# PB007

## 4. cvičení

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FI MU, podzim 2012

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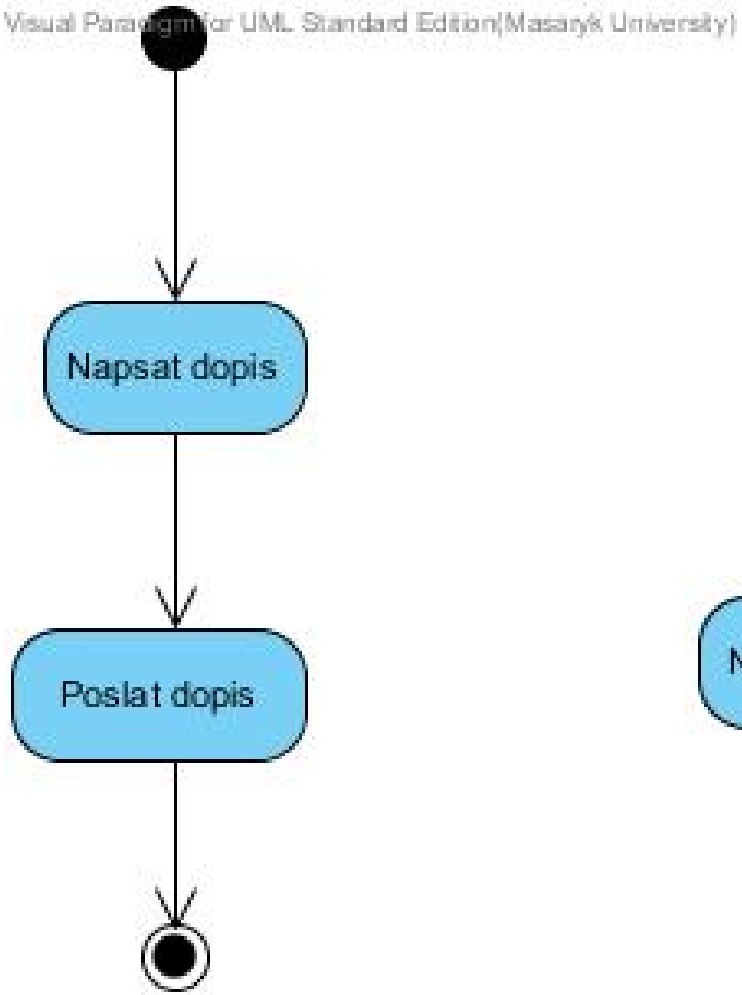
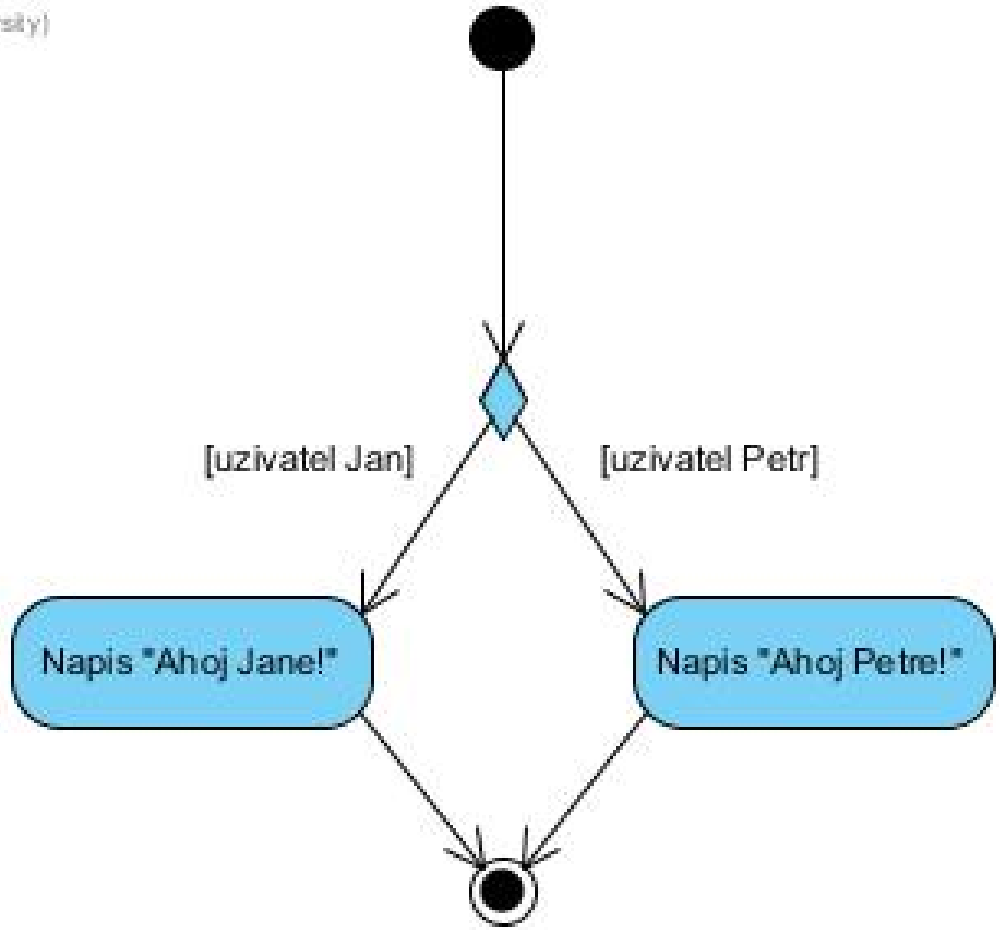
# Diagram aktivit

