

## Stage 1: Create a question set (Form).

As per the course create a question set that you would like to assess:

I have used the following Questions:

1. What is the capital of England? (**Free Text**) – I have used the convert to uppercase on further question options to allow for simpler assessment.
2. What is the capital of France? (**Multiple Choice**)
3. Is Berlin the capital of Germany? (**Yes/No**)
4. Submit (Button) – This will run the **Expression Group** and then redirect to the Summary Page

**\*Please note questions 1-3 need to have been added to the expression parser\***

The screenshot displays the KnowledgeKube application window. The title bar reads "KnowledgeKube". The menu bar includes "File", "Edit", "Model", "Question Groups", "Question", "Response", "Documents", "Security", "Tools", and "Help". The main window shows a "Your Model" sidebar with "Definition", "Properties", and "Layer Management" options. The central area displays the configuration for "ExampleModel-Model" with the following details:

- Number: Not Defined, Reference: ExampleModel
- Effective Date: 15/04/2016, Expiry Date: 15/04/2017

Name	Type	Description
QuestionSet	Form	Question set
FreetextQuestion	Free Text	
MultipleChoiceQuestion	Multiple Choice	
Responses		Type --Please Select-- London Paris Berlin
YesNoQuestion	Yes/No	
Responses		Type Yes No
SubmitButton	Button	
Expression		Value <code>RunExpressionGroup("ExpressionGroup"); ShowGroupForm("SummaryPage");</code>
ExpressionGroup	Expression Group	Expression Group

At the bottom of the window, the footer text reads: "KnowledgeKube Version 4.9.0.0. Copyright © 2006-16 by Mercato Solutions Limited".

## Stage 2: Create an Expression Group (Expression Group).

1. Create a Question of the type **Expression**
2. For each question – set the correct answer
3. Calculate whether or not the individual has answered the questions correctly or not
4. Calculate the percentage of correct responses;

```
1 //For each Question - set the correct answers;
2 FreetextQuestionResult:=
3     "LONDON";
4
5 MultipleChoiceQuestionResult:=
6     "Paris";
7
8 YesNoQuestionResult:=
9     "Yes";
10
11 //Calculate whether or not the individual has answered the questions correctly or not;
12 FreetextCorrectResult:=
13     if(FreetextQuestionResult = FreetextQuestion, 1, 0);
14
15 MultipleChoiceCorrectResult:=
16     if(MultipleChoiceQuestionResult = MultipleChoiceQuestion, 1, 0);
17
18 YesNoCorrectResult:=
19     if(YesNoQuestionResult = YesNoQuestion, 1, 0);
20
21 //Calculate the percentage of correct responses;
22 TotalCorrectResults:=
23     FreetextCorrectResult + MultipleChoiceCorrectResult + YesNoCorrectResult;
24
25 PercentageCorrect:=
26     (TotalCorrectResults / 3) * 100;
27
```

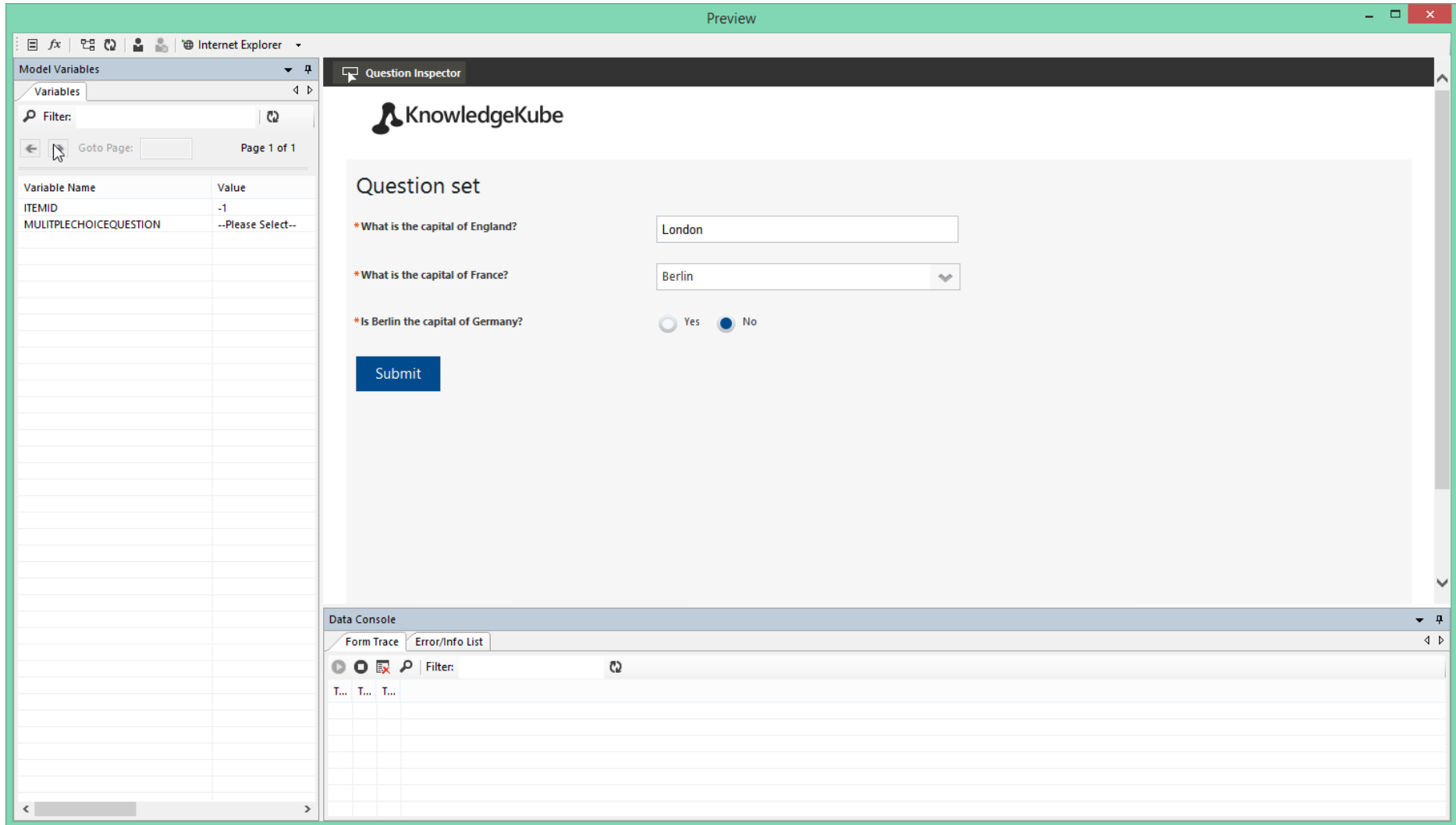
### Stage 3: Create a Summary Page (Form).

