



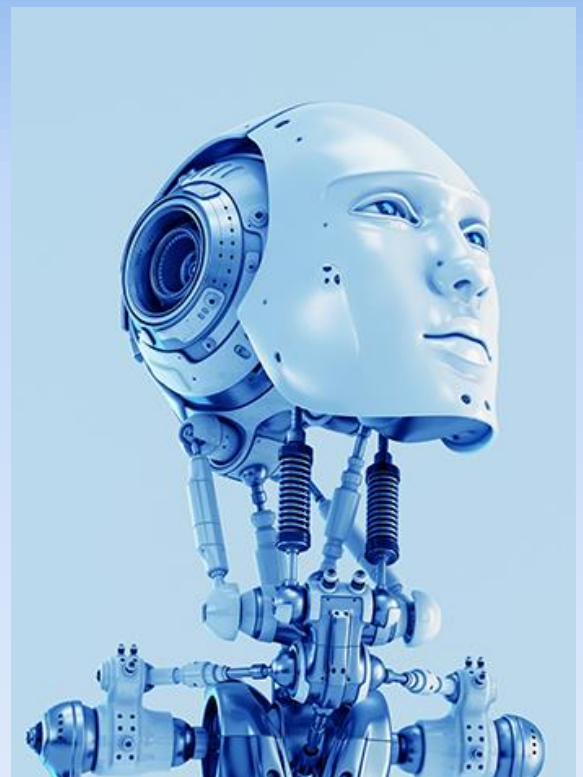
Individual Project

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Candidate Screening System Candidate Screening System

Project Report



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Executive Summary

This is a simple application to help recruiters screen the many profiles that are submitted for the various available positions.

This application makes use of the KIE Workbench for the workflow, as well as the Decision Tree to execute the main logic.

Business Problem Background

Matching the right candidate for a particular vacancy has become increasingly challenging as more variations in skillsets emerge in the new information centric economy.

Filtering through the hundreds, and sometimes thousands, of profiles is one reason that many recruiters spend less time on value added tasks like interacting with suitable candidates and keeping up with recruiters requirements.

Imagine the scenario where we may end up placing the less suitable candidates in the job positions, or reaching out to the suitable ones too late.

We need a better way to streamline the screening process, for which the requirements are spelled out in a job scope. And we need to be able to filter through the many profiles quickly and reach out to the right candidates before they move on to other pastures.

Project Solution

This application does a quick screening by getting the candidate to fill in some vital details about himself/herself.

Due to time constraint, the application is deliberately made simple. However, it can be extended with added data objects and workflow details to suit a real recruitment situation.

Implementation

Data Objects

In this simple setup, only 4 data objects are created.

- 1) consulting – whether the candidate has a consulting background
- 2) proceed – flag indicating ‘proceed’ to hire
- 3) programming – possess programming experience
- 4) yrsExp10 – more than 10 Years of Experience

The idea behind this setup is to match a suitable candidate who would meet some requirements across the 3 main factors (1) Consulting background, (2) Programming skills, (3) Extensive experience.

KIE Workbench

localhost:8080/jbpm-console/kie-wb.jsp?locale=en_US#LibraryPerspective%7C\$ProjectScreen,BPMNDiagramEditor?path_uri=def

GitHubKaggleScikit LearnKerasRRStudioKD Nuggetsfast.aiTranslatePDFPDFBinder

KIE IDEMenu

Spaces » Candidate-Screening » Candidate-Screening-Proj » master » ScreeningDO

ScreeningDO.java - Data Objects

ModelOverviewSource

ScreeningDO

+ add field

Identifier	Label	Type	
consulting	Consulting Background	Boolean	Delete
proceed	Proceed to Next Step	Boolean	Delete
programming	Programming Exp with Java and/or Py...	Boolean	Delete
yrsExp10	More Than 10 Years Exp	Boolean	Delete

Implementation

WORKFLOW

The workflow has a Business Rule task to execute the logic using the Decision Tree, as per the Rule Flow Group setting below.

