```
public class A {

   //public static int x = 10;

   public static void main(String[] args) {

      //Runnable r = new Runnable();

      int x = 10;

      RunnablePatiya rp = new RunnablePatiya(x);

      Thread t = new Thread(rp);
      t.start();
   }
}

class RunnablePatiya implements Runnable{

   int k;

   RunnablePatiya(int i){
      //System.out.println(i);
      this.k = i;
   }

   @Override
   public void run() {
      System.out.println("Niyamai");
      //System.out.println(A.x);
      System.out.println(this.k);
   }
}
```

```
ss A {

ic static int x = 10;
 static void main(String[] args) {

Runnable r = new Runnable();
t x = 10;

ass RunnablePatiya implements Runnable {

  //int k;

  //RunnablePatiya(int i) {
      //System.out.println(i);
      //this.k = i;
  //}

  @Override
  public void run() {
      System.out.println("Niyamai");
      //System.out.println(A.x);
      //System.out.println(this.k);
      System.out.println(x);
  }

Runnable rp = new RunnablePatiya(x);
nnablePatiya rp = new RunnablePatiya();

read t = new Thread(rp);
start();
```

මෙක local class එකක්. local class එක තියන method එකේ තියන local variables, local class එකේ ඉදලා direct access කරන්න පුලුවන්

```
public class A {

    public static void main(String[] args) {

        int x = 10;

        //class RunnablePatiya implements Runnable {

            //@Override
            //public void run() {
                //System.out.println("Niyamai");
                //System.out.println(x);
            //}
        //}

        //RunnablePatiya rp = new RunnablePatiya();

        Runnable rp = new Runnable(){
            @Override
            public void run() {
                System.out.println("Niyamai");
                System.out.println(x);
            }
        };

        Thread t = new Thread(rp);
        t.start();
    }
}
```

anonymous inner class

```java
public class A {

    public static void main(String[] args) {

        int x = 10;

        //class RunnablePatiya implements Runnable {

            //@Override
            //public void run() {
                //System.out.println("Niyamai");
                //System.out.println(x);
            //}
        //}

        //RunnablePatiya rp = new RunnablePatiya();

        Runnable rp = () -> {
            System.out.println("Niyamai");
            System.out.println(x);
        };

        Thread t = new Thread(rp);
        t.start();
    }
}
```

