## Tips and tricks for eclipse and the IDE MyEclipse

In this Tutorial we present tips and trick for the development enviroment eclipse and the extension MyEclipse.

## Generals

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# Datum:

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#### Eclipse 3.x

MyEclipse plugin 3.8 (A cheap and quite powerful Extension to Eclipse to develop Web Applications and EJB (J2EE) Applications. I think that there is a test version available at MyEclipse.)

#### **PDF Version des Tutorials**

http://www.laliluna.de/assets/tutorials/eclipse-myeclipse-tips-and-tricks-en.pdf

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## Workbench tips and tricks

#### Select working set

You can assign one or several projects to a working set. The advantage of the working set: If you work on many projects, you do not display all project in the package explorer.



Choose the button New...

🥭 Select Working S	et	×
Select a working set:		
<u>N</u> ew	Edit	<u>R</u> emove
	OK	Cancel

Choose the working set type.



Set a name for the working set and assign the projects.

🚝 New Working Set	×
Java Working Set	*
Enter a working set name and select the working set elements.	<b>C</b>
Working set name:	
Working set content:	
🗄 🗖 😂 MessageResources	

The package explorer shows the selected working set with the assigned projects.



On the drop down menu you can see which working set is activated. You can deselect the working set with the option **Deselect Working Set**.

<b>■</b> \$	-	1	
		Select Working Set	ige "P
		Edit Active Working Set	"ł
		Lac Hearto Monaing Soch	_
	• 4	1 FinderExample	
	Ť"Ť	¦⇒ Filters	L =
		Layout	•
	ł	SLink With Editor	ige
		10 (1) 10 dap and 10	- aa

#### **Navigation History**

The workbench editors holds a navigation story. If you open a second editor while you are editing, you can press **Navigate > