Imtroduction to BPMN - III

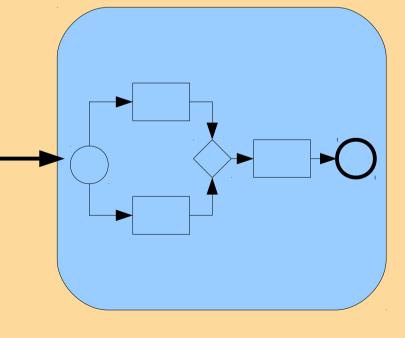
Rushikesh K Joshi IIT Bombay

- Task
 - atomic activity within a process flow

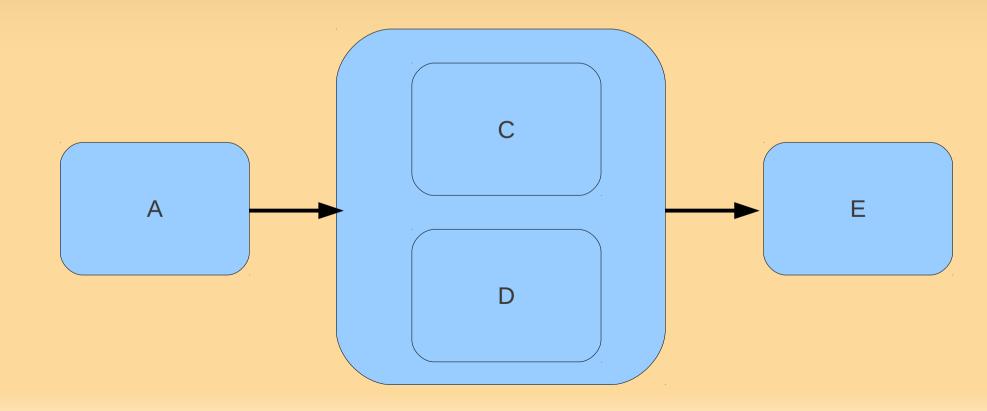
Collect receipt

 Cannot be further broken down

- Subprocess
 - An activity which is expanded further
 - The figure shows an expanded subprocess

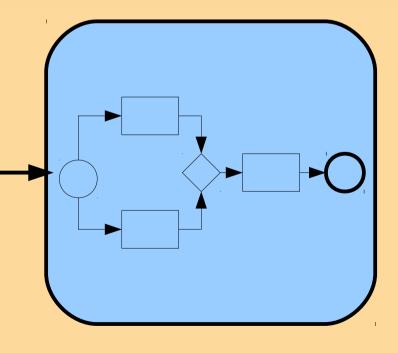


Parallel boxes in Subprocess



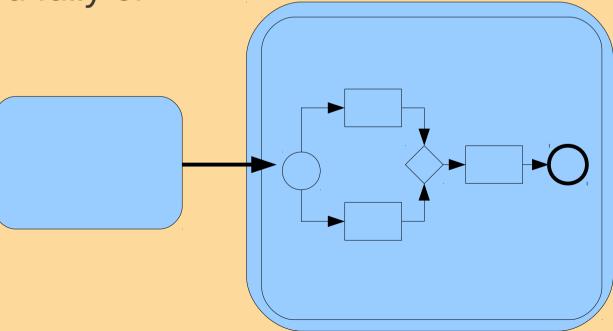
- Call Activity
 - A global process or a global task is used
 - Execution is transferred to the global task/process
 - Shown with a thick boundary





- Transactions
 - A subprocess
 - Double line boundary is used

Should be completed fully or cancelled

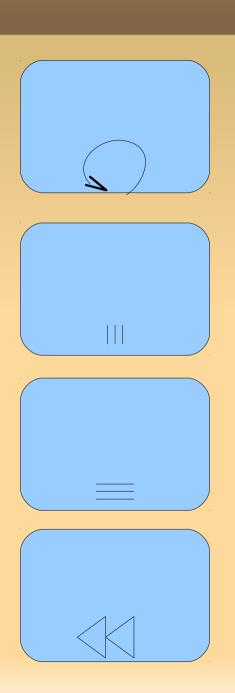


Looping

Multi Instance parallel

Multi-instance sequential

Compensation:



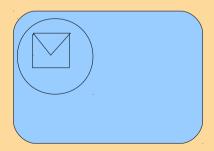
Send task

Receive task

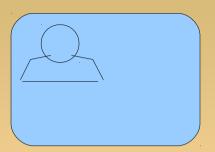
 Receive Task that instantiates a process



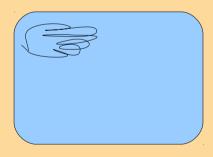




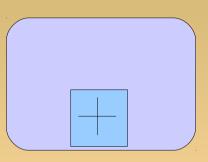
- User task
 - User performs it through software



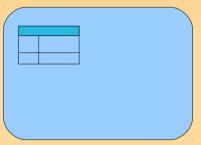
- Manual task
 - Performed entirely manually