Lamda expectations

regex

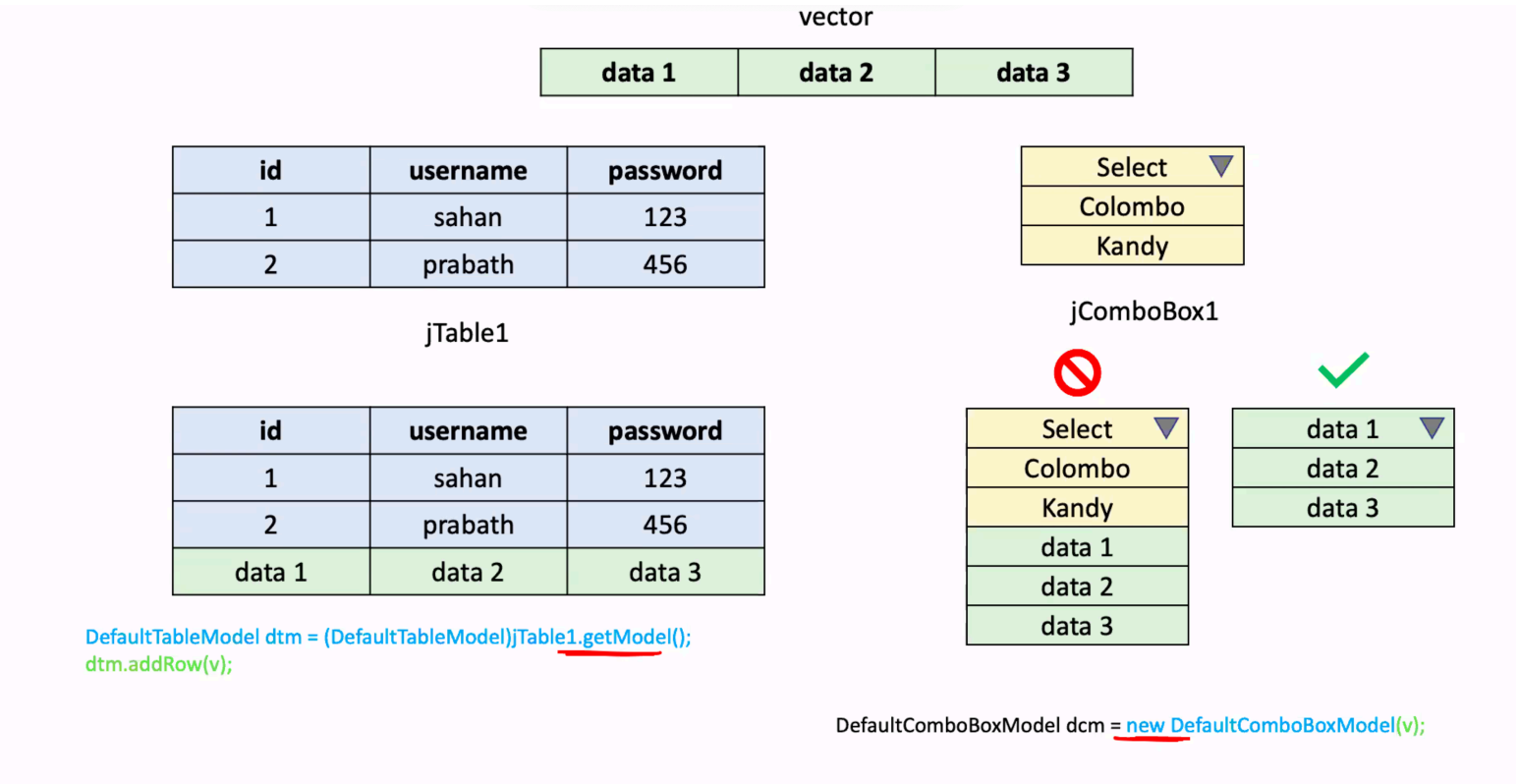
```
String text = "0774773829";
String regex = "07[01245678][0-9]{7}";
System.out.println(text.matches(regex));
```

String x = “abc” ; → ‘ “+x+” ’ → ‘abc’

