



ZK Training

MODULE 1-3
COMPONENT USAGES

Table of Contents

2

- Component Usage
- UI Pattern

Component Usage

3

- **Name**
 - `<tagname>` - `ComponentClassName.java`
- **Attribute**
 - Complete in <https://www.zkoss.org/javadoc/latest/zk/org/zkoss/zul/Textbox.html>

Component Usage

4

- **Event**

- Check a component's owned doc:

https://www.zkoss.org/wiki/ZK_Component_Reference

- Inherited:

https://www.zkoss.org/wiki/ZK_Component_Reference/Base_Components/HtmlBasedComponent#Supported_Events

- special

https://www.zkoss.org/wiki/ZK_Component_Reference/Events

Component Usage

5

- <https://www.zkoss.org/zkthemedemo/demo/>

Component Usage

6

- Data display – Grid, Listbox, Tree
 - Using ZK model object (ListModel, DefaultTreeModel) instead of Java standard collection
 - ✦ Better performance - Render difference when calling add(), remove() instead of the whole collection
 - Render the model
 - ✦ Default template
 - ✦ Custom template
 - ✦ renderer

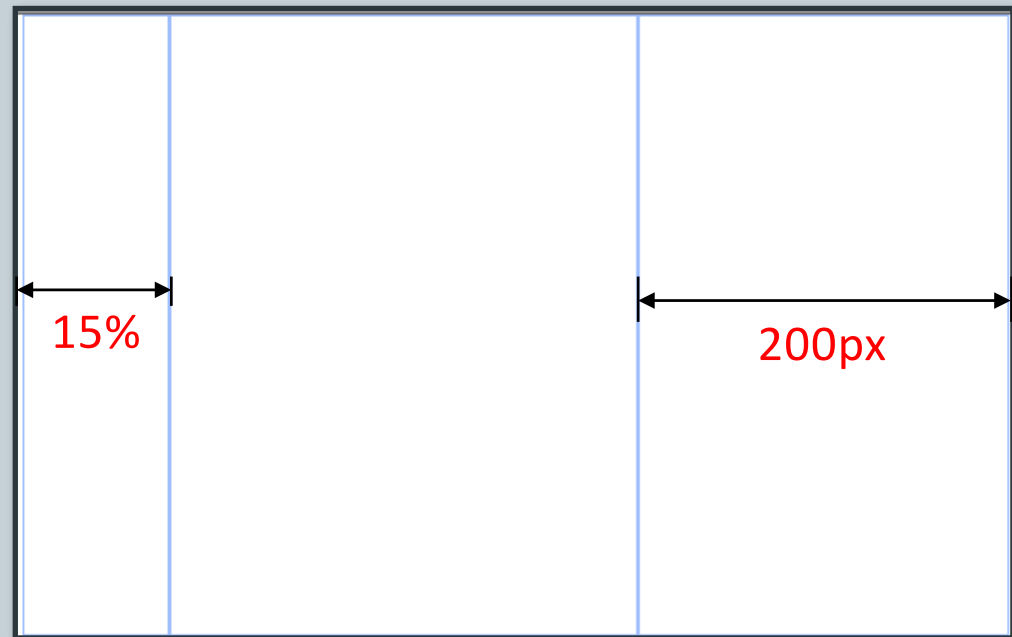
Borderlayout

7

- How to use

```
<borderlayout id="layout">  
  <west size="15%"></west>  
  <center></center><!-- doesn't support size! -->  
  <east size="200px"> </east>  
</borderlayout>
```

Attribute	Value
size	pixel(px) percentage(%)

