

iReport

➤ What is it?

- a GUI reporting tool for Java applications
- originally created for an application called JasperReports

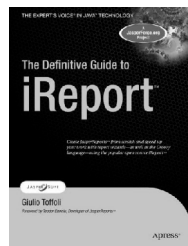
➤ Why are we using it?

- Opensource
- Ability to create XML files



Print documentation

➤ “Definitive Guide to iReport”



iReport Structure and Report Elements

➤ Bands

- Don't cross the ~~streams~~ bands



➤ Elements

- Elements are measured in pixels using the 72 dpi (dots per inch) standard

➤ Fonts and Styles

- Diacritics



List of available styles

- **size**
- **fontName**
- **isBold**
- **isItalic**
- **isUnderline**
- **isStrikeThrough**



Expression Editor: Defining Terms

- **Objects**
 - include both data and functions
- **Classes**
 - a blueprint to create objects
- **Methods**
 - a subroutine associated either with a class or an object
- **Fields**
 - using the data libraries defined by Innovative



Examples of Some Methods used in the Java.lang.string class

- **equals(Object)** boolean
- **contains(CharSequence)** boolean
- **startsWith (String)** boolean
- **endsWith (String)** boolean
- **indexOf(String)** boolean
- **substring (int, int)** String
- **split(String)**
- **replaceAll (CharSequence, CharSequence)**



Example 1. Using Styles

Raw Data

Call Number 082 |aF MCCART

Example 1. Using Styles

Example 1. Using Styles

Output

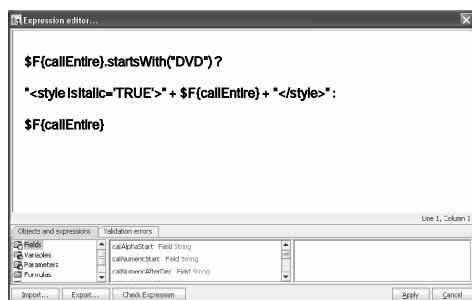
F
MCCART
10a

Example 2. Using the Conditional Operator

Ternary or Conditional Operator

```
( <boolean expression> ) ?  
<expression on true> :  
<expression on false>
```

Example 2. Using the Conditional Operator



Example 2. Using the Conditional Operator

Output

Expression on True	Expression on False
<p><i>DVD</i></p> <p>323.4</p> <p>K53</p>	<p>823.2</p> <p>M257MI</p>

Example 2. Using the Conditional Operator

- You can also negate the boolean expression to test for the existence of a field

```
(!$F{itemv}.equals("")) ?  
"  
" <style isBold='TRUE' size='12'>" + $F{itemv} +  
"</style>"  
: "" )
```

Example 3. Using the split() method

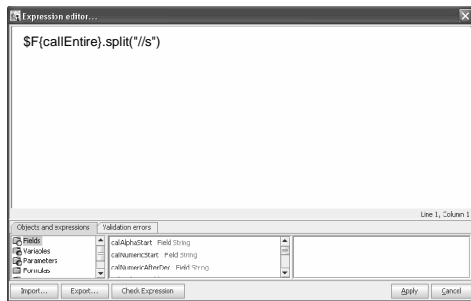
- **split() method**
 - Splits your string based on a delimiter you specify
 - Can use a text character or regex
 - Creates a list or array of smaller strings
 - `$F{field}.split(",")`
 - These smaller strings can be accessed and printed out separately

Example 3. Using the split() method

- **Raw Data**

Call Number 082 |aMYS PAT 2009

Example 3. Using the split() method



Example 3. Using the split() method

- Results in an array
- Each part assigned an index number, starting with '0'

Index	0	1	2
Data	MYS	PAT	2009

- `$F{callEntire}.split("/") [0]`

Example 3. Using the split() method

- One of our libraries needed to shorten the title on their hold slips
- We used the split() method on the title field using the '/' character as a delimiter
- Raw Data
 - Title: The police and their many publics / by Donald W. McEvoy.

Example 3.
Using the split() method

Expression editor

```
($F{v_b_title}.indexOf("/") > 0 ?  
  
$F{v_b_title}.split("/")[0] :  
  
$F{v_b_title} )
```

Objects and expressions

Fields

Variables

Parameters

Formulas

caAlphaStart: Field String

caAnswerStart: Field String

caAnswerAnswer: Field String

Import...

Export...

Check Expression

Apply

Cancel

Example 3.
Using the split() method

Output

PATRON TEST 10
Mon May 04 2009

Title: The police and their many publics

Call number: 363.2 M142 1a
Item barcode: 0680180001
Hold note:

Pickup at: Central (1)

Example 4.
Using the replaceAll() method

The replaceAll() method

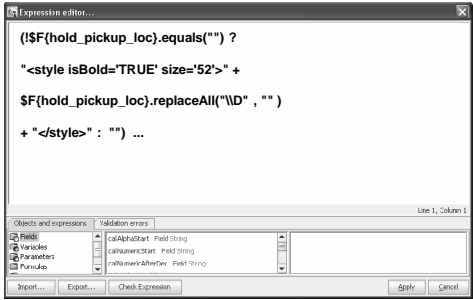
Example: `$F{field}.replaceAll("x" , "")`

Example 4.
Using the replaceAll() method

➤ We wanted to place the base location code for the destination library on the top of our transit slips in large type

– Example: '13' instead of 'East (13)'

Example 4.
Using the replaceAll() method



Example 4.
Using the replaceAll() method

➤ Output

13

IN-TRANSIT HOLD

To: East (13)

Check in Terminal 112

Title: Test record 2

Call number: enss10 243vd

Barcode: 000005

Other Resources

- **Java.lang.String**
 - <http://java.sun.com/j2se/1.5.0/docs/api/java/lang/String.html>
- **Innovative Data Libraries**
 - IGR (page # 107515)
- **Online Documentation for iReport**
 - <http://tinyurl.com/iug2009>



Questions?

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