



## Page Processing

- no-args constructor used to create new Page
- context, format, headers and path dependencies set
- request parameter values bound to matching named fields
- `onSecurityCheck()` – called for security check
- `onInit()` – called to complete initialization
- all the page controls are processed
- `onGet/Post()` – called for additional processing
- `onRender()` – called for pre-render processing
- page template and model is rendered
- `onDestroy()` – called to clean up any resources

## Template Model Includes

- any public Page fields by field name
- `context` – the servlet context path
- `headElements` – the page Css and other head elements
- `format` – the Format object
- `imports` – the PageImports object
- `jsElements` – the page JavaScript elements
- `messages` – the MessagesMap object
- `path` – the path of the Page template
- `request` – the HttpServletRequest object
- `response` – the HttpServletResponse object
- `session` – the SessionMap object

## Velocity Directives

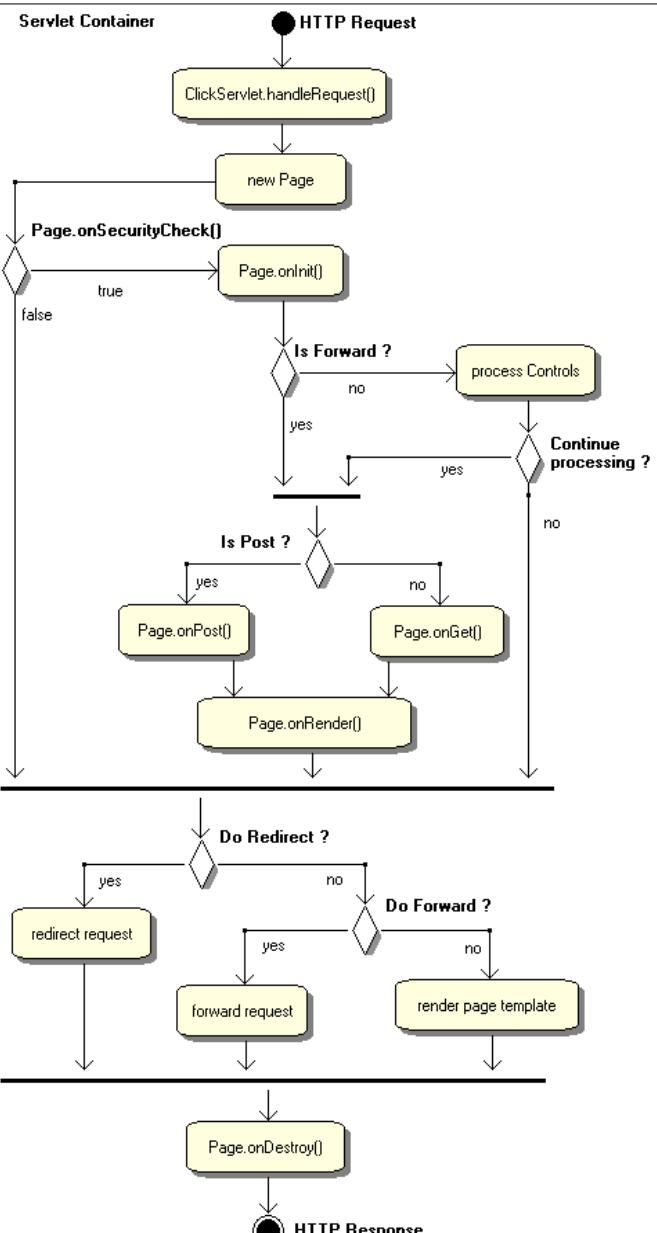
- `#if #elseif #else #end` – conditional statement
- `#foreach` – list iterator
- `#macro` – defines Velocity macro
- `#set` – variable declaration
- `#include` – include file directly without parsing
- `#parse` – parse and render the specified template
- `#stop` – stops the execution of template

## Core Controls

- ActionButton
- ActionLink
- Button
- Checkbox
- Column
- FieldSet
- Form
- HiddenField
- ImageSubmit
- Label
- Option
- OptionGroup
- PageLink
- Panel
- PasswordField
- Radio
- RadioGroup
- Reset
- Select
- Submit
- Table
- TextArea
- TextField

## Extras Controls

- CayenneForm
- CheckList
- ColorPicker
- CreditCardField
- DateField
- DoubleField
- EmailField
- FieldColumn
- FormTable
- IntegerField
- LinkDecorator
- ListPanel
- LongField
- Menu
- NumberField
- PageSubmit
- PickList
- PropertySelect
- QuerySelect
- RegexField
- TabbedForm
- TabbedPanel
- TelephoneField



## click.xml File

```

<?xml version="1.0" encoding="UTF-8"?>
<click-app charset="UTF-8" locale="de">

  <pages package="com.mycorp.page"/>

  <mode value="debug"/>

</click-app>
  
```

## Click App Modes

- |                            |                          |
|----------------------------|--------------------------|
| • <code>production</code>  | – caching, warn logging  |
| • <code>profile</code>     | – caching, info logging  |
| • <code>development</code> | – info logging (default) |
| • <code>debug</code>       | – debug logging          |
| • <code>trace</code>       | – trace logging          |