

ToiletPaper #89

Integration of business processes – made easy with Camunda

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✗ Problem

In our daily project work, we often encounter complex business processes that we have to depict in existing software for the customer. In many cases, you obtain or create a process diagram in "PowerPoint Notation" based on customer requirements and implement e.g. a state machine that corresponds to the process.

But such an individual solution is usually very inflexible and process changes might cause a divergence between output diagram and code.

✓ Solution

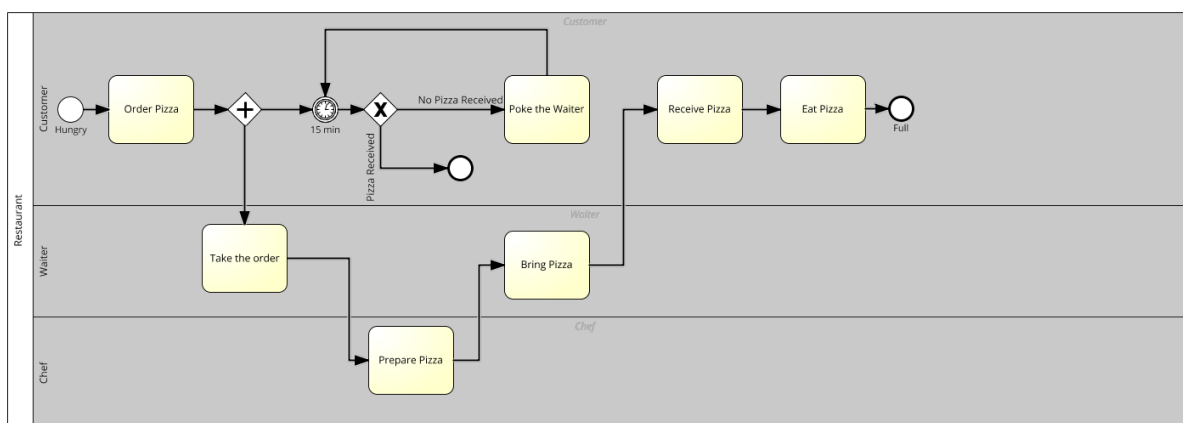
There are several workflow management systems that can be integrated into existing software projects in different ways. In two ABI projects, we chose to work with Camunda – an open source Java workflow engine that works with BPMN 2.0, DMN 1.1, and CMMN 1.1 process definitions.

Camunda offers many advantages:

- Since the supported notations are standardized, you are not tied to a specific workflow engine
- A BPMN process is an XML document that can be visually modeled in editors together with the customer and can be processed by workflow engines
- Due to versionable processes, it is very easy to develop processes with the customer
- Business processes can be subdivided into sub-processes
- Camunda provides three web applications out-of-the-box to handle manual process tasks, to manage users and to monitor processes
- Camunda can be integrated in different ways, e.g. as a JAR library, as cluster-enabled standalone REST service or as container service

➔ Example

In the following, you can find a BPMN process to order a pizza in a restaurant. It consists of 3 lanes, one for the guest, for the waiter and for the cook.



+ Further aspects

- Camunda website: <https://camunda.com/>
- Examples of using Camunda: <https://github.com/camunda/camunda-bpm-examples>
- BPMN specification of the OMG: <http://www.bpmn.org>
- List of notable workflow management systems: https://en.wikipedia.org/wiki/Workflow_management_system#List_of_notable_WfMS