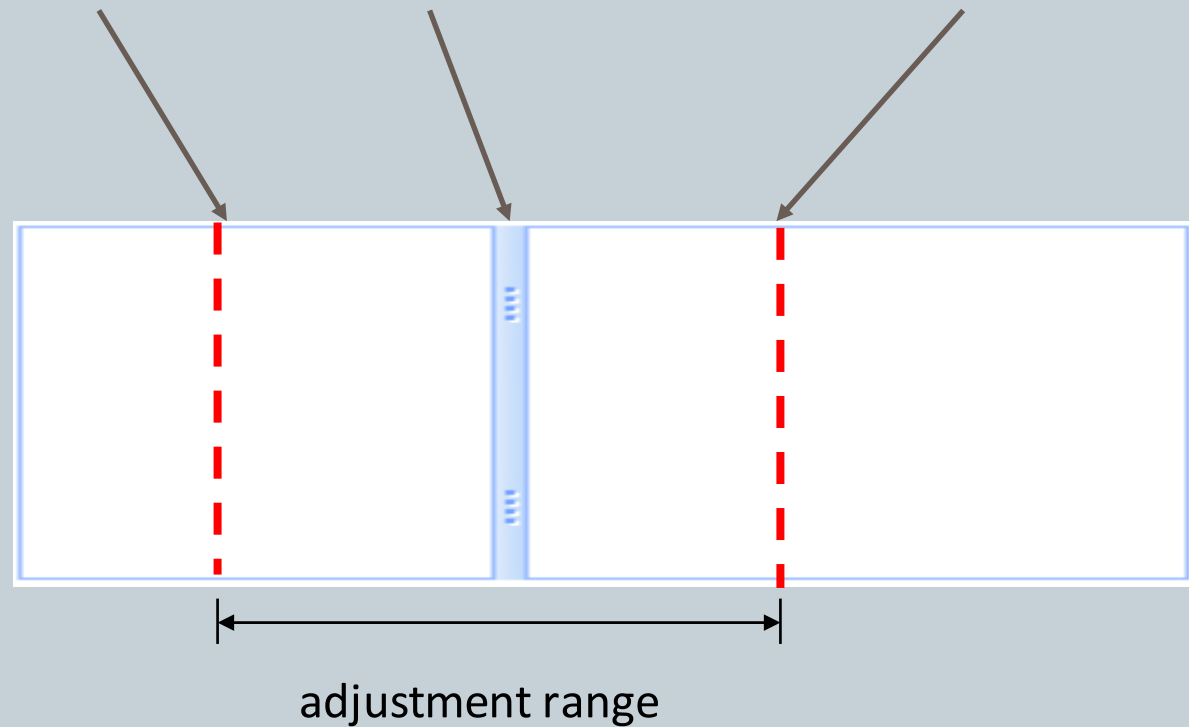


Borderlayout

8

- How to use

```
<borderlayout height="150px" width="250px">  
  <center></center>  
  <west minsize="50" splittable="true" size="80px" maxsize="100"></west>  
</borderlayout>
```



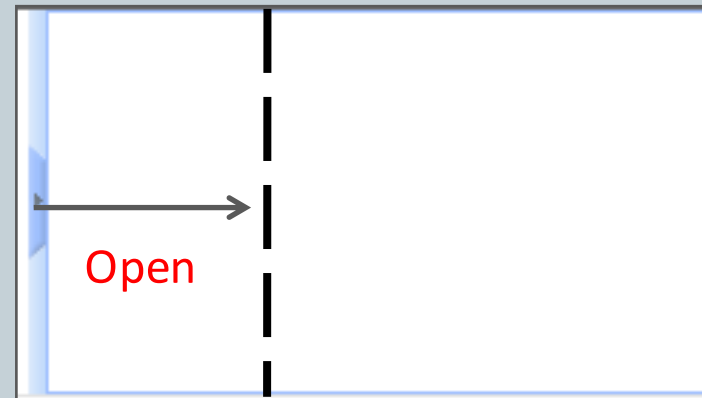
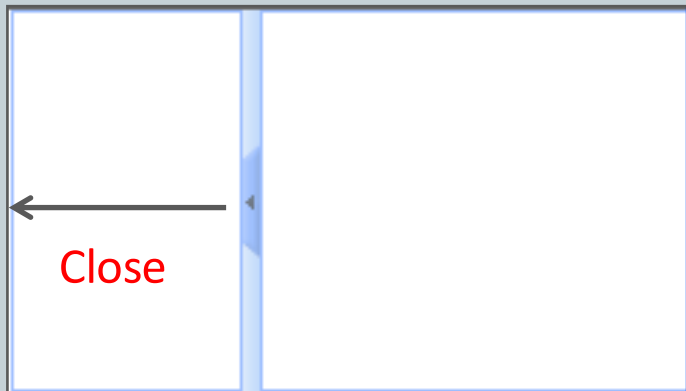
Borderlayout