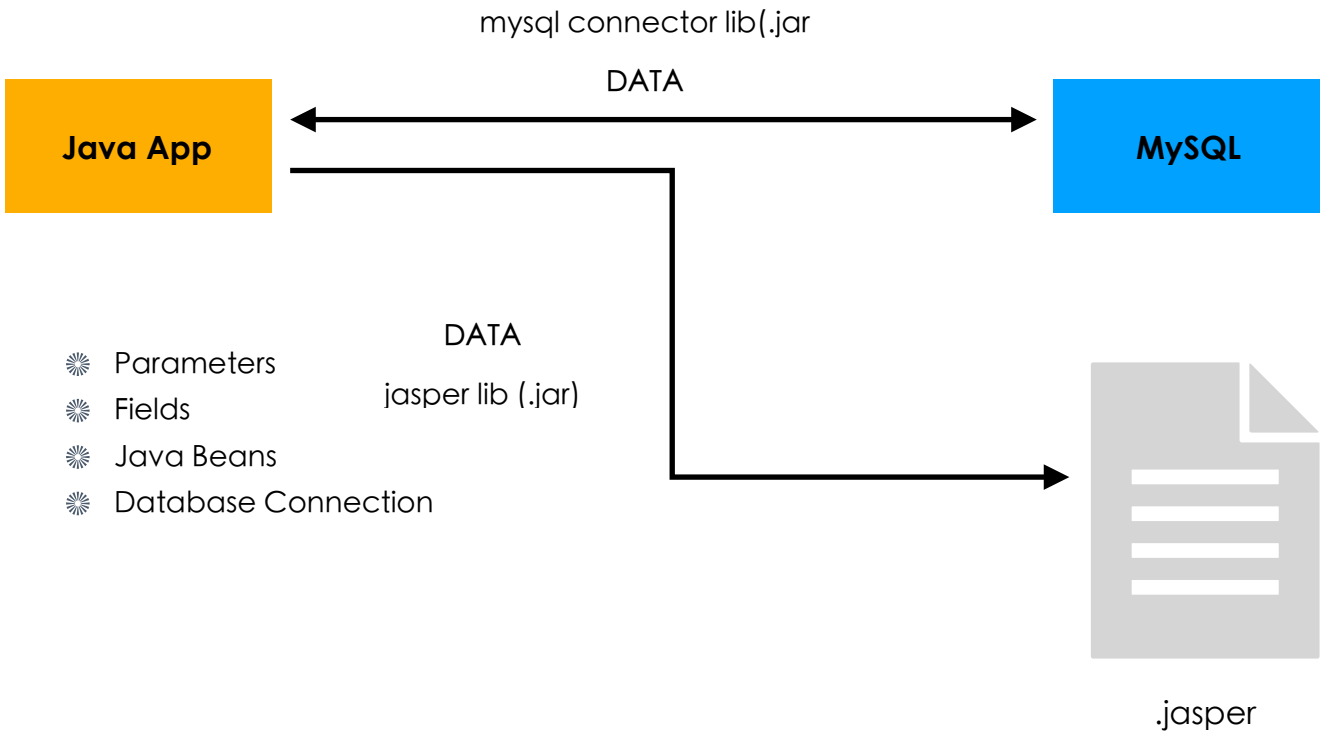
int x = 10; → ‘ “+x+” ’ → ’ 10’