After this step, the Recruiter will take over if the result is a match.

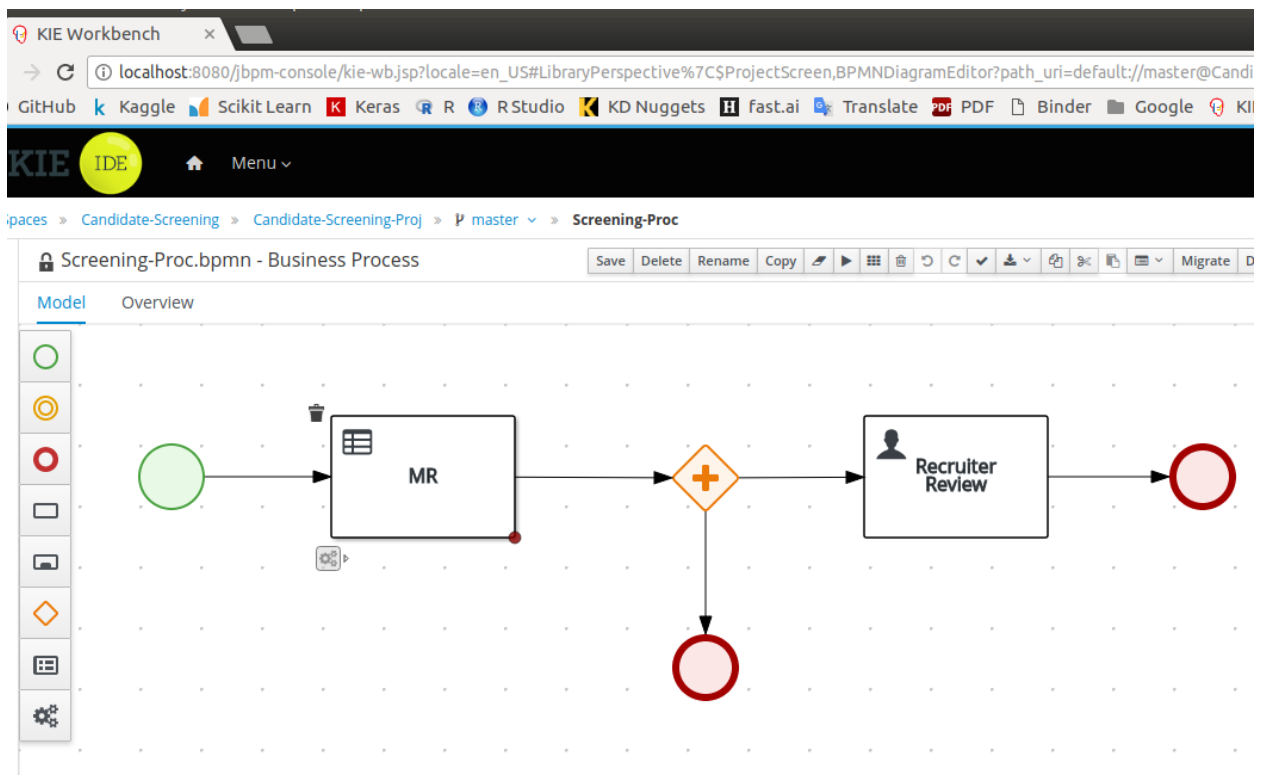
Otherwise, the profile goes out of the workflow and ends.

Implementation/Execution

Rule Flow Group

ScreeningDT

On Entry Action



Implementation

Decision Tree

Using the Decision Tree, the filtering is carried out based on the logic. The value for Proceed is default to False.