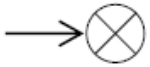
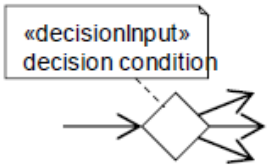
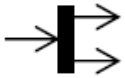
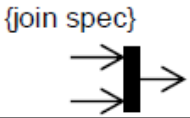


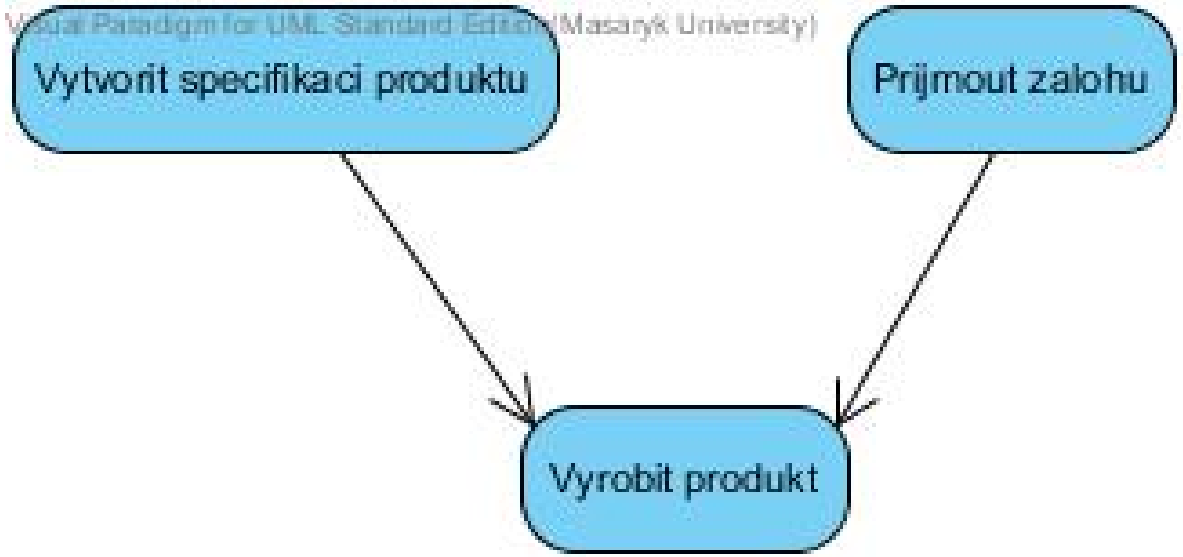
# Diagram aktivit

- UC (use case) – interakce aktéra a systému
- DA (diagram aktivit) – posloupnost akcí
- UC a DA jsou vzájemně se doplňující pohledy na stejné chování

# Diagram aktivit – tabulka řídících uzlů

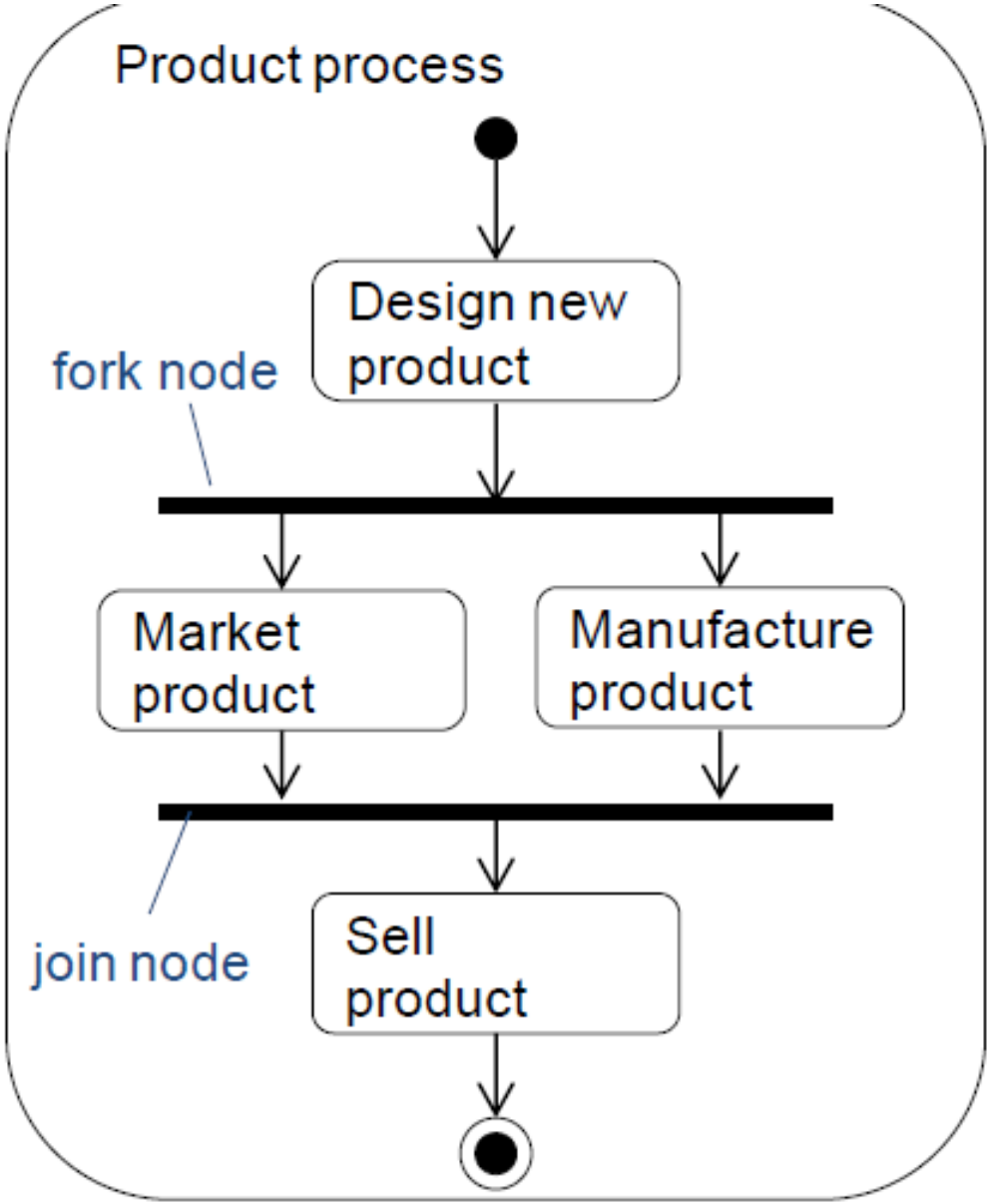
| control node syntax | control node semantics | |
|---|---|---|
|  | Initial node – indicates where the flow starts when an activity is invoked | |
|  | Activity final node – terminates an activity | Final nodes |
|  | Flow final node – terminates a specific flow within an activity. The other flows are unaffected | |
|   | Decision node– guard conditions on the output edges select one of them for traversal<br>May optionally have inputs defined by a «decisionInput» | See examples on next two slides |
|  | Merge node – selects *one* of its input edges | |
|  | Fork node – splits the flow into multiple concurrent flows | |
|   | Join node – synchronizes multiple concurrent flows<br>May optionally have a join specification to modify its semantics | |

