Object Oriented Analysis and Design

Activity Diagram

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Activity Diagram

Describe the activities that occur in the system.

Shows the steps in the system work process.

Describe the business process and the sequence of activities in a process.

Shows the sequence of process activities on the system.

Activity diagrams are made based on one or more use cases in the use case diagram.

Activity Diagram Benefits

Describe the logic flow of an algorithm.

Describe the business process steps in the use case.

Illustrates the business process between the user and the system.

Clarify the process flow in the use case.

Model elements of software architecture, such as methods, functions and operations.

Activity Diagram Components

Action

- Process or task executed by user or system. Depicted with a box symbol.

Decision node

- Conditionals that have one input and two or more outputs. Depicted with a diamond symbol (rhombus).

Control flows

- Connectors that describe the direction of the business process. Depicted with a line with the tip of an arrow.
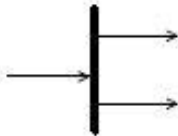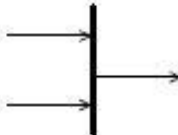
Start node

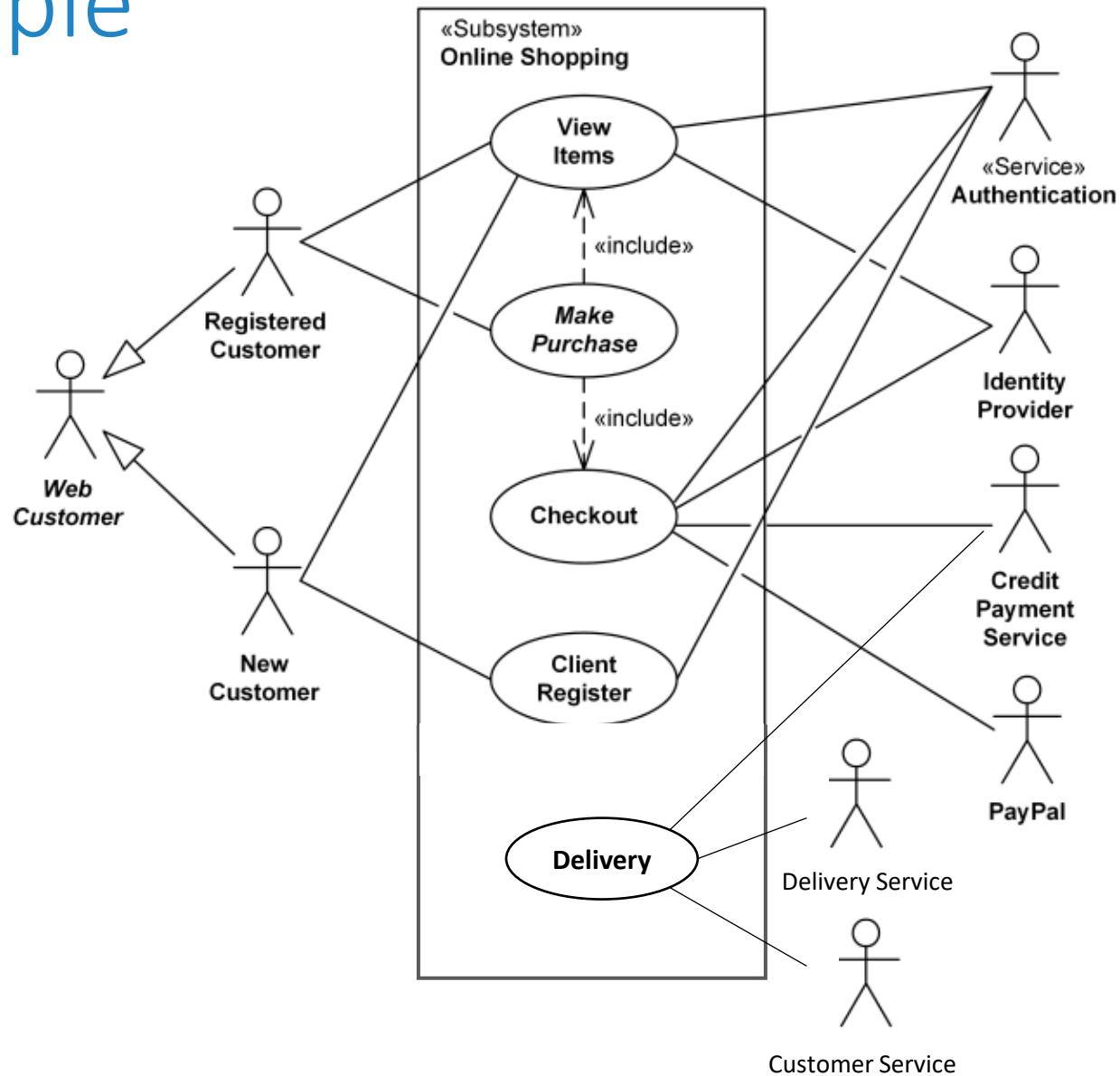- The start of the activity. Depicted with a black circle symbol.

