Sub-Report tutorial for iReport

Lets create a sub-report call Employee's Address using sub-report features

Database Schema

Employee	
ID	integer
first-name	char(30)
last-name	char(30)

<u>Address</u>

ID	integer
Street	char(30)
City	char(30)
State	char(10)
Country	char(30)
Postal Code	char(30)

Each employee can have 0 or more address, we will use the sub-report feature in iReport to generate this Report.

We are assuming the tables are created and the data is populated.

- 1. Start iReport.
- 2. Click on the menu File->New

New report	
Report name: EmployeeAddress	ок
Page Size	Cancel
Preset Sizes: A4	
Width: 595 pixels	
Height: 842 pixels	
Orientation: Portrait	
Page Margin Columns Scriptlet More	
Page Margin	
Top: 20 pixels 💌	
Bottom: 20 pixels -	
Left: 30 pixels 💌	
Right: 30 pixels -	

3. Enter the name EmployeeAddress and press OK.

ew report	
Report name: EmployeeAddress	ок
Page Size	Cancel
Preset Sizes: A4	
Width: 595 pixels	
Height: 842 pixels	
Orientation: Portrait	
Orientation: Portrait	1
Page Margin Columns Scriptlet More	
Page Margin Columns Scriptlet More	
Page Margin Columns Scriptlet More Page Margin Top: 20 pixels	

4. Save the report by pressing Ctrl-S or File→Save from the menu.

- 5. Use the Database->Connection menu option to setup your JDBC option.
- 6. Use the Database->Query to setup rest of the fields and Click on Read fields, Register fields to Report and Save to Report and the close the window.

Report query		
Connection		
hsqldb		-
Report query		
select * from employee		
Field name	Field type	
ID	java.lang.Integer	
FIRST_NAME	java.lang.String	
LAST_NAME	java.lang.String	
Read fields Register fields	to report Save to report	<u>C</u> lose

7. Lets add a text-field by clicking text-field ICON from the toolbar in the detail band.

🖶 Prope	erties of e	leme	nt-3		
Common	Text Field	Text	properties	Hyper Link	
Expressio	n Class				
java.lang	g.Integer				•
Evaluatio	n time		Evaluation	group	
Now		-			×.
☐ Streto	h with overf	low	Г	Blank when	Null
Pattern					
					_
Textfield	Expression				
\$F{ID}					
100					1.1

8. Lets add another text field to detail band to show last name, first name.

Properties of el	ement-5 🛛 🛛
Common Text Field	Text properties Hyper Link
Expression Class	
java.lang.String	-
Evaluation time	Evaluation group
Now	
☐ Stretch with overflo Pattem	ow
Textfield Expression	
\$F{LAST_NAME} +	+", " + \$F{FIRST_NAME}

9. Save the Report by pressing Ctrl-S or the File→Save from the menu.

10. Let's compile and run the report now, we are just running master report at this time.

🔯 iReport C	Compiler Tool	
Input file name	C:\Programs\iReport-0.0.8\myReport\EmployeeAddress.xml	Select XML file
Connection	hsqldb Compile and preview as PDF exported re	eport 🗾
Query SQL	select * from employee	
C:\programs\j2	2sdk1.4.1_01\bin\java.exe -Dorg.xml.sax.driver=org.apache.xerces.parsers.SAXParse	er IReportCom
	ams\iReport-0.0.8\myReport\EmployeeAddress.xml leC:\Programs\iReport-0.0.8\myReport\EmployeeAddress.jasper	
	nable to compile with "sun.tools.javac.Main" compiler. *	
* Cause : java.	a.lang.ClassNotFoundException : sun.tools.javac.Main * th command line "javac" compiler. *	
Compilation run	inning time : 4236	
Opening conne		~
Compile		Close

11. Now let's setup 2 parameters for the sub-report

Fields	Variables	Parameters		
Field na	the second s	Class Type	Is for prompting	New
SUBRE	PORT	java.lang.String	true	Modify
				Delete

12. Put the complete path of the sub-report filename with the ".jasper" as the file extension.

13. Define the
parameter ID which
will be passed to the sub-report.

		X
		•
		-
	4.1	-
Ok	Cancel	
	Ok	Ok Cance

14.Let add a sub-report element in the detail band and set the properties.

Properties of element-7	×
Common Subreport 1 Subreport 2	
Parameters Map Expression	
Connection/Datasource Expression	
Use connection expression	•
\$P{REPORT_CONNECTION}	
Using cache	
15 Add a sub-roport aloment	to 1

15.Add a sub-report element to the detail band and set the following properties.

