Lecture 4 Activity Diagram

System Models – Provide blueprint for construction

3 categories
1. Functional Modeling
   Activity Diagram, Use Case
2. Structural Modeling
   Class diagram
3. Behavioral Modeling
   Sequence diagram, Communication Diagram, Behavioral state machine

Activity diagram
To model business process / workflow
Viewed as sophisticated Data Flow Diagram, but with
1. concurrency 2. decision

Elements:

- Simple, non-decomposable piece of behavior
- A set of actions
- Object
- Control flow
- Object flow
- Initial Node
- Final activity node

More to see next page
Typical Activity Diagram

Examples:

1. Get Cash from ATM

2. Concurrency
3. Swimlane

Activity Diagram for Controller of vending machine
Exercise

Consider the following process and draw an activity diagram with swimlane.

Suppose that a customer wants to return an item bought through a mail order. The customer first calls the company’s telesales to request a return. Telesales verifies whether the return is valid; and if so sends a return number. Then the customer can ship the item. The company’s warehouse receives the item and restocks it. The item now becomes available for sale. The company’s accounting department credits the customer’s account.