End node

- End of activity. Depicted with a black circle symbol.

Activity Diagram Symbols

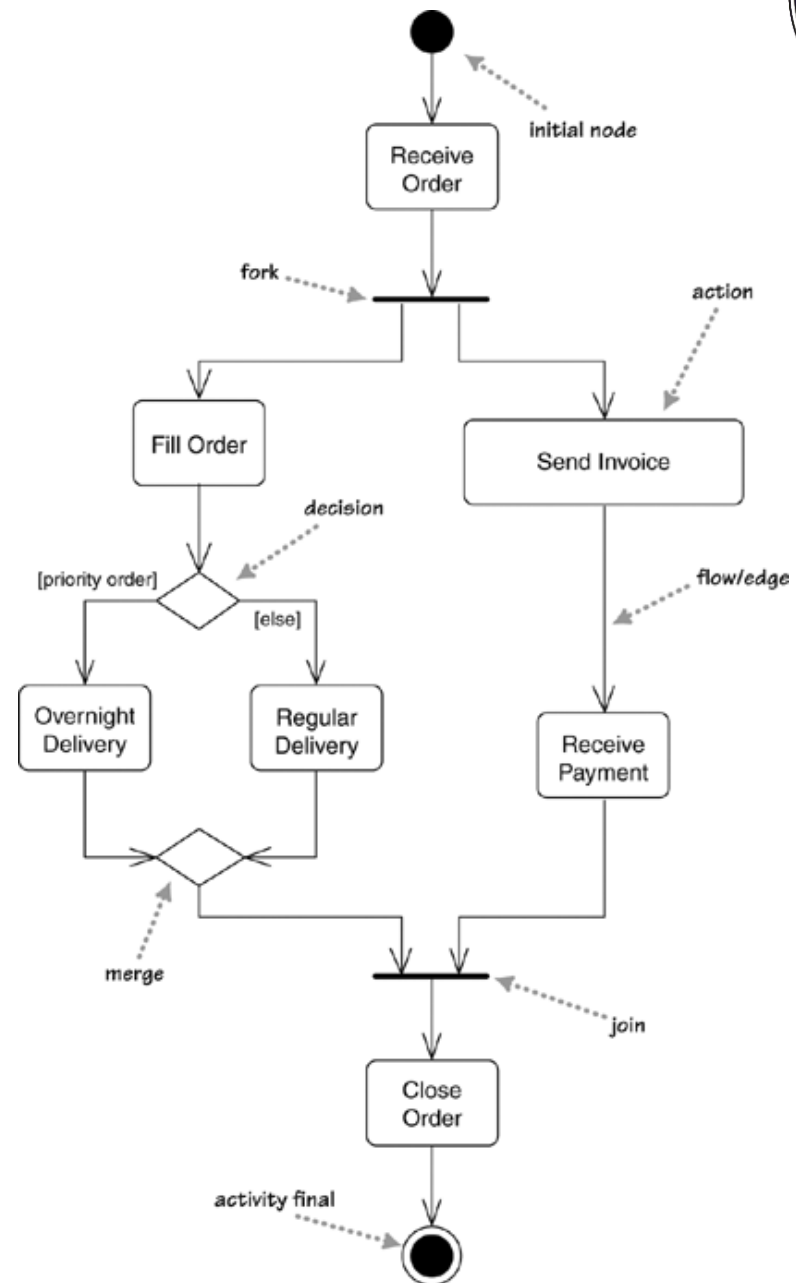| Simbol	Keterangan
●	Start Point
◉	End Point
(rounded rectangle)	Activities
(fork symbol)	Fork (Percabangan)
(join symbol)	Join (Penggabungan)
◇	Decision
Swimlane	Sebuah cara untuk mengelompokkan activity berdasarkan Actor (mengelompokkan activity dalam sebuah urutan yang sama)

Example

Example

In this case, the employee first receives the order, then the employee can immediately fill the order and send an invoice.