- 1) IF Consulting Background
AND Programming Skills
AND >10 Years Experience
THEN Proceed
- 2) IF Consulting Background
AND Programming Skills
THEN Proceed
- 3) IF Programming Skills
AND >10 Years Experience
THEN Proceed

The screenshot shows the KIE Workbench IDE interface. The browser address bar indicates the URL: `localhost:8080/jbpm-console/kie-wb.jsp?locale=en_US#LibraryPerspective%7C$ProjectScreen,BPM`. The KIE IDE logo is visible in the top left. The breadcrumb navigation shows: `Spaces > Candidate-Screening > Candidate-Screening-Proj > master > ScreeningDT`. The main view is titled `ScreeningDT.gdst - Guided Decision Tables` and has tabs for `Model`, `Columns`, `Overview`, `Source`, and `Data Objects`. The `Model` tab is active, displaying a table with 7 rows and 6 columns. The columns are: `#`, `Description`, `Consulting Background`, `Programming Exp`, `Years Exp`, and `Action`. The table contains 7 rows of data, each with a number in the `#` column, a blank `Description` column, and checkboxes in the other four columns. The `Action` column contains a checkmark for rows 1, 2, 3, and 4, and is empty for rows 5, 6, and 7.

#	Description	Consulting Background	Programming Exp	Years Exp	Action
1		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

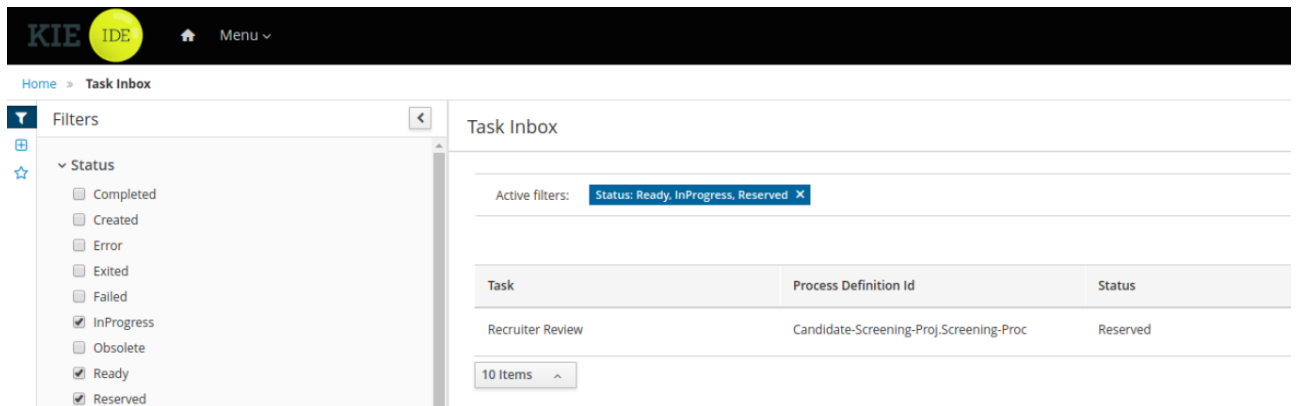
Project Validation

Executing the Workflow

The user iss-barry logs in to execute the workflow with the screen showing the status below.

He will Start the process, and then Complete it to end the workflow.

For the test scenario, a positive set of inputs were given such that the Proceed flag becomes True.



The screenshot displays the KIE IDE interface, specifically the Task Inbox. The top navigation bar includes the KIE IDE logo, a home icon, and a menu dropdown. Below the navigation bar, the breadcrumb path "Home > Task Inbox" is visible. On the left, a "Filters" panel is open, showing a "Status" section with checkboxes for various task states: Completed, Created, Error, Exited, Failed, InProgress (checked), Obsolete, Ready (checked), and Reserved (checked). The main area, titled "Task Inbox", shows "Active filters: Status: Ready, InProgress, Reserved" with a close button. Below this, a table lists tasks. The table has three columns: Task, Process Definition Id, and Status. One task is visible: "Recruiter Review" with Process Definition Id "Candidate-Screening-Proj.Screening-Proc" and Status "Reserved". At the bottom of the table, a "10 Items" dropdown is shown.

Task	Process Definition Id	Status
Recruiter Review	Candidate-Screening-Proj.Screening-Proc	Reserved