

## TOOL

Camunda DMN Simulator

<https://consulting.camunda.com/dmn-simulator/>

## Modeling a decision table in DMN

When opening the DMN online simulator, you will see the example, *Dinner Decisions* model. This model reflects a case of a dinner party. Here, we need to decide which dish we should prepare. This guide will show you how to model the “Dish” decision table.

The dish decision table is based on the decision logic:

*The choice of the dish depends on the current season.*

1. Select **Create Decision** and place the decision in the canvas.
2. While the decision is selected, click on the wrench icon and choose **Decision Table**. This will create a green decision table icon in the upper left corner.



3. Click on the green decision table icon in the upper left corner to access the decision table. (To go back to see the model click on the **View DRD** button in the upper left corner.)
4. Start by setting the name of the decision to e.g. “Dish”.

A screenshot of the Camunda DMN simulator decision table editor. The decision name is "Dish". The Hit Policy is set to "Unique". The decision table has two columns: "When" and "Then". The "When" column has a single row with a "-" sign. The "Then" column has a single row with a "+" sign. The data type for the "Then" column is "string". There is an "Annotations" column on the right. The BPMN.iO logo is in the top right corner.

View DRD		Hit Policy: Unique		BPMN.iO	
When	Then	Annotations			
-	+				
	string				

5. The **Hit Policy** is set next to the name. For this example, set it to “Unique”.

5. The **When** cell is the input data. Double click on **When** to set
- the name to “Season”,
  - the **Expression** to “season”,
  - the **Expression Language** to “feel” and
  - the **Type** to “string”.
- Leave the remaining values as they are and click outside the pop-up to save and close it.

When

Season

Expression  
season

Expression Language  
feel

Input Variable  
cellInput

Type:  
string

6. The **Then** cell is the output data. Double click on **Then** to set
- the name to “Dish”,
  - the **Output Name** to “desiredDish” and
  - the **Type** to “string”.
- Click outside the pop-up to save and close the pop-up.

Then

Dish

Output Name  
desiredDish

Type:  
string

7. Click on the green plus icon on the left-hand side to add a row in the table.
8. Add the following rows and remember to write the input and output entries in quotation marks (“”):

Dish		Hit Policy: Unique
	When	Then
	Season	Dish
	string	string
1	"Fall"	"Spareribs"
2	"Winter"	"Roastbeef"
3	"Spring"	"Steak"
4	"Summer"	"Light Salad and nice Steak"
+	-	

10. Add additional inputs by clicking on the plus **+** -icon between the **When** and **Then** columns. This will create the **And** input column.

Dish		Hit Policy: Unique	BPMN.IO	
	When	And	Then	
	Season	How many guests	Dish	Annotations
	string	integer	string	
1	not("Fall", "Winter", "Spring", "Summer")	>= 0	"Instant Soup"	Default value
2	"Fall"	<= 8	"Spareribs"	
3	"Winter"	<= 8	"Roastbeef"	
4	"Spring"	<= 4	"Dry Aged Gourmet Steak"	
5	"Spring"	[5..8]	"Steak"	Save money
6	"Fall", "Winter", "Spring"	> 8	"Stew"	Less effort
7	"Summer"	-	"Light Salad and a nice Steak"	Hey, why not?
+	-	-		

# Simulate decision

Above your model, you are able to simulate your decision tables.

Inputs: Decision table:  Outputs: Dish:

Dish

Season:  string

How many guests:  integer

	When	And	Then	
	Season	How many guests	Dish	Annotations
	string	integer	string	
1	not("Fall", "Winter", "Spring", "Summer")	>= 0	"Instant Soup"	Default value
2	"Fall"	<= 8	"Spareribs"	
3	"Winter"	<= 8	"Roastbeef"	
4	"Spring"	<= 4	"Dry Aged Gourmet Steak"	
5	"Spring"	[5..8]	"Steak"	Save money
6	"Fall", "Winter", "Spring"	> 8	"Stew"	Less effort
7	"Summer"		"Light Salad and a nice	How. why not?

1. Choose the decision table that you want to simulate at **Decision table**.
2. As seen from the table, the decision table has two inputs. Type in a season under **Season** and a number under **How many guests**.  
NOTE: Strings should not be written in quotation marks (") here.
3. Click on **Simulate now**.

Inputs: Decision table:  Outputs: Dish:

Dish

Season:  string

How many guests:  integer

	When	And	Then	
	Season	How many guests	Dish	Annotations
	string	integer	string	
1	not("Fall", "Winter", "Spring", "Summer")	>= 0	"Instant Soup"	Default value
2	"Fall"	<= 8	"Spareribs"	
3	"Winter"	<= 8	"Roastbeef"	
4	"Spring"	<= 4	"Dry Aged Gourmet Steak"	
5	"Spring"	[5..8]	"Steak"	Save money
6	"Fall", "Winter", "Spring"	> 8	"Stew"	Less effort
7	"Summer"		"Light Salad and a nice	How. why not?

4. The row in the table that matches the input will be highlighted in blue and the **Output** will be shown under Outputs.