When an employee fills an order, the customer can choose the priority of the order. If so, it will go to overnight delivery but if not, it will go to regular delivery.

After everything is done, the order will be closed and the customer can wait for the order (Close Order).
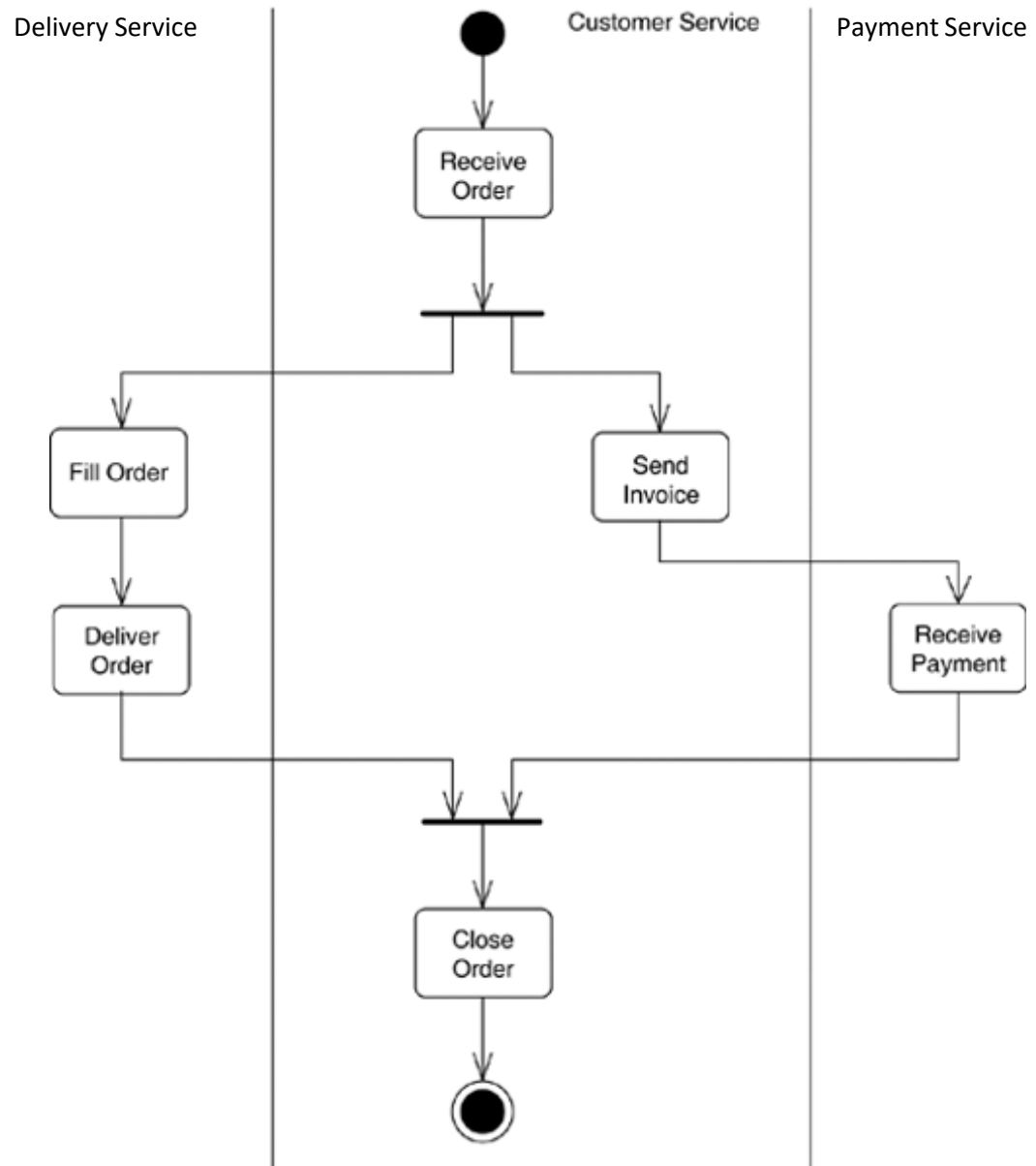
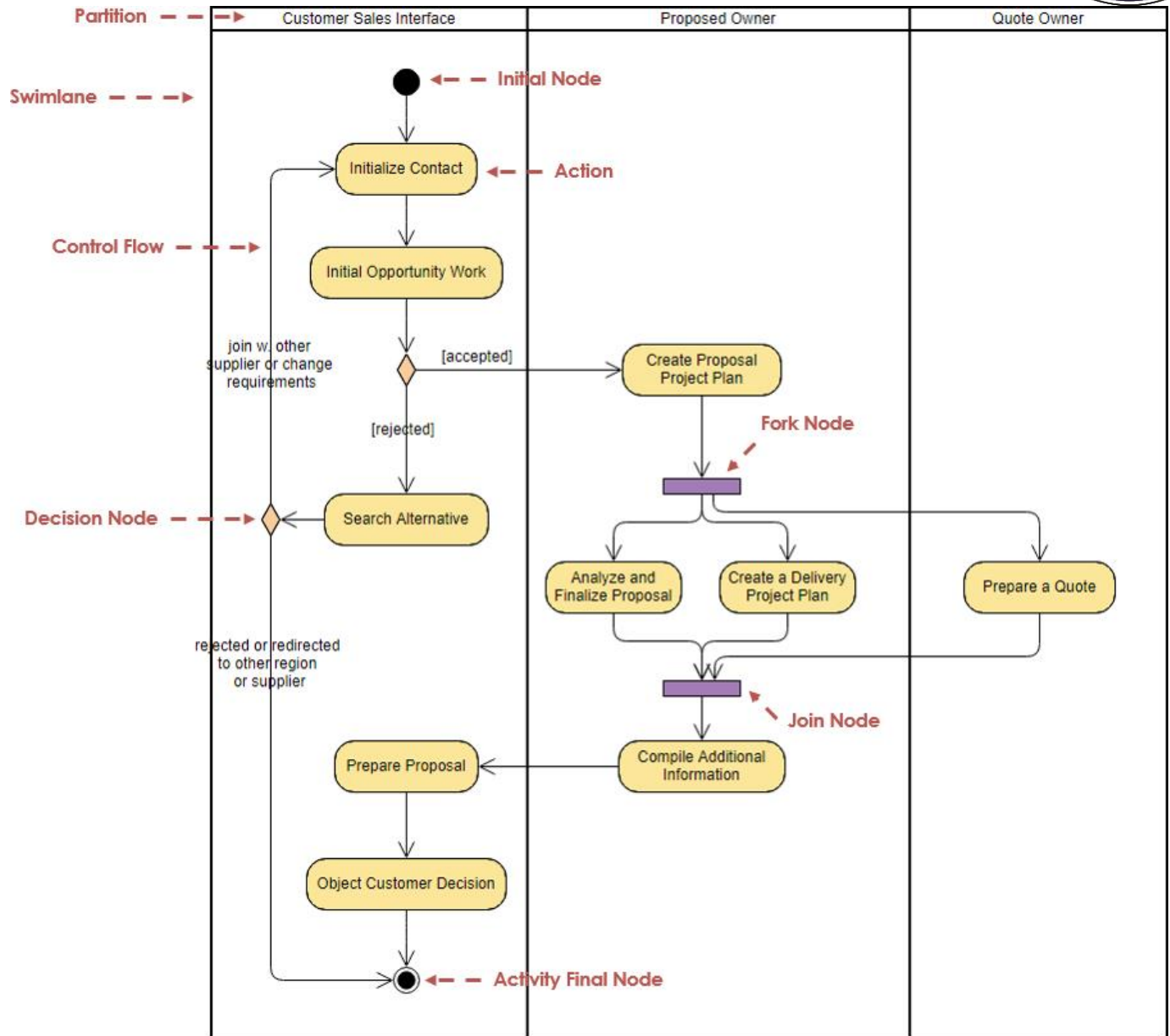Decision is used for conditional activities   such as yes or no.

