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Assignment-02

Assignment Name: ATM Activity And **Sequence Diagram.**

Course Title: SYSTEM ANALISIS AND DESIGN

Course Code: CSE-325

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What is Activity Diagram?

Activity Diagrams describe how activities are coordinated to provide a service. Activity Diagrams consist of activities, states and transitions between activities and states. You can use activity diagram to model the logic of a single use case, or even how to coordinate a collection of use cases for the entire targeted system being developed. For example, to model how the events in a single use case relate to one another - in particular, use cases where activities may overlap and require coordination.

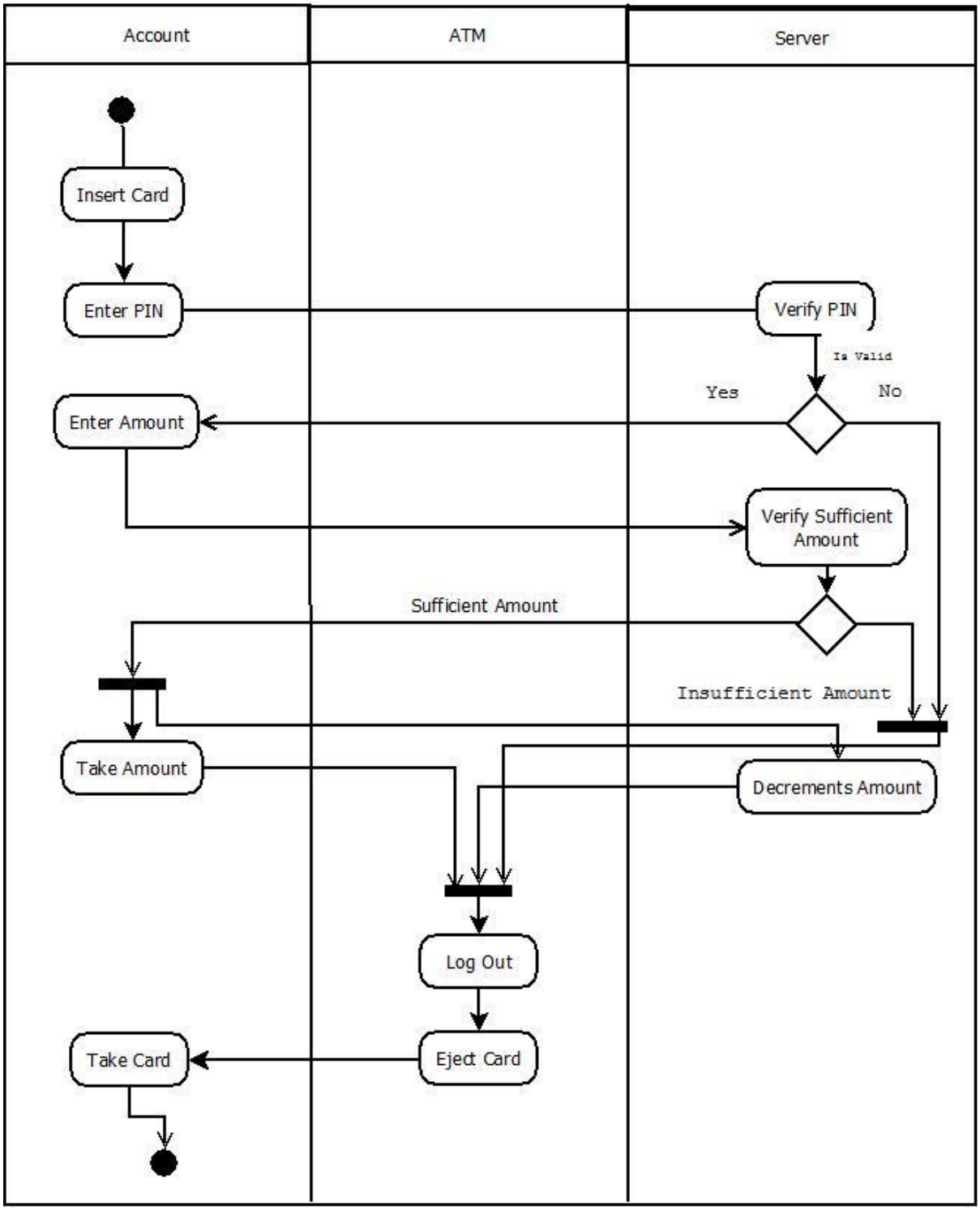
Behavior:

