

Activity Diagram

PB007 Software engineering I

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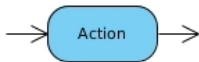
Activity diagram represents flow of events and actions in an activity. It consists of different types of nodes that are connected with directed edges

The **Activities** usually represent:

- use cases
- operations and methods
- algorithms
- business processes



Basic elements



Action node



Initial node



Final node



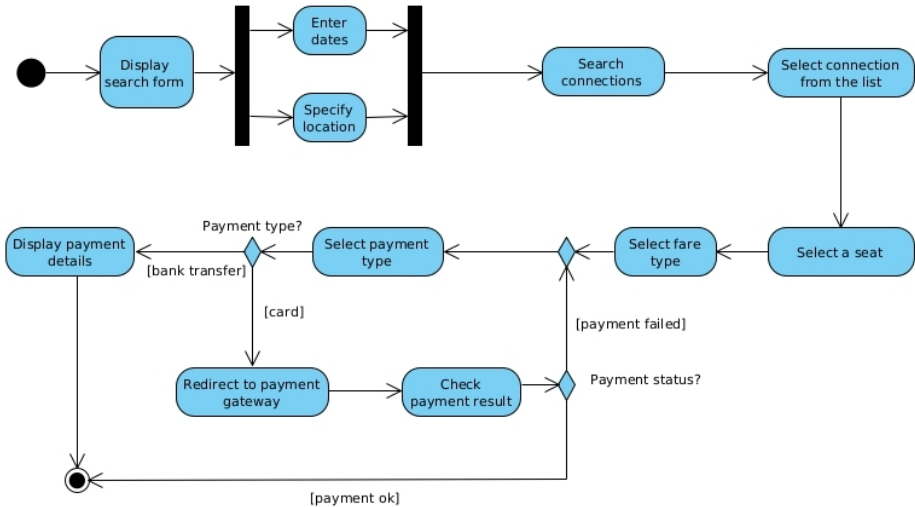
Decision/merge node



Fork/join node



Activity diagram - example



Swimlane (Activity partition) represents a logical grouping of related actions (e.g. based on actors, use cases, ...). In our case they usually represent individual uses cases connected with `<<include>>` or `<<extend>>`.

`<<include>>`

- Base and included use case have their own swimlanes.

`<<extend>>`

- If there is an extension point between *Action1* and *Action2*, a decision node is added after *Action1*, which allows transition either to the *Action2* or to the extending use case. Afterwards, the flow returns to the *Action2* via the merge node. Each of the use cases has its own swimlane.



- <http://sourcemaking.com/uml/modeling-business-systems/external-view/activity-diagrams>
- http://sce.uhcl.edu/helm/rationalunifiedprocess/process/modguide/md_bactd.htm



- Fix the problems from the previous week and finalize the textual specification of the chosen use cases.
- Select additional 2 use cases for which you will create the activity diagrams. They must be different from the use cases with the textual specification. The selection should be approved by the seminar tutor.
- Submit **pdf report** to the homework vault (**Seminar 04**).

Deadline:

- Saturday (Groups 03, 04)
- Monday (Group 11)
- Tuesday (Groups 06, 07)
- Wednesday ([06:00 AM] Groups 08, 09)



Rules for report submission

- 1 Submit the PDF report, not the VP source file and not an exported image.
- 2 PDF report must be created using the procedure shown on the seminars including the report settings.
- 3 The name of the PDF report file should be *lastname1-lastname2-lastname3* of the team members.
- 4 PDF report must contain all diagrams modelled until now.
- 5 PDF report must be uploaded to the homework vault by the specified deadline.
- 6 PDF report must be uploaded to the correct homework vault. The name of the homework vault is always specified on the slides.
- 7 Each team uploads only a single PDF report for the whole team.
- 8 Submitted diagrams must be clear and readable.
- 9 Submitted diagrams should not contain serious mistakes. At least, they should not contain mistakes mentioned in the *Catalogue of common mistakes*.



VP report settings