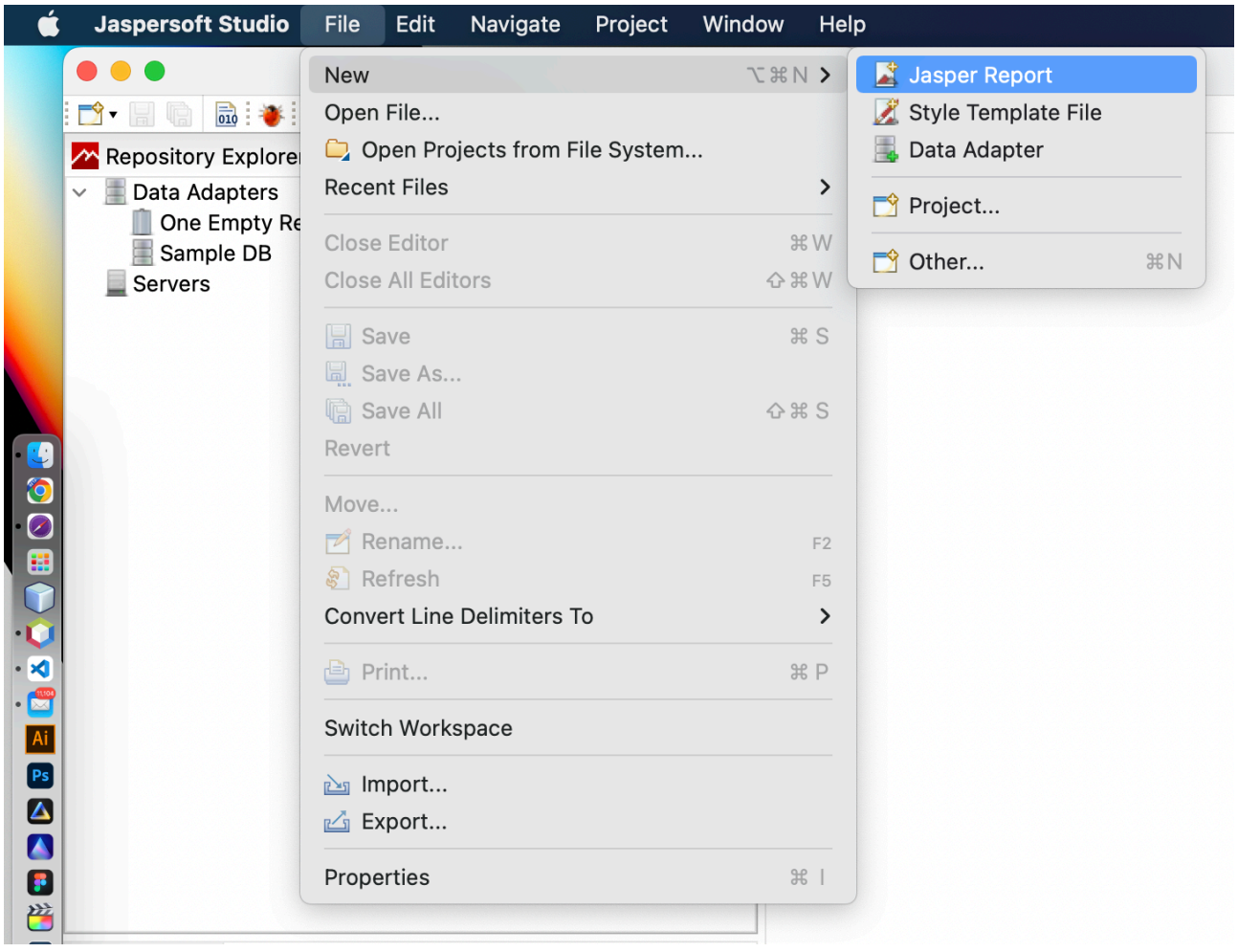
int x = 10; → “+x+” → 10

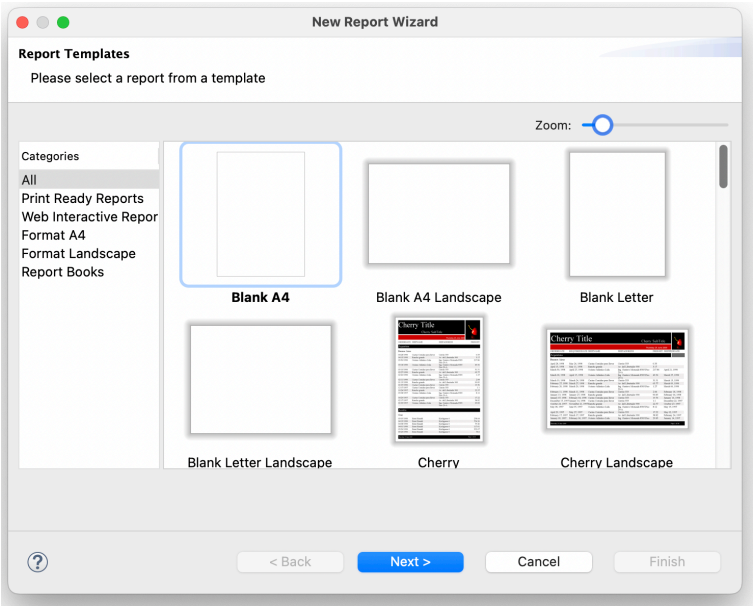
- DefaultComboBoxModel : combo box එකකට data load කරද්දී අපි අලුතින්ම model එකක් හදනවා.
- DefaultTableModel : table එකකට data load කරද්දී අපි අලුතින් හදන්නෙ නෑ. තියන model එක අරගෙන ඒකට තමා data load කරන්නේ.