Swimlane Example

If we use swim lines, the activity diagram will be divided into rows and columns according to the responsibilities of the objects that carry out the activity.
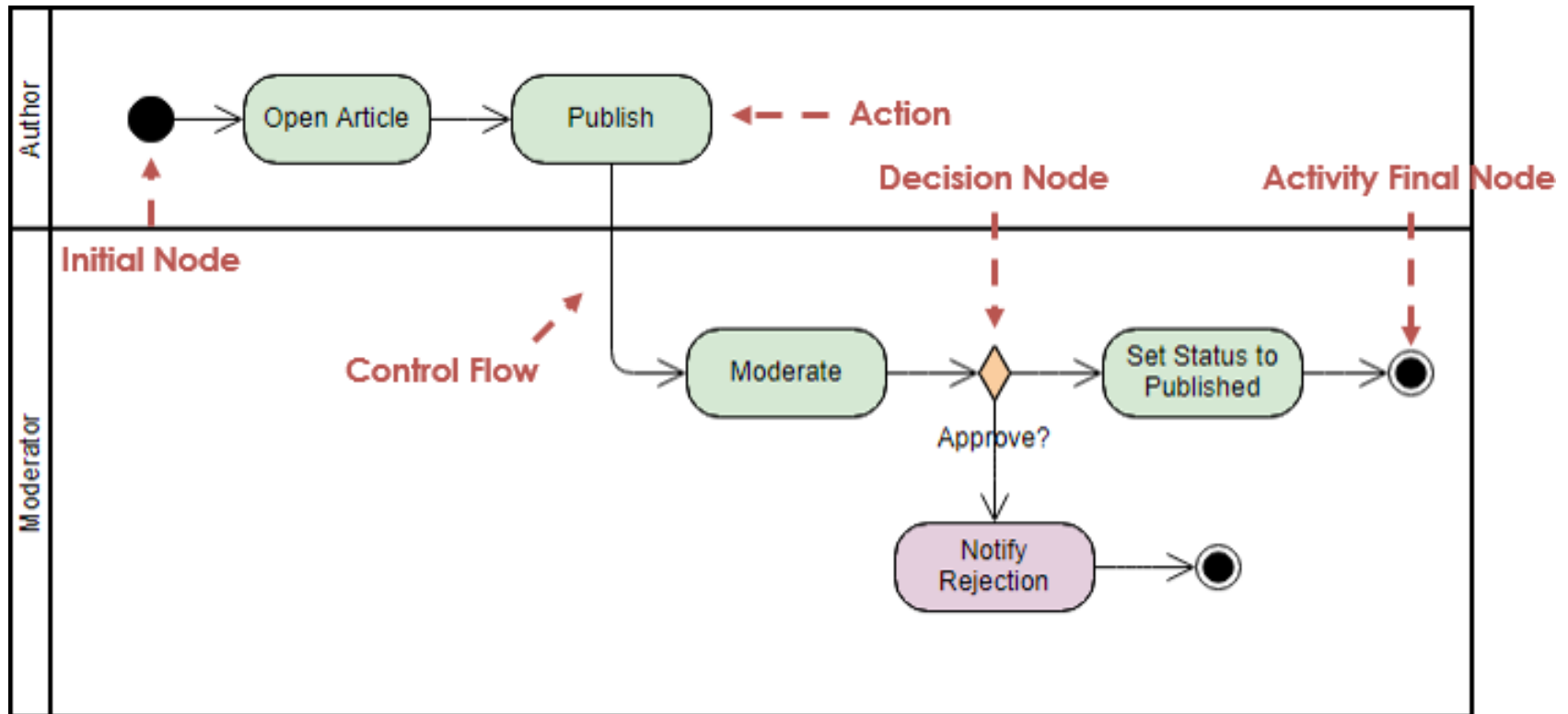
Another Example

Case in point: Business Proposal Process

Another Example

Case in point: Article Submission Process

Exercise

Make an Activity Diagram for all the use cases that you have created.

Thanks!

Any questions?

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