# Diagram aktivit – notace Petriho sítí

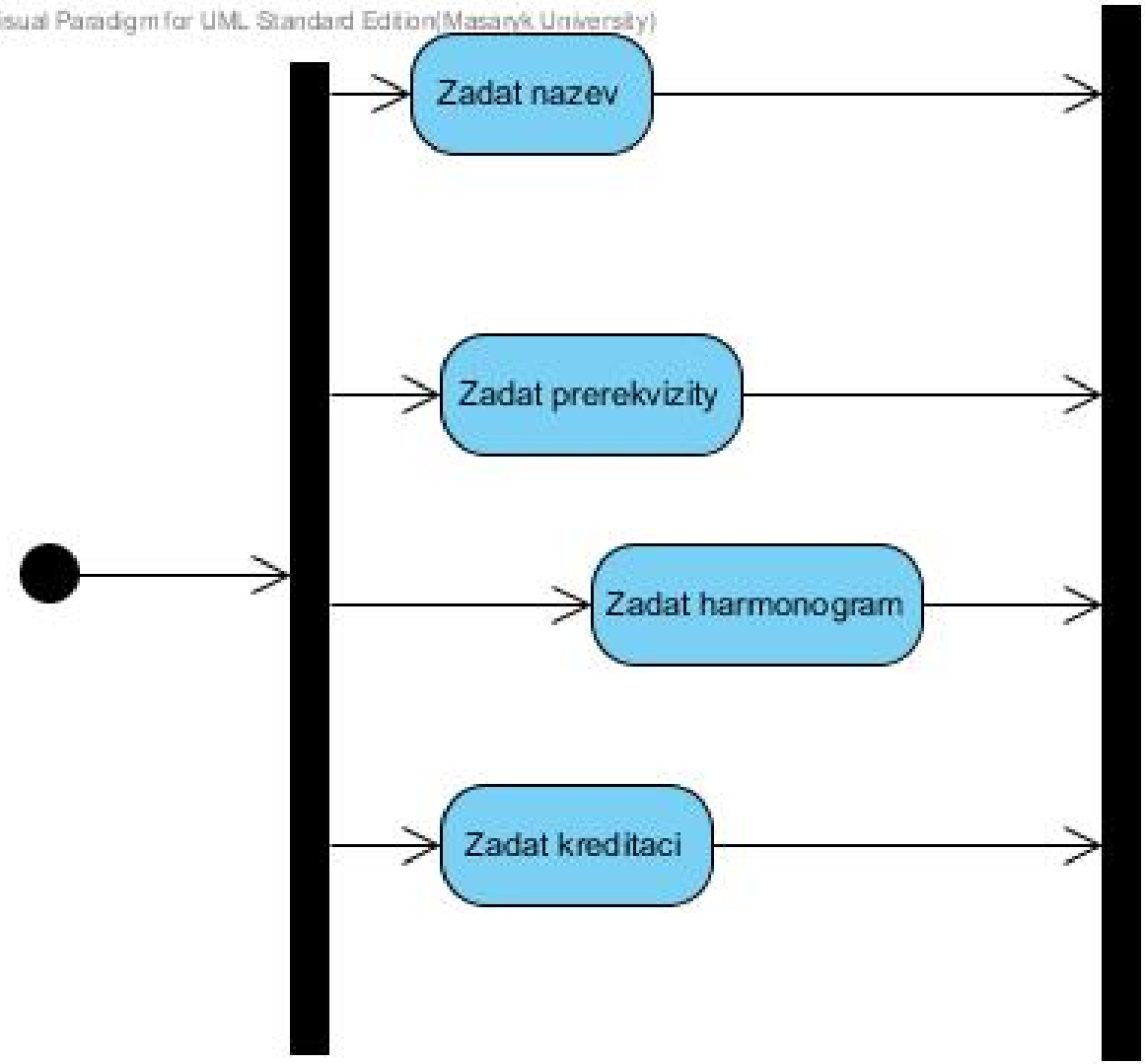



akce *Vyrobit produkt* je spuštěna až poté co skončí obě akce:
*Vytvořit specifikaci produktu* **a** *Přijmout zálohu*