Now we will create a simple summary page that will show the overall results of the entries – I have chosen to use a 2 column layout. I have added **Read Only Text** question type and then used the **Mapped to Expression** question attribute to map the **Variable** to the question

SummaryPage		Form	SummaryPage	Checked out by you on 15/04/2016 08:23:29
FreeTextResponse	Read Only Text	----		
<b>Attributes</b>				
Type	Key	Value		
Mapped To Expression	N/A	FreeTextQuestion		
FreeTextCorrectAnswer	Read Only Text	----		
<b>Attributes</b>				
Type	Key	Value		
Mapped To Expression	N/A	FreeTextQuestionResult		
MultipleChoiceResponse	Read Only Text	----		
<b>Attributes</b>				
Type	Key	Value		
Mapped To Expression	N/A	MultipleChoiceQuestion		
MultipleChoiceCorrectAnswer	Read Only Text	----		
<b>Attributes</b>				
Type	Key	Value		
Mapped To Expression	N/A	MultipleChoiceQuestionResult		
YesNoResponse	Read Only Text	----		
<b>Attributes</b>				
Type	Key	Value		
Mapped To Expression	N/A	MultipleChoiceQuestion		
YesNoCorrectAnswer	Read Only Text	----		
<b>Attributes</b>				
Type	Key	Value		
Mapped To Expression	N/A	YesNoQuestionResult		
NumberOfCorrectResponses	Read Only Text	----		
<b>Attributes</b>				
Type	Key	Value		
Mapped To Expression		TotalCorrectResults		
PercentageCorrect	Read Only Text	----		
<b>Attributes</b>				
Type	Key	Value		
Mapped To Expression		round(1,2,PercentageCorrect) & "%"		

## Summary

Your form should then look something like this:



The screenshot displays a web browser window titled "Preview" showing a KnowledgeKube question set. The browser's address bar shows "Internet Explorer". The page features a "Question Inspector" toolbar at the top. On the left, a "Model Variables" panel is open, showing a table with two columns: "Variable Name" and "Value".

Variable Name	Value
ITEMID	-1
MULTIPLECHOICEQUESTION	--Please Select--

The main content area, titled "Question set", contains three questions:

- \*What is the capital of England? (Text input field containing "London")
- \*What is the capital of France? (Dropdown menu showing "Berlin")
- \*Is Berlin the capital of Germany? (Radio buttons for "Yes" and "No", with "No" selected)

A blue "Submit" button is located below the questions. At the bottom of the browser window, a "Data Console" is open, showing tabs for "Form Trace" and "Error/Info List". The "Form Trace" tab is active, displaying a table with three columns, each containing "T...".

Internet Explorer - Preview

Model Variables

Variables

Filter:

Goto Page: Page 1 of 1

Variable Name	Value
FREETEXTCORRECTANSWER	LONDON
FREETEXTCORRECTRESULT	1
FREETEXTQUESTION	LONDON
FREETEXTQUESTIONRESULT	LONDON
FREETEXTRESPONSE	LONDON
MULTIPLECHOICECORRECTANSWER	Paris
MULTIPLECHOICERESPONSE	Berlin
MULTIPLECHOICECORRECTRESULT	0
MULTIPLECHOICEQUESTIONRESULT	Paris
NUMBEROFCORRECTRESPONSES	1
PERCENTAGECORRECT	33.33%
TOTALCORRECTRESULTS	1
YESNOCORRECTANSWER	Yes
YESNOCORRECTRESULT	0
YESNOQUESTION	No
YESNOQUESTIONRESULT	Yes
YESNORESPONSE	No
ITEMID	-1
MULTIPLECHOICEQUESTION	Berlin

Question Inspector

**KnowledgeKube**

### SummaryPage

What is the capital of England?	LONDON	Correct Answer:	LONDON
What is the capital of France?	Berlin	Correct Answer:	Paris
Is Berlin the capital of Germany?	No	Correct Answer:	Yes
Number of correct responses:	1	Percentage Correct:	33.33%

Data Console

Form Trace Error/Info List

Filter:

Trace Item	Trace Details	Trace Value
FreetextQuestion	FreetextQuestion	FreetextQuestion=LONDON
MultipleChoiceQuestion	MultipleChoiceQuestion	MultipleChoiceQuestion=Berlin
YesNoQuestion	YesNoQuestion	YesNoQuestion=No
RunExpressionGroup[]:	ExpressionGroup: Start - 15/04/2016 10:05:48	
CalculateExpression	"LONDON"	FreetextQuestionResult=LONDON
CalculateExpression	FreetextQuestionResult	FreetextQuestionResult=LONDON
CalculateExpression	"Paris"	MultipleChoiceQuestionResult=Paris