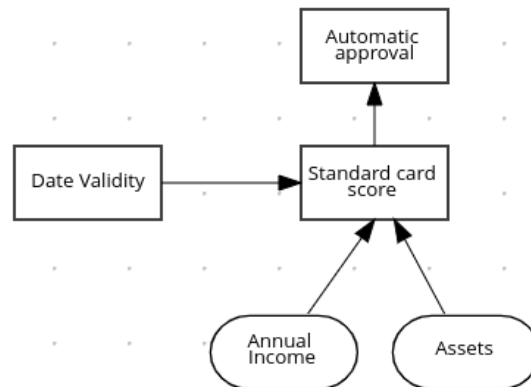


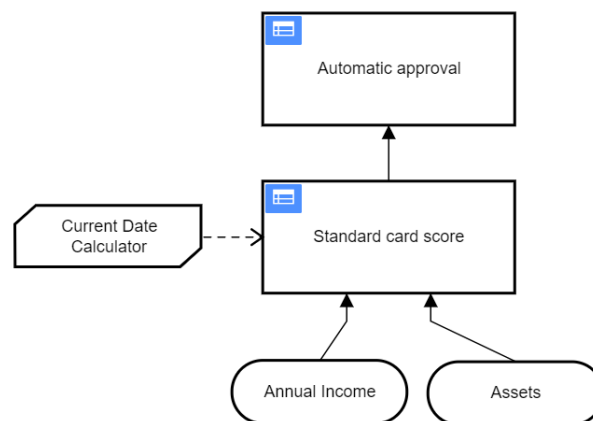
Card Approval Decision – DMN solution using Camunda



Description: You need to create a decision model that produces a card approval decision following a simple diagram given above. Based on the Current Date, Annual Income, and Assets it calculates the Standard Card Score. If the score ≥ 350 , the decision is “Approve”, otherwise the decision is “Reject”. Here is the decision table for Card Score calculation:

I used Camunda modeler version 4.11.1, which supports DMN 1.3, to make this solution.

DRD:



Decision Table for calculating Standard card score:

I used the `date and time("yyyy-mm-ddThh:mm:ss")` FEEL function to set the data type for input Current Date, and the default value is set using `today()`, which is also a function in FEEL supported by Camunda modeler.

Other inputs are Annual Income and Assets, which are integers.

Standard card score Hit Policy: Unique				
	When	And	And	Then
	Current Date	Annual Income	Assets	card_score
	date	integer	integer	integer
1	< date and time("2022-01-01T00:00:00")	< 50	< 100	312
2	>= date and time("2022-01-01T00:00:00")	< 50	< 100	350
3	-	< 50	[100..350]	458
4	-	< 50	>350	603
5	-	[50..80[	<100	416
6	-	[50..80[	[100..350]	562
7	-	[50..80[	>350	707
8	-	[80..100[	<100	468
9	-	[80..100[	[100..350]	614
10	-	[80..100[	>350	759
11	-	>100	<100	520
12	-	>100	[100..350]	645
13	-	>100	>350	811

Decision Table for the Automatic Approval Decision:

This is straight forward and simple table with only two rules

Automatic approval Hit Policy: Unique		
	When	Then
	card_score	Approval Decision
	integer	string
1	>=350	"Approve"
2	<350	"Reject"

Tests: I used camunda simulator <https://consulting.camunda.com/dmn-simulator/> to test the model.

Note that the default value for the current date is already set to today(), a function that updates the date to the date of decision execution.

Inputs:

Decision table: All tables

Standard card score

Current Date: 2021-11-16 00:00:00 date

Annual Income: 40 integer

Assets: 40 integer

Outputs:

Approval Decision: Reject

card_score: 312

Simulate now

Current date: 2021-11-18

	Annual Income	Assets	Card Score	Approval Decision
1	40	40	312	Reject
2	40	260	458	Approve
3	140	540	811	Approve