State, Activity Diagram State Diagram:-State transition diagrams provide a way to model the various states in which an object can exist. While the class diagram show a static picture of the classes and their relationships, state transition diagrams model the dynamic behavior of a system in response to external events (stimuli). State transition diagrams consist of the following: 1. States, which show the possible situations in which an object can find itself2. Transitions, which show the different events which cause a change in the state of an object.

Description:

This is a UML Activity Diagram example for ATM. Swim lanes are used to represent the participants that take part. The whole process begins at the black start circle at the top and ends at the concentric white/black stop circles at the bottom. The activities are modeled as rounded rectangles.

Activity Diagram for ATM System



Guidelines for creating Activity Diagrams

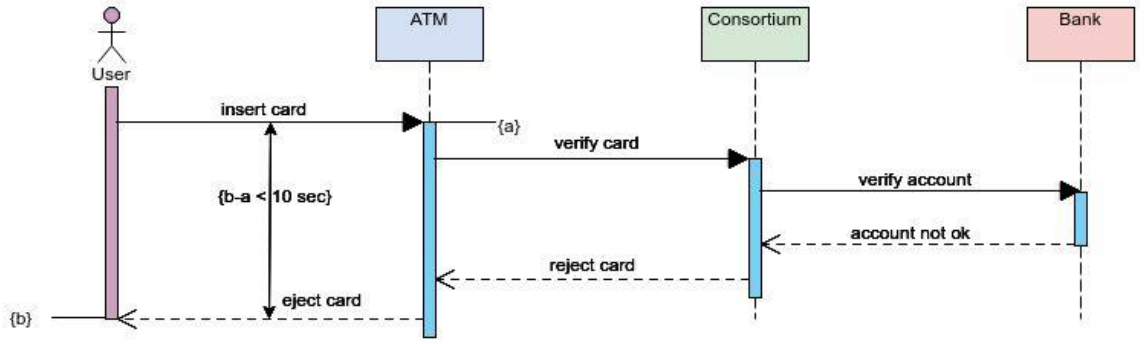
- Minimize the number of crossings links or relationship among activities.
- Reorganize larger diagrams into several smaller ones. It is often easier to have several diagrams on various levels of detail than a single complex one.
- Use swim lanes to model responsibility of stakeholders, function of department or service provided by operational units.
- It can be used to elaborate the logic of an entity in UML, such as, a use case, function or orchestration of several use cases and etc.

What is Sequence Diagram?

A sequence diagram (sometimes called event diagrams or event scenarios) shows object interactions arranged in time sequence. Sequence diagrams are typically associated with realization of a use case scenario. A sequence diagram depicts the objects participated in a use case scenario and the sequence of messages exchanged between the objects (also called the flow of event in textual form) needed to carry out the functionality of the scenario.

Description:

A sequence diagram shows objects and the messages that are passed between these objects for the particular collaboration. This is a simple sequence diagram example for ATM. It shows the interaction from inserting card to verifying account and rejecting card.



How to draw Sequence Diagram

1. Identify who starts the interactions (which actor)
2. Describe the message exchange between actors and the business systems in textual form called flow of events
3. Consider each of the flows in the flow of events repeatedly to identify the participating objects which are required to get the task done.
4. Detail the message exchange between the participating object
5. Consider the creation and deletion of object lifeline as well
6. Review and touch up by running through the entire scenario