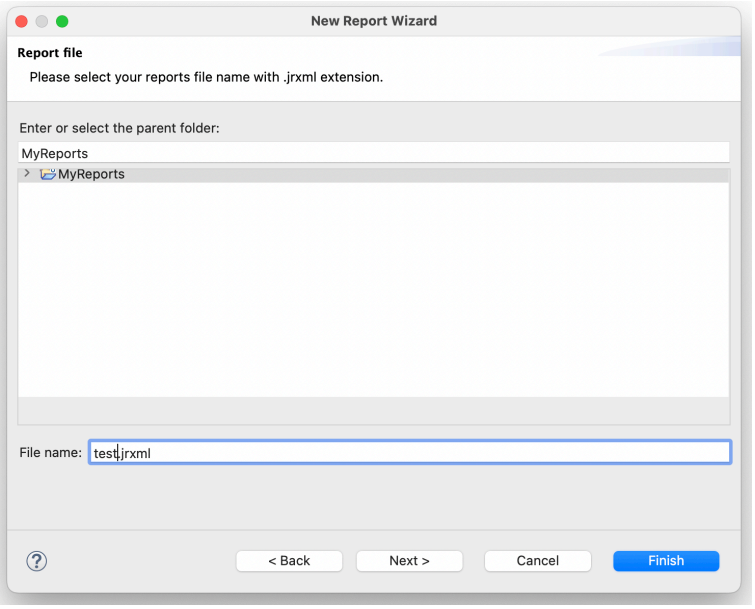
Jasper Reporting



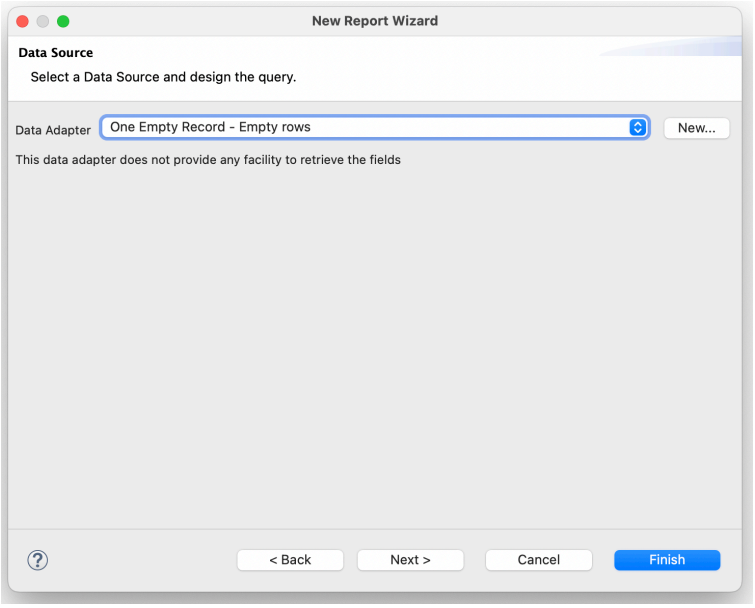



New Report Wizard
Report Templates
Please select a report from a template
Zoom:
Categories
All
Print Ready Reports
Web Interactive Repor
Format A4
Format Landscape
Report Books
Blank A4
Blank A4 Landscape
Blank Letter
Blank Letter Landscape
Cherry
Cherry Landscape
< Back
Next >
Cancel
Finish