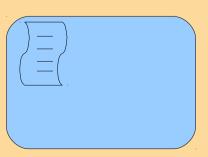
Collapsed subprocess



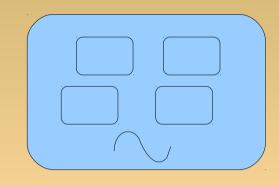
Business rule task



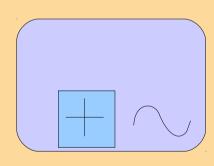
Script task



 Ad-hoc subprocess: activities in it do not have sequence relationship



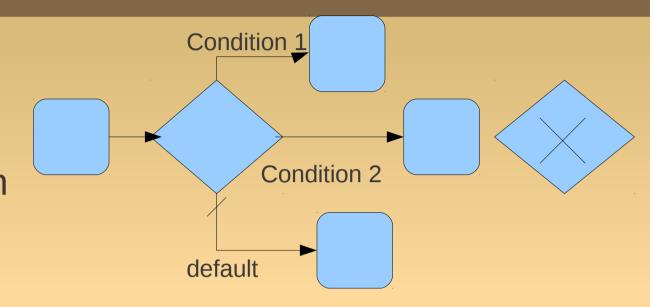
 Collapsed Ad hoc subprocess



Gateways

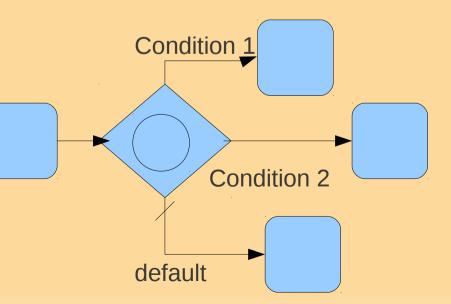
Exclusive

 only one of the diversions is taken



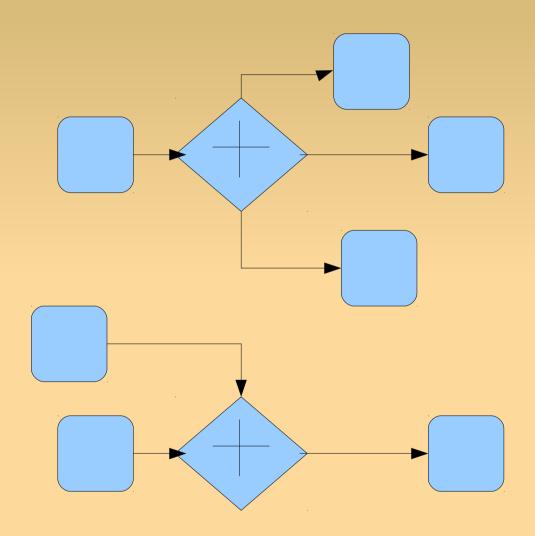
Inclusive

 All conditions are evaluated and all true evaluations are followed (it could be zero to all paths)



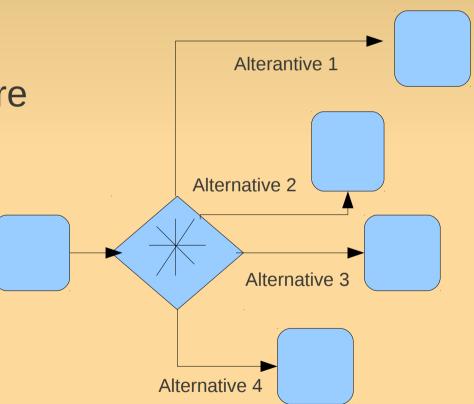
Gateways

- Parallel
 - Converge parallel flows
 - Diverge parallel flows



Gateways

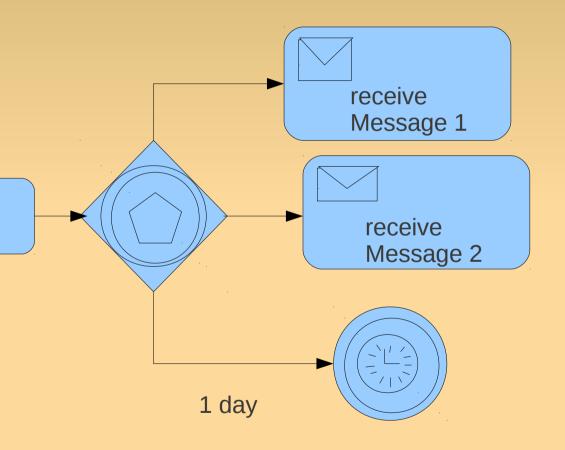
- Complex
 - A complex synchronization
 - K out of m tokens are produced



Event based Gateways

Event based

- e.g. When a message arrives follow the gateway
- The decision gets made by another participant from where a message arrives
- Gateway does not get followed due to the process itself
- Outgoing flow does not carry a connditional expression
- the figure shows use of receive tasks and timer event



Event based Gateways

Event based

- e.g. When a message arrives follow the gateway
- The decision gets made by another participant from where a message arrives
- other events may be used
- Gateway does not get followed due to the process itself
- Outgoing flow does not carry a connditional expression
- the figure shows use of intermediate message events, timer event