9

- How to use

```
<borderlayout id="1">  
  <west width="30%" title="west" collapsible="true" open="true"></west>  
  <center></center>  
</borderlayout>
```

Attribute	Value
collapsible	true/false
open	true/false



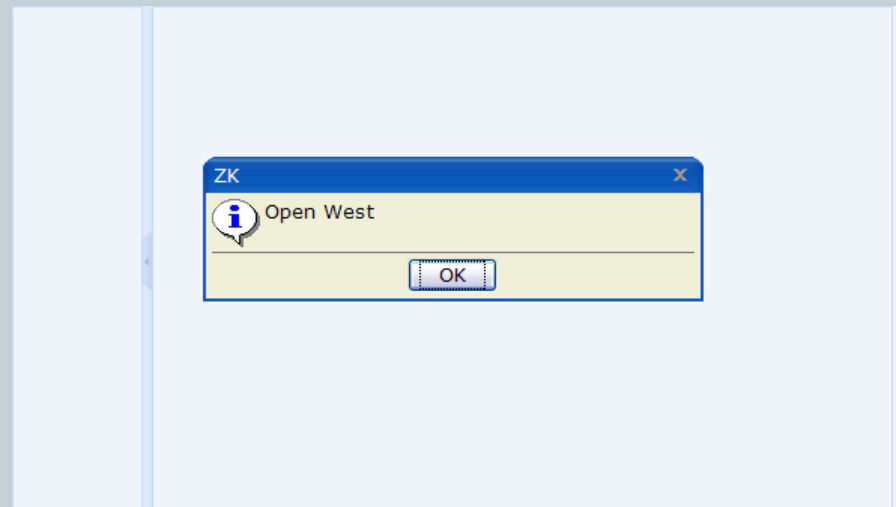
Borderlayout

10

- How to use

- ✧ If I want to do some jobs while splitter collapsing (or opening) ...

```
<borderlayout id="1">
  <west width="15%" title="west" collapsible="true" >
    <attribute name="onOpen">
      if(event.isOpen()) {
        alert("Open West");
        // add you code here
      } else {
        alert("Close West");
        // add you code here
      }
    </attribute>
  </west>
  <center></center>
</borderlayout>
```



Open collapse alert

Borderlayout

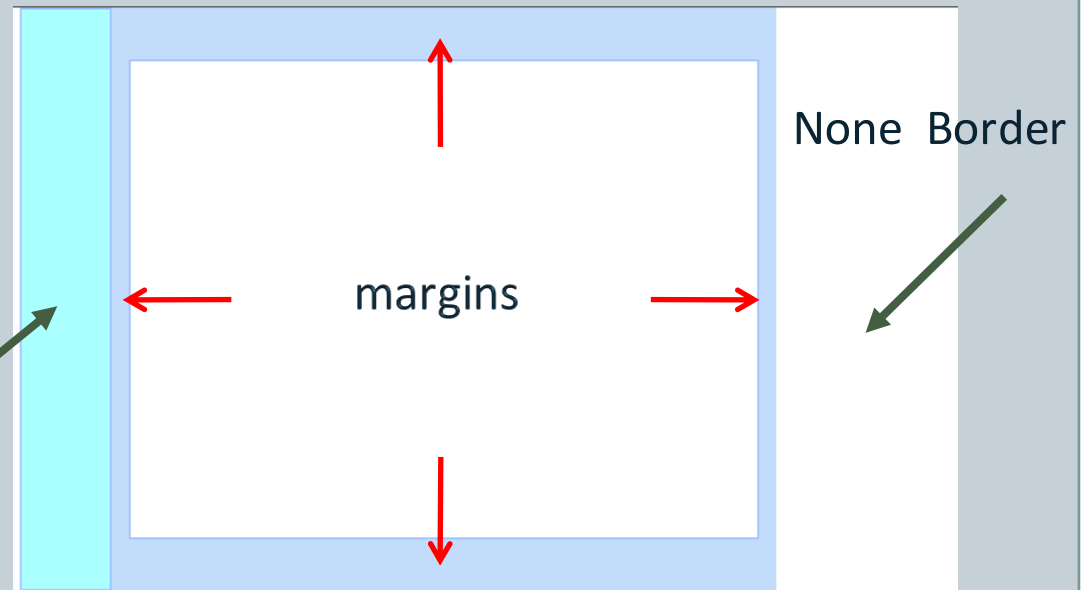
11

- Customization

```
<borderlayout id="1">  
  <west width="10%" style="background: #aaffff"></west>  
  <center margins="30,10,10,30"></center>  
  <east size="100px" border="none"></east>  
</borderlayout>
```