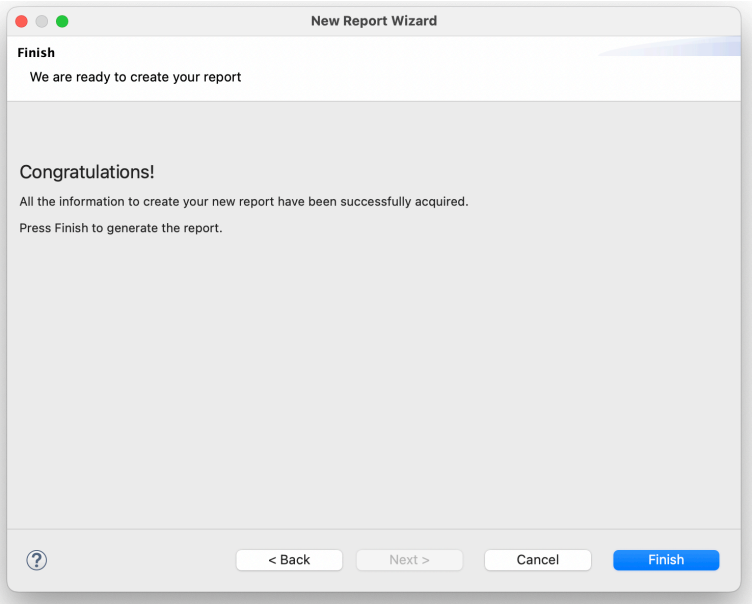
1


New Report Wizard
Report file
Please select your reports file name with .jrxml extension.
Enter or select the parent folder:
MyReports
MyReports
File name:
test.jrxml
< Back
Next >
Cancel
Finish

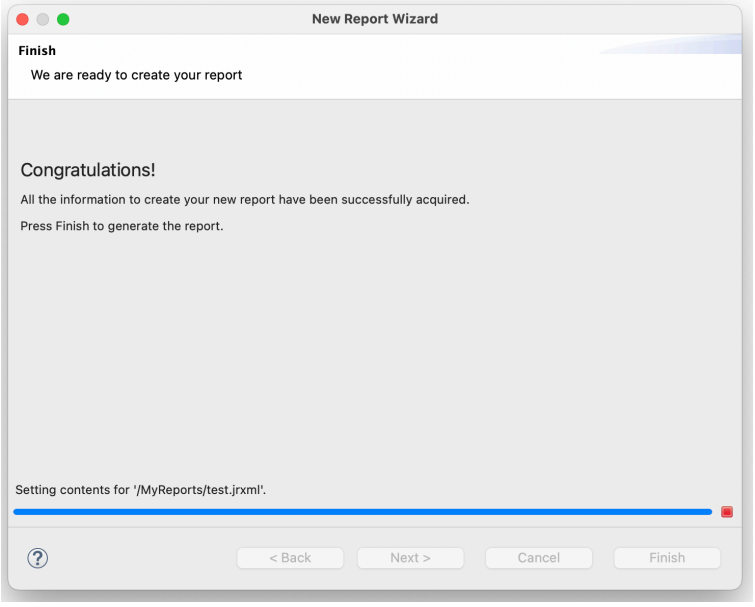
2


New Report Wizard
Data Source
Select a Data Source and design the query.
Data Adapter
One Empty Record - Empty rows
New...
This data adapter does not provide any facility to retrieve the fields
< Back
Next >
Cancel
Finish

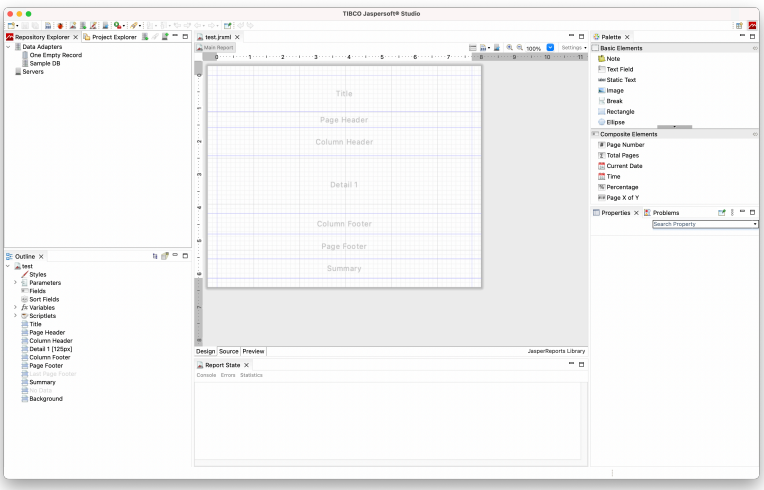
3


New Report Wizard
Finish
We are ready to create your report
Congratulations!
All the information to create your new report have been successfully acquired.
Press Finish to generate the report.
< Back
Next >
Cancel
Finish

