

Activity Diagram

PB007 Software Engineering I

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Activity Diagram

What can the activity diagram represent?

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- Activities – Who would have guessed ;)

Activity Diagram

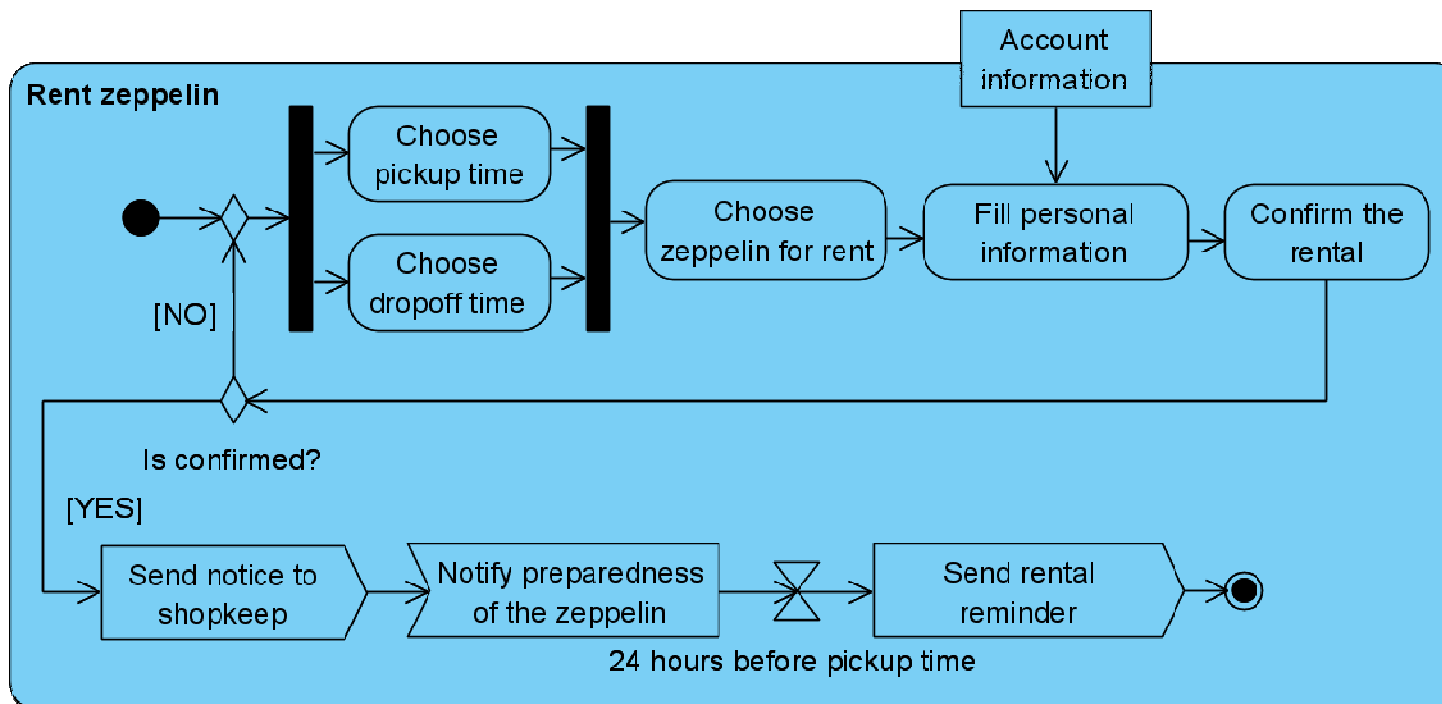
What can the activity diagram represent?

- Activities – Who would have guessed ;)
 - Use Cases
 - Business Processes
 - Algorithms
 - Operations, methods, ...