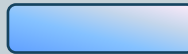
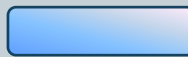
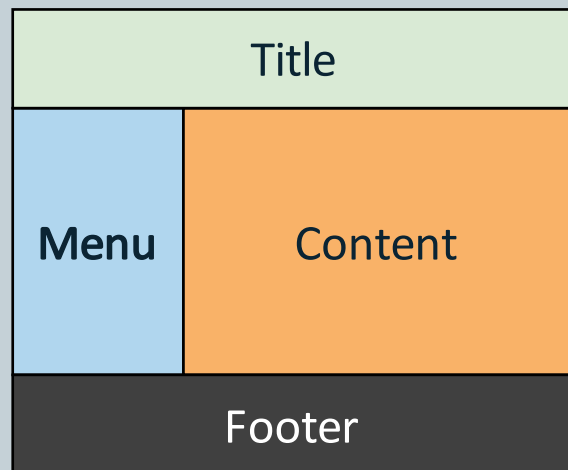
Attribute	Value
border	normal/none
margins	top, left, right, bottom
style	CSS Style

Background Color

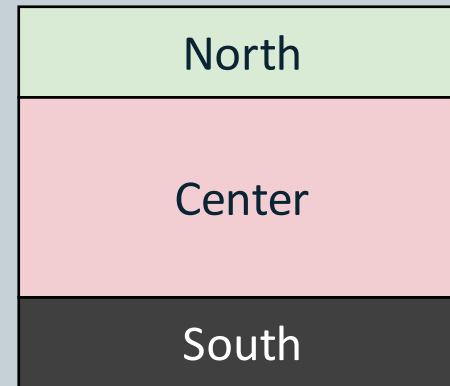


Nested BorderLayout

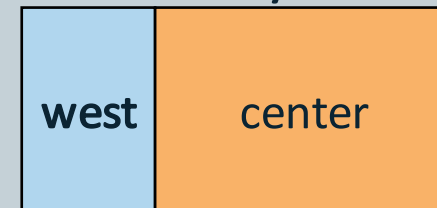
12



Borderlayout 1



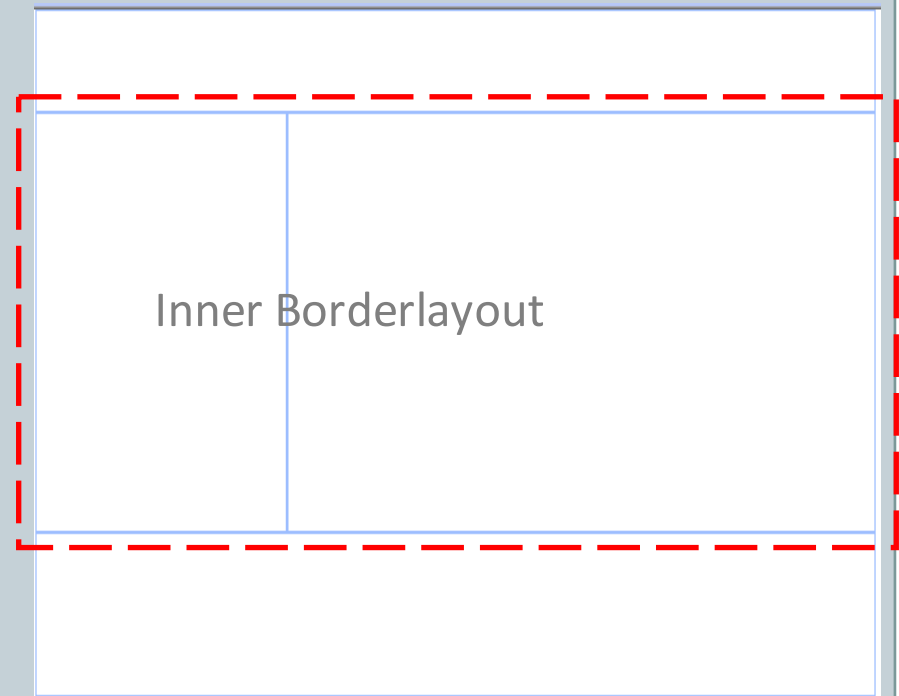
Borderlayout 2



Nested BorderLayout

13

```
<borderlayout id="outer">  
  <north size="15%">  
  </north>  
  <center>  
    <borderlayout id="inner">  
      <west size="30%">  
      </west>  
      <center>  
      </center>  
    </borderlayout>  
  </center>  
  <south size="100px">  
  </south>  
</borderlayout>
```