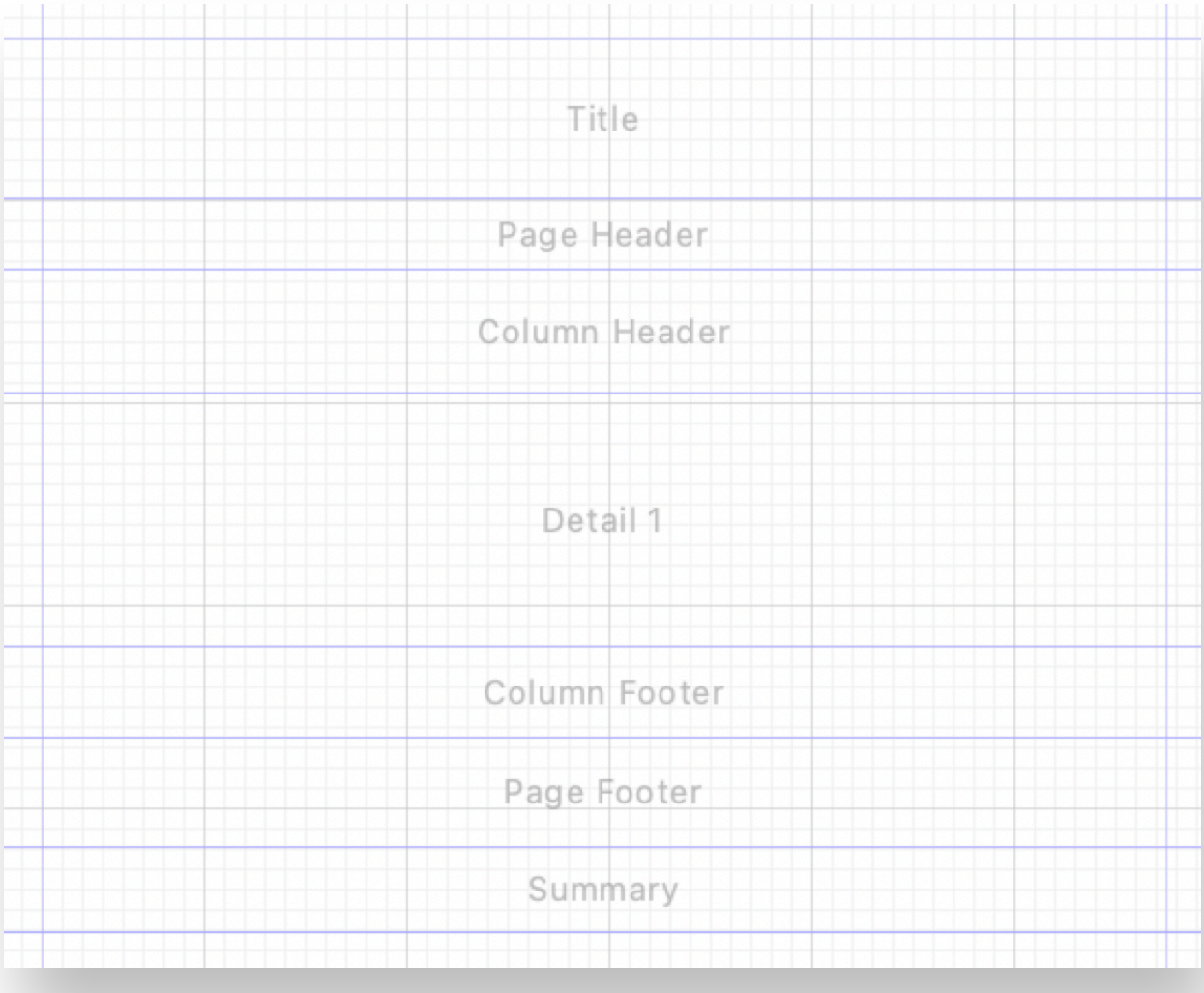
4


New Report Wizard
Finish
We are ready to create your report
Congratulations!
All the information to create your new report have been successfully acquired.
Press Finish to generate the report.
Setting contents for '/MyReports/test.jrxml'.
< Back
Next >
Cancel
Finish