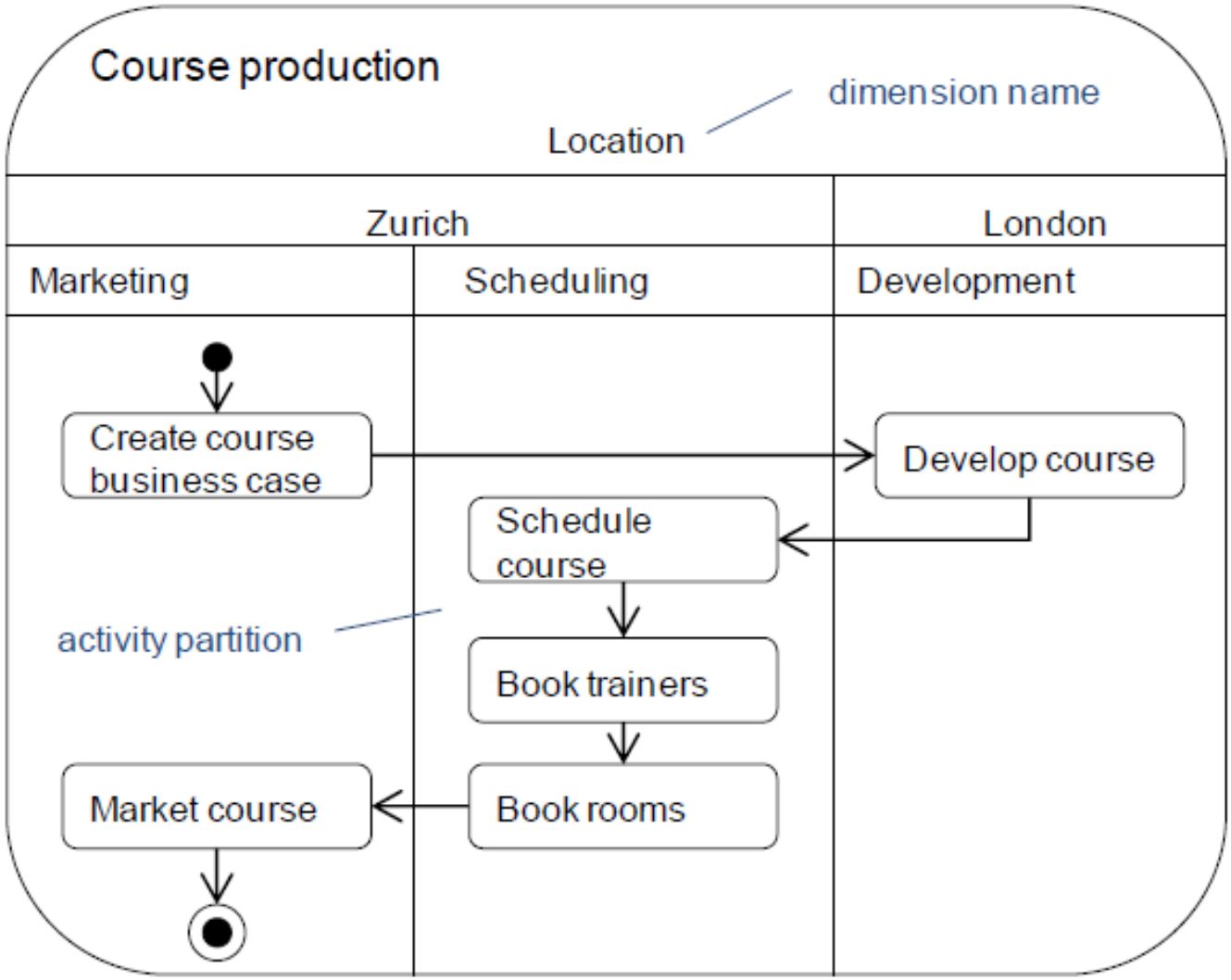
# Diagram aktivit – souběžnost



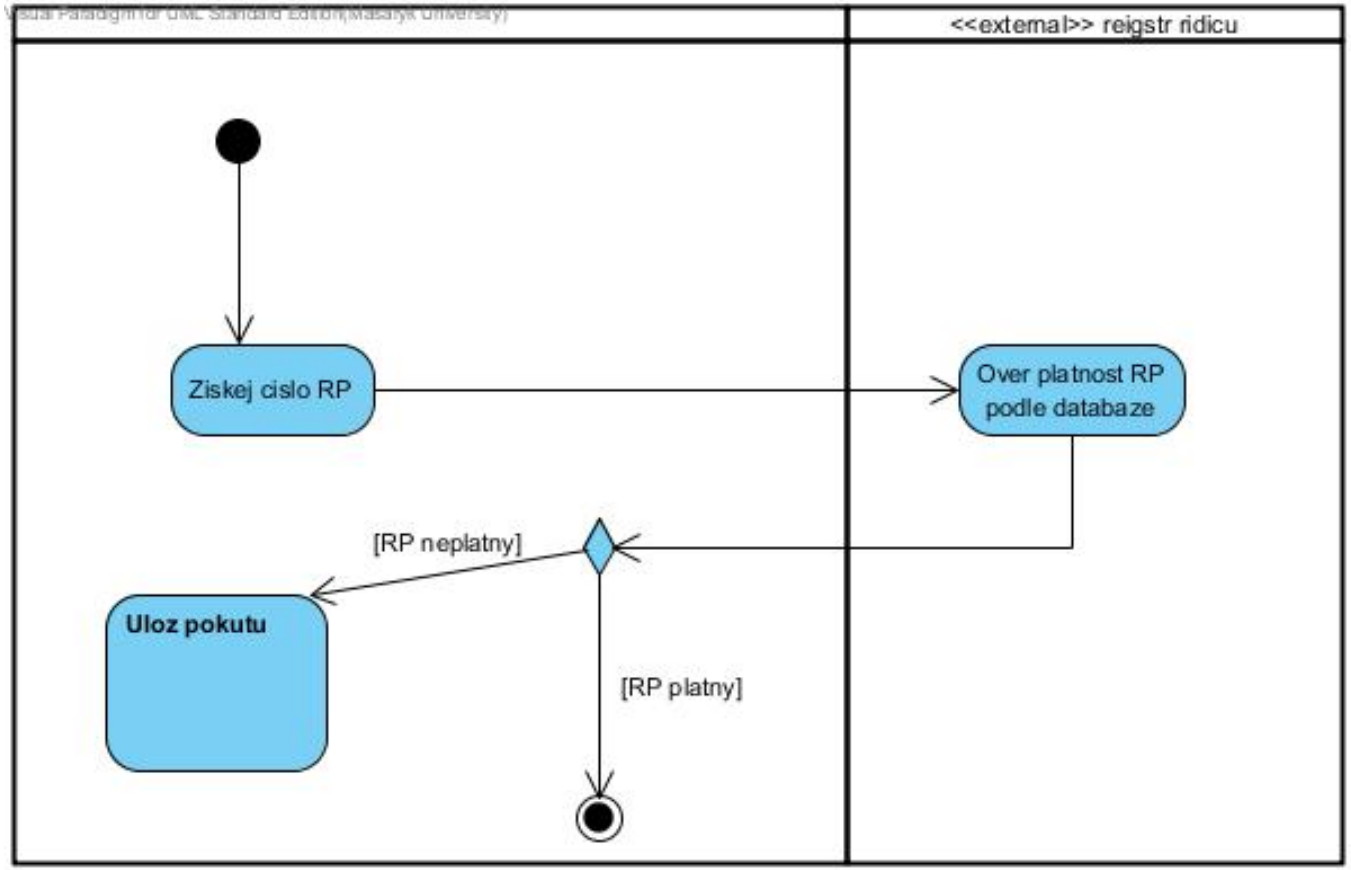
# Diagram aktivit – souběžnost



# Diagram aktivit – oddíly

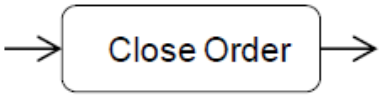
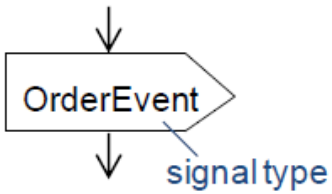
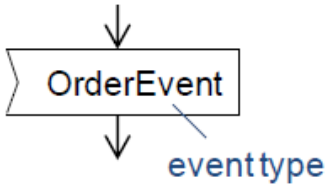
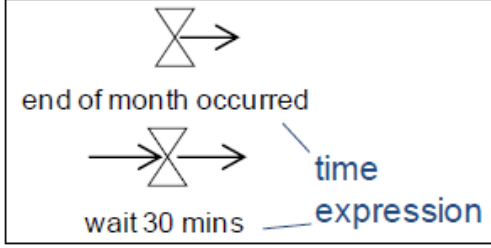