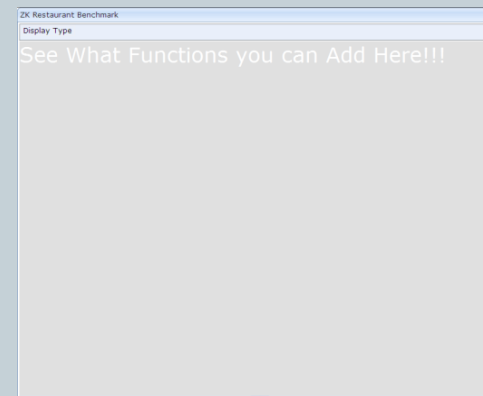
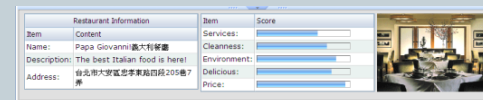
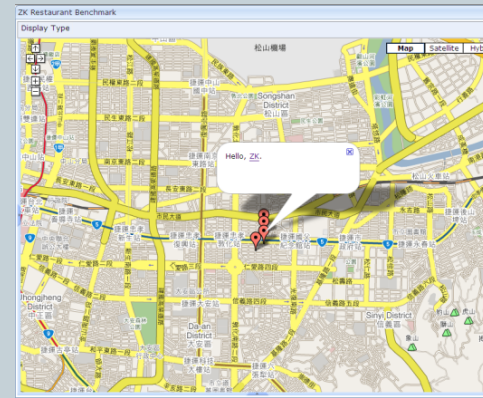
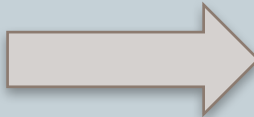
When to use an Ajax Layout?

14

- You need your layout to be elastic, Both your application and user can control it.
- You need a 2.5 Dimensions UI to present more UI parts(next page).
- Layout can be changed in a very dynamic way.