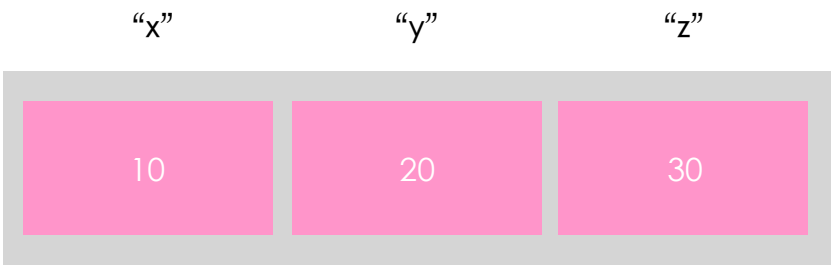
5


TIBCO Jaspersoft® Studio

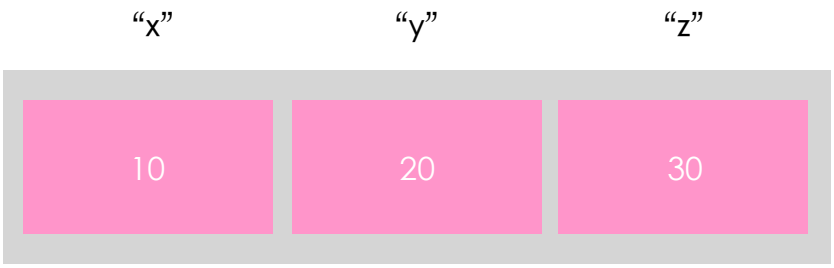
6



Java Map



PHP - Associative Array



Java - Map

```
HashMap m = new HashMap();

m.put( “a” ,10);
m.put( “b” ,20);
m.put( “c” ,30);

System.out.println(m.get( “b” ));
```

Jasper

Parameters

$P{Parameter1}

මේ විදියට තමා jasper වල parameters පෙන්නන්නේ.

parameter1 **කියන එක තමා මෙතන වෙනස් වෙන්නේ.**

```
public static void main(String[] args) {
    try {
        String filePath = "src//reports//test.jrxml";
        JasperReport jr = JasperCompileManager.compileReport(filePath);

        HashMap parameters = new HashMap();
        parameters.put("Parameter1", "abc");
        parameters.put("Parameter2", "123");

        JREmptyDataSource dataSource = new JREmptyDataSource();

        JasperPrint jp = JasperFillManager.fillReport(jr, parameters, dataSource);

        JasperViewer.viewReport(jp);

    } catch (Exception e) {
        e.printStackTrace();
    }
}
```

```
        String filePath = "src//reports//test.jrxml";
        JasperReport jr = JasperCompileManager.compileReport(filePath);
        JasperPrint jp = JasperFillManager.fillReport(jr, parameters, dataSource);
```

මේ විදියට අපිට jasper file එක කලින් compile නොකර ඕන වෙලාවට compile කරලා පාවිච්චි කරන්න පුලුවන්. ඒත් ඒක ටිකක් slow, මොකද compile වෙන්න වෙලාවක් යනවා.

මෙතනදි අපි compile කරලා ඒක variable එකක store කරලා ඒක නමා දෙන්නේ JasperFillManager එකට.

එහෙම නැත්නම් අපිට පුලුවන් කලින් compile කරලා පාවිච්චි කරන්න. ඒක ටිකක් fast. but හැමවෙලාවෙම compile කරන්න ඕනේ හදන වෙලාවෙදි මොනවහරි වෙනස් කලාම.

ඒ නිසා හදනකොට jrxml (compile නැති) එක පාවිච්චි කරලා software කර customer ට දෙනකොට compile කරපු file එක දාල දෙනවා. මොකද එතකොට ඒක වෙනස් වෙන්නෑ. ඒ වගේම speed කලින් compile කරපු නිසා.

Fields