# Diagram aktivit – interakce s externím systémem

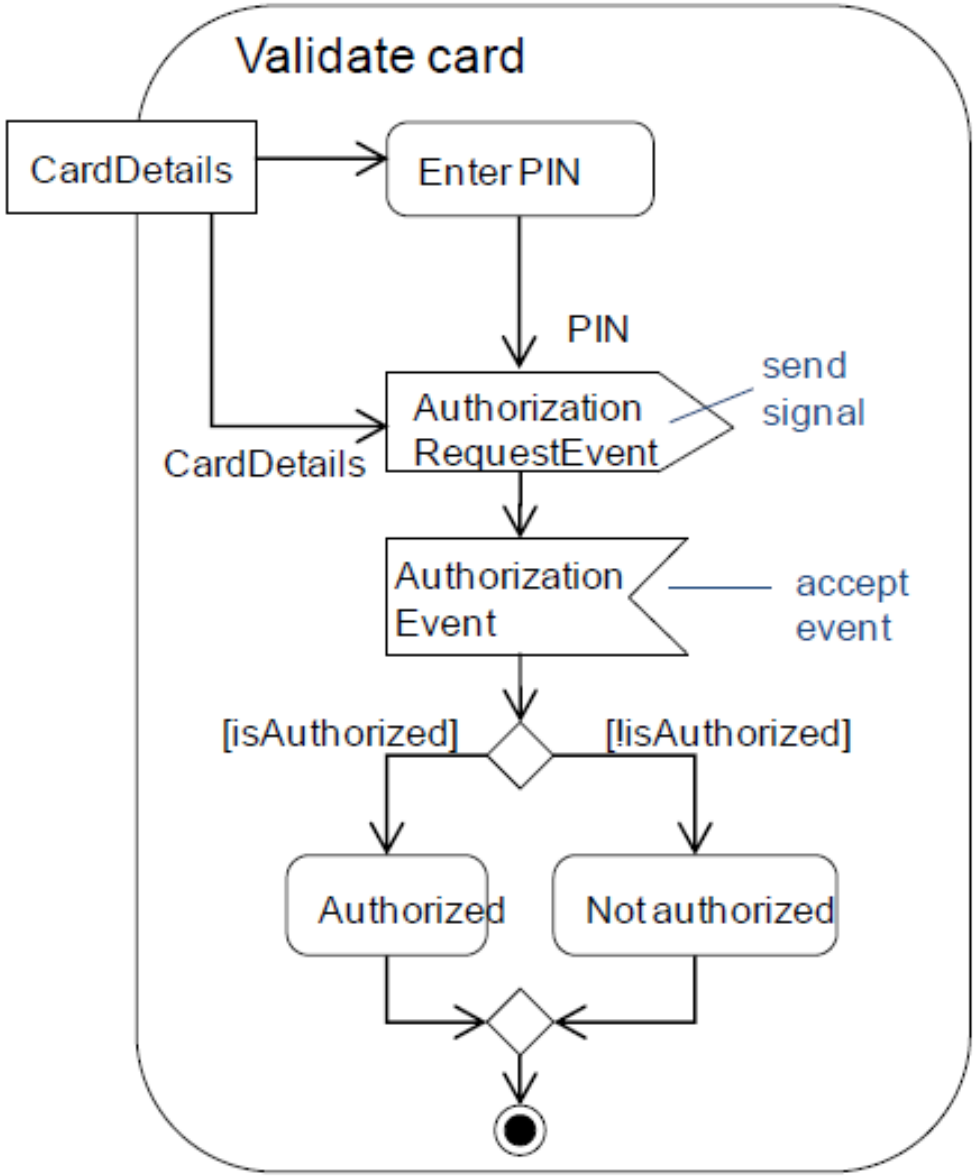



– externí oddíl není součástí systému

# Diagram aktivit – akční uzly

| action node syntax | action node semantics |
|---|---|
|  | Call action - invokes an activity, a behavior or an operation.<br>The most common type of action node.<br>See next slide for details. |
|  | Send signal action - sends a signal asynchronously.<br>The sender *does not* wait for confirmation of signal receipt.<br>It may accept input parameters to create the signal |
|  | Accept event action - waits for events detected by its owning object and offers the event on its output edge.<br>Is enabled when it gets a token on its input edge.<br>If there is *no* input edge it starts when its containing activity starts and is *always* enabled. |
|  | Accept time event action - waits for a set amount of time.<br>Generates time events according to it's time expression. |

# Diagram aktivit – signály, objekty



# Domácí úkol

- popsat několika větami každý případ užití (Use case details → Info)
- detailní rozpracování textové specifikace 3 případů užití, v diagramu UC je označit světle žlutou
- vybrat další 1-2 případy užití, zdokumentovat je pomocí diagramů aktivit

– do středy 24. 10. 2012, 20:00, odevzdávárna PB007 → Týden 04

# PDF report – minimální