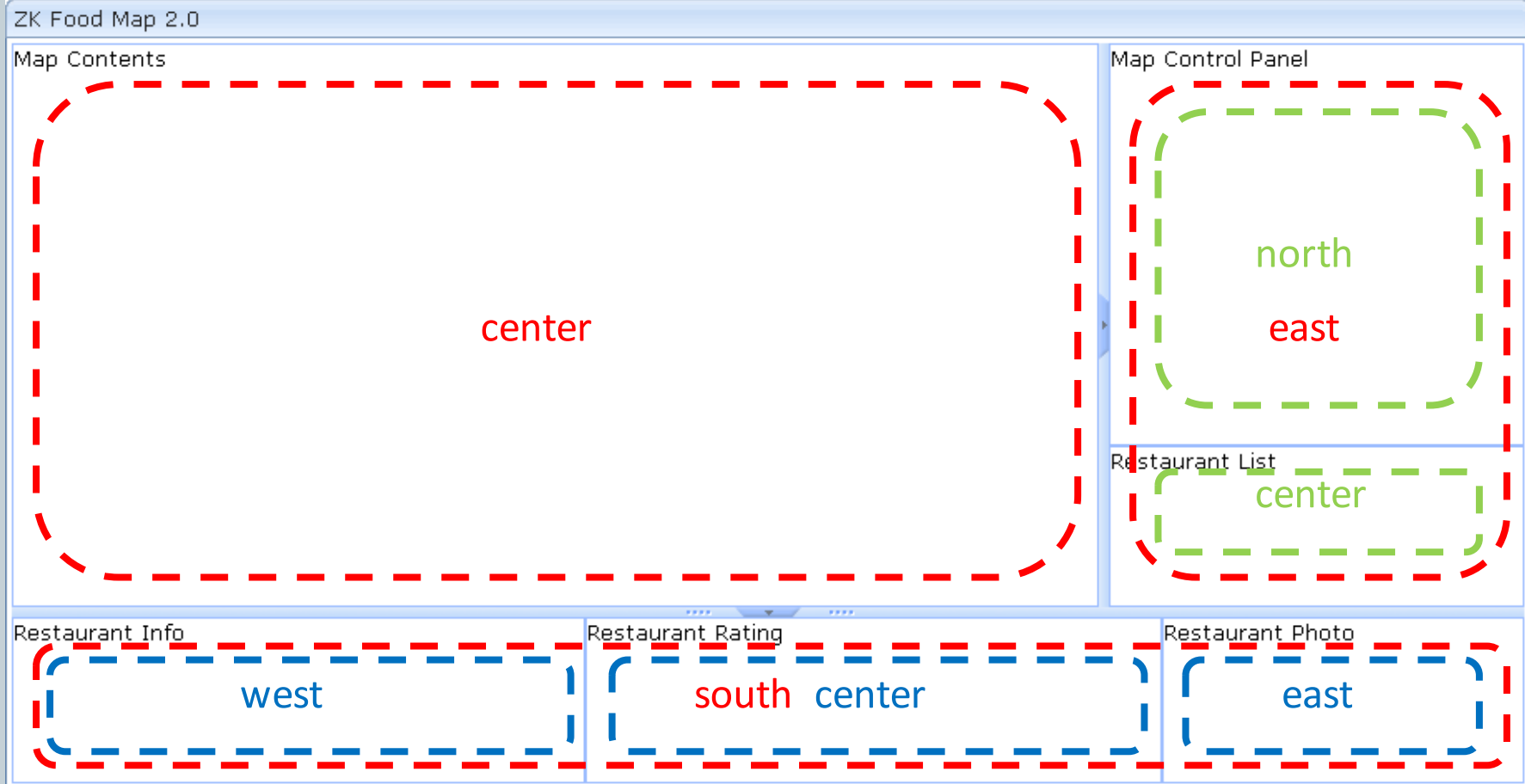
Why Borderlayout

15



Borderlayout Example

16



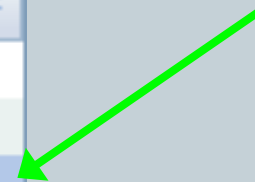
What is Listbox?

17

- Layout your components into a tabular style like the Grid but with a concept of selected item

name	gender
Mary	FEMALE
John	MALE
Jane	FEMALE
Henry	MALE

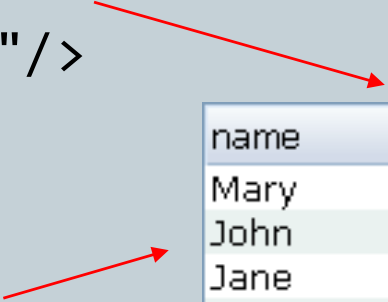
Selected Item



How to build a Listbox?

18

```
<listbox width="400px">  
  <listhead>  
    <listheader label="name"/>  
    <listheader label="gender"/>  
  </listhead>  
  <listitem>  
    <listcell label="Mary"/>  
    <listcell label="FEMALE"/>  
  </listitem>  
  ...  
</listbox>
```




name	gender
Mary	FEMALE
John	MALE
Jane	FEMALE
Henry	MALE

Customize Listbox

19

```
<listbox width="400px">  
  <listhead>  
    <listheader label="name"/>  
    <listheader label="gender" image="/img/home.gif"/>  
  </listhead>  
  <listitem>  
    <listcell label="Mary"/>  
    <listcell label="FEMALE"/>  
  </listitem>  
  ...  
</listbox>
```