Activity Diagram

- Flow of events and actions in an activity
- It consists of different types of nodes, connected with edges
 - Action
 - Event (asynchronous behavior)
 - Time events
 - Parallel flow
 - Branching
- Typically, it is a sequence of commands (Control Flow), but data can be represented as well (Object Flow)

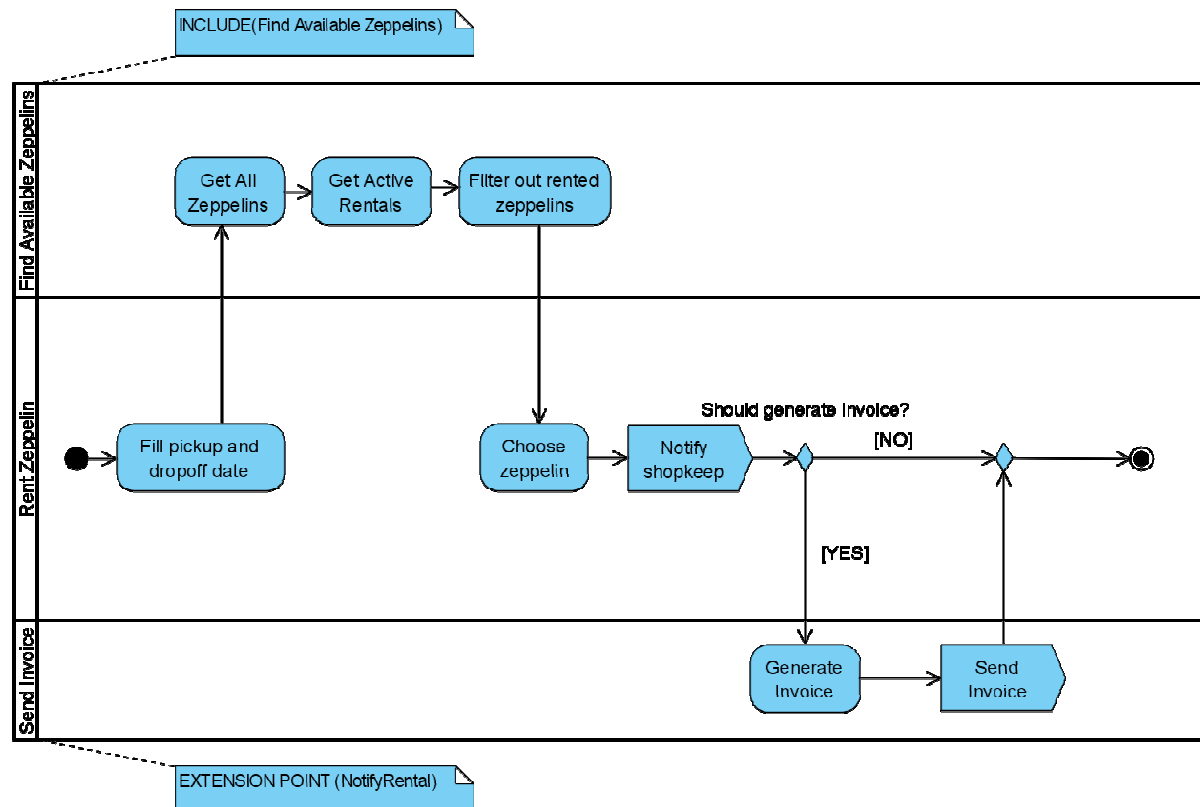
Activity Diagram – Example



Swimlines

- Logical grouping of related actions
 - Context of actors, use cases, etc..
- If use case is modelled, they can be «include» and «extend»
- **«include»**
 - Base and included use case have their own swimlanes.
- **«extend»**
 - If there is an extension point between two actions, decision node is added in between, from which it is possible to move to the extended use case. Afterwards, the control is returned by merge node.
 - Base and extended use case have their own swimlanes.

Swimlines – Include & Extend



In this seminar...

Work, work

- Visual Paradigm demo

- Feedback

- Team work on project
 - Activity Diagram

Task for this week

You gotta do what you gotta do

- Process the feedback
- Choose two use cases and create activity diagrams for them
 - Adequately™ complex (meaning no three-action diagrams)
 - Choose different use cases than those for textual specification
- Submit the report
 - Don't forget to include work from previous weeks