Properties of	element-12
Common Subrepor	t 1 Subreport 2
Subreport Expression	n
java.lang.String	-
Subreport Parameter	
Name	Expression
ID	\$F{ID}

- 16.Let's save and close this report by pressing the key Ctrl-F4 and work on the sub-report
- 17.Click on File \rightarrow New on the menu option

eport name: EmployeeAddressSubReport	ОК
Page Size	Cancel
Preset Sizes: A4	• <u></u>
Width: 20,990 cm	•
Height: 29,703 cm	•
Orientation: Portrait	•
	•
age Margin Columns Scriptlet More	
age Margin Columns Scriptlet More	
age Margin Columns Scriptlet More	
age Margin Columns Scriptlet More Page Margin Top: 0,705 cm	

18.And now save the report with the name "EmployeeAddressSubReport" by pressing Ctrl-S.

Save As		? 🛛
Save in: 🛅) myReport	- 🛋 🖆 📰 -
employee 알 Employee	Address AddressSubReport	
File <u>n</u> ame: Save as <u>typ</u> e:	EmployeeAddressSubReport	Cancel

19. Lets setup a parameter name ID that will be passed from the master report.

Fields Variables	Parameters		
Field name	Class Type	Is for prompting	New
ID	java.lang.lnteger	true	Modify
			Delete

Parameter properties		X
Parameter name		
ID		1
Parameter type		
java.lang.Integer		-
✓ Is for prompting		
Default value expression		
1		
Parameter description		
1		
	(c)	
	Ok	Cancel

20. Lets setup a dummy query for the sub-report by using the Database→query menu option. Click on read fields, register fields to report and save to report.

Report query		
Connection		
hsqldb		•
Report query		
Field name	Field type	
ID	java.lang.Integer	1
FIRSTNAME	java.lang.String	
LASTNAME	java.lang.String	
STREET	java.lang.String java.lang.String	
Read fields Register fields	to report Save to report	Close

21. Use the Database \rightarrow Query menu option again to put the query again.

Report query		
Connection		
		•
Report query select * from address where id = :		
Field name	Field type	
Read fields Register field	s to report Save to report	<u>C</u> lose

22. Add a Text-Field element in the detail band to print street.

Properties of element-21	
Common Text Field Text properties Hyper Link	
Expression Class	
java.lang.String	
Evaluation time Evaluation group	
Now	
Stretch with overflow Pattem Textfield Expression	
<pre>\$F{STREET}</pre>	

23. Add a Text-Field element in the detail band to show rest of the field city, postal, and other remaining field.

24. Save the report by pressing Ctrl-S or selecting the File→Save menu option.

25. Compile the report by using Tools→iReportCompiler option. Remember the compile only option.

🔯 iReport Co	ompiler Tool	
Input file name	C:\Programs\iReport-0.0.8\myReport\EmployeeAddressSubReport.xml	Select XML file
Connection	No connection Compile only	
Query SQL	select * from address where id = \$P{ID}	
		<u>~</u>
		121
<		ž
Compile		Close

- 26.Save the report and close the report by pressing ctrl-F4.
- 27.Now we are ready to run the complete report, Select again Tools→iReportCompiler.
- 28. Put the master report name and be sure not to put the query in the query SQL text-field and press the compile button. Now you should see the report in the Acrobat Reader window.

🔊 iReport Co	ompiler Tool	
Input file name	C:\Programs\iReport-0.0.8\myReport\EmployeeAddress.xml	Select XML file
Connection	hsqldb Compile and preview as PDF exported	report 💌
Query SQL		
	I	
C:\programs\j2s	sdk1.4.1_01\bin\java.exe -Dorg.xml.sax.driver=org.apache.xerces.parsers.SAXPar	ser IReportCom
	ns\iReport-0.0.8\myReport\EmployeeAddress.xml e C:\Programs\iReport-0.0.8\myReport\EmployeeAddress.jasper	
	able to compile with "sun.tools.javac.Main" compiler. *	
* Compiling with	lang.ClassNotFoundException : sun.tools.javac.Main * n command line "javac" compiler. *	
Compilation run Opening connect	ning time : 2043 stion	
Print generated		
Running time : 3 Viewing pdfC:	3255 \Programs\iReport-0.0.8\myReport\EmployeeAddress.pdf	
<		>
Compile		Close