name	gender
Mary	FEMALE
John	MALE
Jane	FEMALE
Henry	MALE

name	 gender
Mary	FEMALE
John	MALE
Jane	FEMALE
Henry	MALE

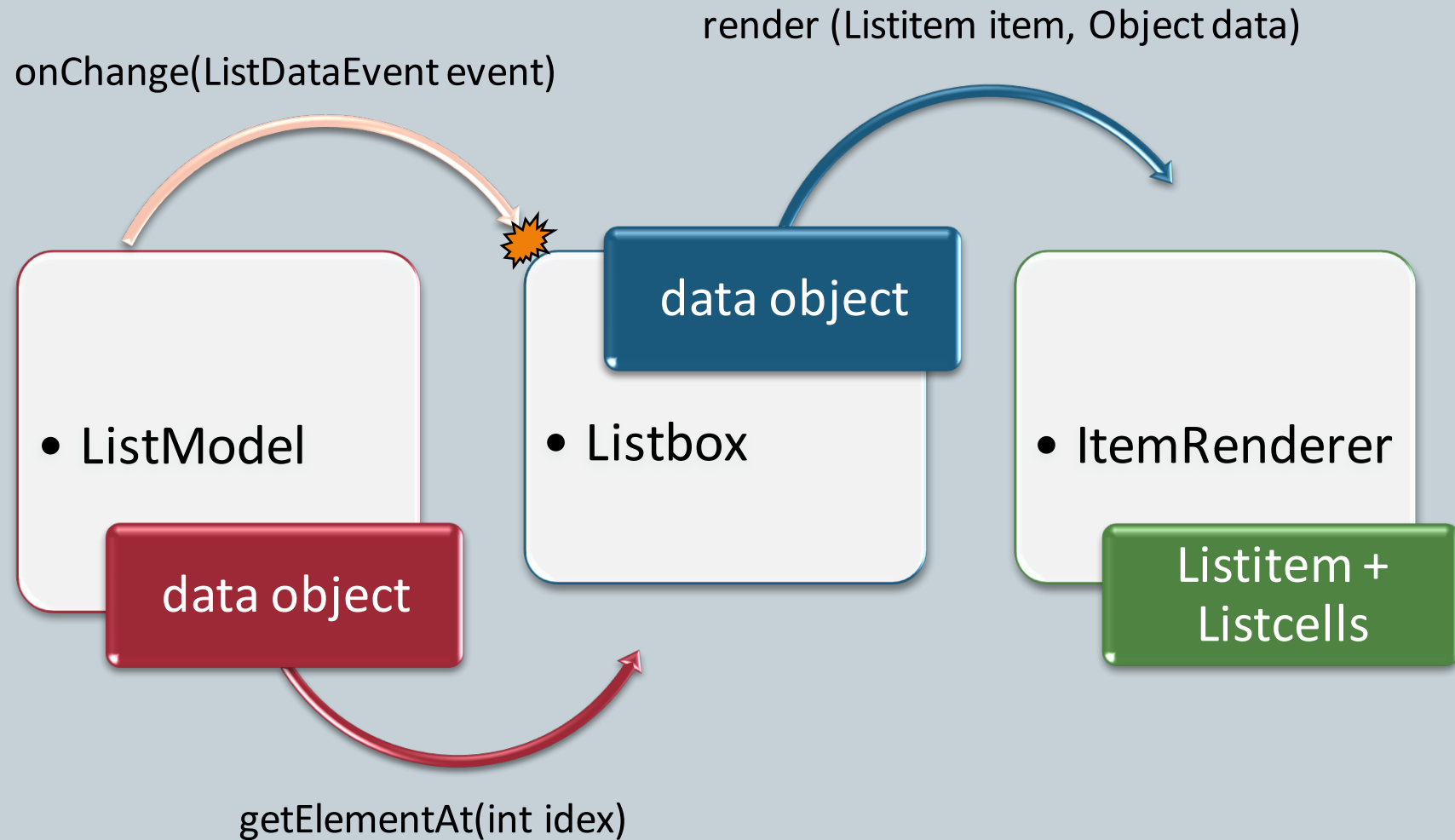
ListModel & ListitemRenderer

20

- How to set Model to your Listbox?
- Tell Listbox how to render each entry

ListModel & ListitemRenderer

21



Conclusion of ListModel & Renderer

22

- The concept came from Swing
- Most ZK Collection Components support this
 - Tree, TreeModel & TreeitemRenderer
 - Combobox, ListModel & ComboitemRenderer
 - GroupModel of Listbox & Grid

Component Set

23

- 3 different component sets
 - Use them with [XML namespace](#)
 - Zul <zk xmlns:z="zul">
 - Xhtml <zk xmlns:x="xhtml">
 - Native <zk xmlns:n="native">

Q & A