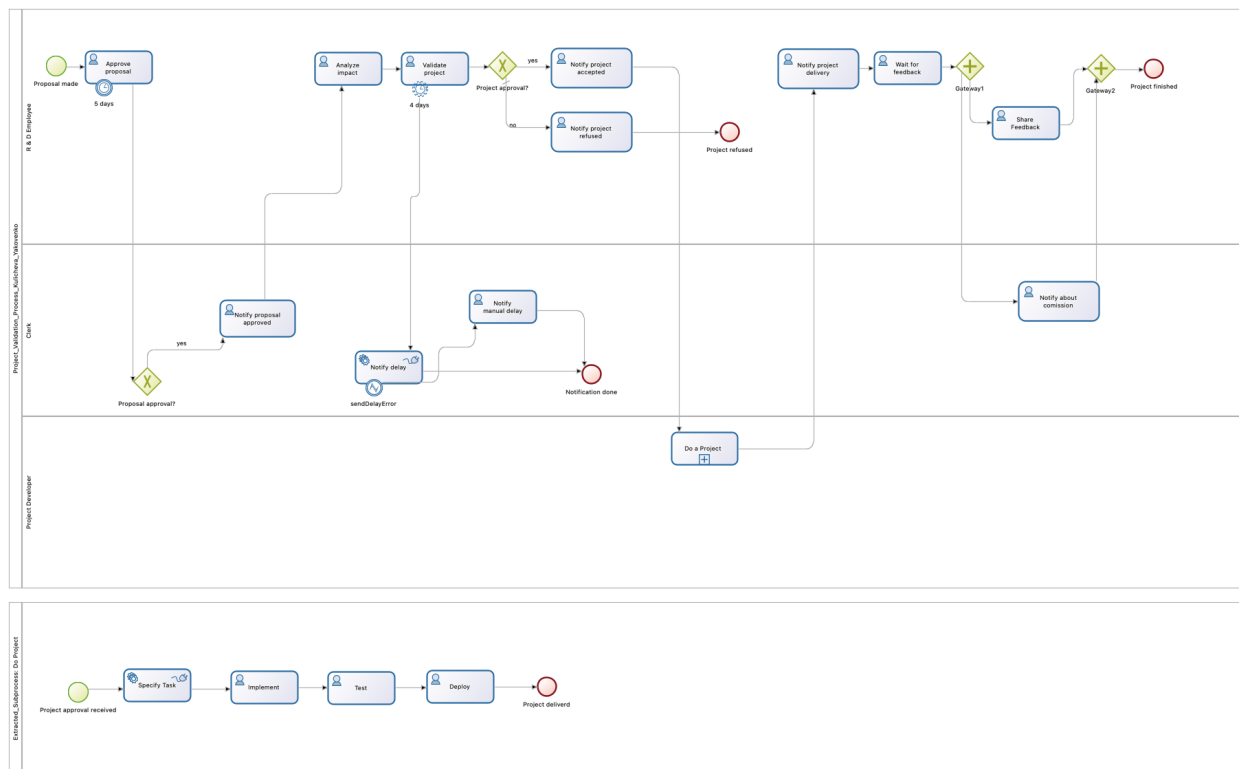


bonitabpmpproject

This is the Bonita BPM project for Process Engineering course at MoSiG M2 program completed by Elizaveta Kulicheva and Tetiana Yakovenko. We have presented our final diagrams and README.md in our [git repository](#). In this report we have answered the course questions, described our approaches and added some notes.

Final diagram



Answers for the questions:

Q_1 The model displays some errors. Do you know why?

We are observing an error because the output transitions from a XOR gateway must be default or conditional. We haven't used the forks for gateway such as "Yes" or "No" answers after the XOR gateway and in order to fix this error we have to add the condition. To do so we had to click on the connection leaving the gateway and add the conditions accordingly ([Source](#)).

Roughly speaking, without the definition of this logic on the semantic level in Bonita the model won't understand XOR gateway.

The screenshot shows the 'General' tab of a Bonita BPM configuration window. At the top, there is a toolbar with icons for General, Data, Execution, Appearance, Validation status (checked), Minimap, and Git Staging. Below the toolbar, the 'General' tab is selected, showing a 'Name' field, a 'Description' field, a 'Default flow' checkbox, and a 'Condition' section. The 'Condition' section has two radio buttons: 'Use expression' (selected) and 'Use decision table'. Below the radio buttons, there is a text input field containing the expression 'Proposal approval==true'. To the right of the text input field are icons for clearing the field, a dropdown arrow, and an edit icon.

Q_2 Why do we define variables at the process level?

A process variable is available throughout the life of a process. Process variables can be used to store data for transition conditions, and identifiers for business data stored in an external database. They are typically items of data which affect the path of the process, or are used at several steps of the process, but which become redundant, once the process instance has completed ([Source](#)). In our task we have to define variables to be able to use them properly during the whole process lifecycle.

Q_3 Why do we use operations in Bonita BPM?

Operations are used to instantiate case data objects, delete case data objects, or assign values to attributes of case data objects. One can also use an operation at a task to update the value of a search key ([Source](#)). The operations are utilized to store form inputs to register data objects after completing a user action. Also, they can be used for the user's script validation.

Q_4 Which are the human tasks that need a form? Why?

A human task is carried out by a person using a form to enter data or to receive information. Forms are needed for human tasks to make controlling and interacting with processes clearer in terms of UI ([Source](#)). Usually, every user activity has a user interface form associated with it. Forms creation is an easy process in Bonity that requires understanding of Javascript and CSS basics leveraging useful tools for creating user friendly looking interfaces.

Q_5 What happens if you try to realize the task Approve proposal after 15 seconds (suppose you define the timer with 15 sec)?

