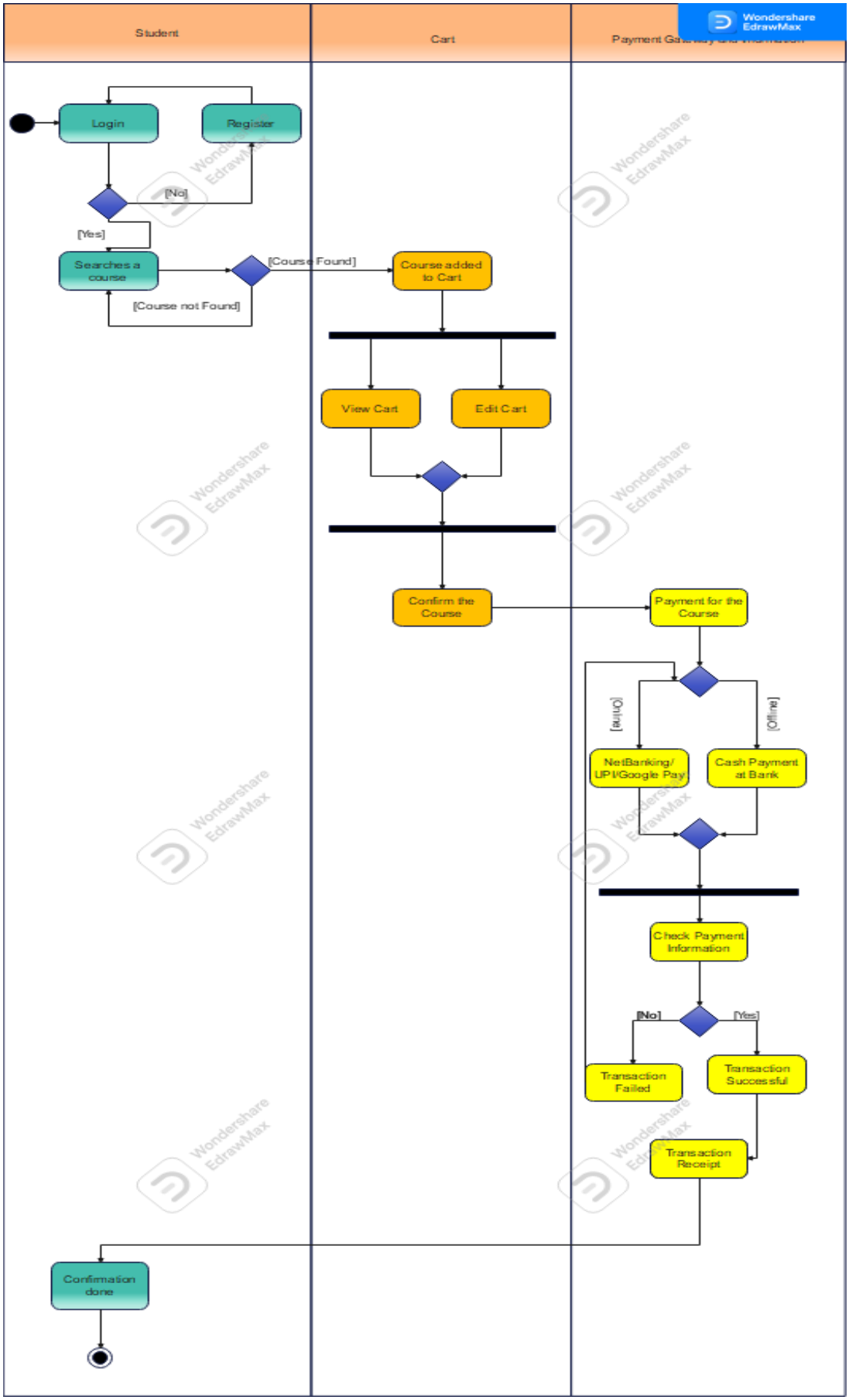
→ 1. flowchart :- flowchart is a diagramatic representation and the illustration of a solution model to a given problem.

2. Sequence Diagram :- The sequence diagram represent the UML which is visualize the sequence of calls that a system that used to Performs.

3. Activity diagram: Activity diagram is graphical representation of workflow of stepwise activities with support for chase, storation & concessing.

Pranjali

Activity Diagram:



Conclusion: Hence we have successfully implemented the Activity diagram for cps.