The task isn't available anymore. We have tested the timer functionality with various sequences of actions. After a given time has passed the task isn't executable anymore.

The screenshot shows a Bonita BPM task form. At the top, there is a dark blue header bar. Below it, a light gray navigation bar contains tabs for 'Form', 'Comments', and 'Overview'. A red error message box is displayed over the form, stating: 'An error occurred while submitting the form. The task may not be available anymore.' Below the error message, there is a 'Case ID' input field and a search icon. A dark gray warning banner is also visible, stating: 'To fill out the form, you need to take this task. This means you must do it. To make it available to the team again, release it.' Below the banner, the text 'Notify proposal re' is visible, followed by a green 'Execute' button. At the bottom, there is a table with columns for 'Process name' and 'Due date'. The table shows 1 - 2 / 2 items, with a gear icon for settings.

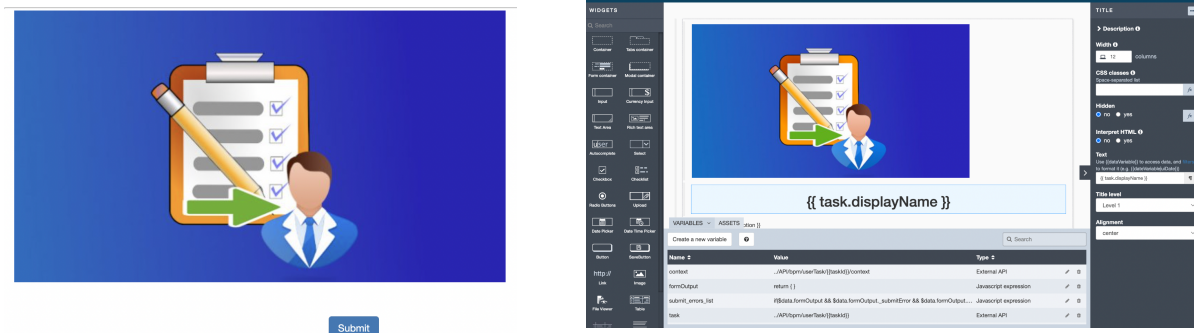
Q_6 Why should we not use a terminate event in this case?

We still need to communicate the notification about project refusal. If we were to use the terminate event, all tokens would be terminated and this layout would not follow the logic of our diagram

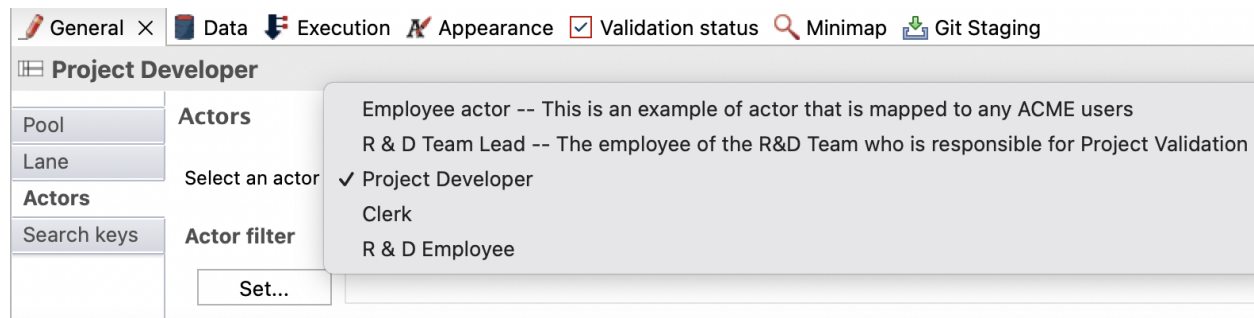
Extension

- 1) We added lanes **Clerk**, **R & D employee** and **Project developer** to separate the different roles in the process.
- 2) We added a sub-process called **Do project**, that develops the 'Do Project' activity with the **Specify Task**, **Implement**, **Test** and **Deploy** tasks.
- 3) We created a connector to an oracle database in order to add new project data to the data warehouse. However, our connector is mocked because we don't have a database and the credentials to access it. This is causing an error in Bonita.

4) We adjusted the **Specify** task in the subprocess **Do project** with a form containing image and submit button.

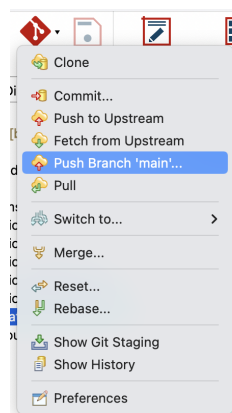


5) Before, in our diagram any user could execute all the tasks. We changed our diagram so that the initiator assigns the task to the user who initiated the process, the one who approved the proposal.



Instructions on working in Git

To work collaboratively we have set up the git repository to share our steps and to be able to reproduce project progress better. However, we faced some issues with the repository connection. In order to authenticate and bind Bonita and Git we used a guide and created a personal token that allowed us to push/pull our changes using HTTPS ([Source](#), [Guide on token creation](#)).



Personal access tokens (classic)

[Generate new token](#)

[Revoke all](#)

Tokens you have generated that can be used to access the [GitHub API](#).

bonita — admin:enterprise, admin:gpg_key, admin:org, admin:org_hook, admin:public_key, Last used within the last week

admin:repo_hook, admin:ssh_signing_key, codespace, delete:packages, delete_repo, gist, notifications, project, repo, user, workflow, write:discussion, write:packages

Expires on Sun, Dec 11 2022.

[Delete](#)

Personal access tokens (classic) function like ordinary OAuth access tokens. They can be used instead of a password for Git over HTTPS, or can be used to [authenticate to the API over Basic Authentication](#).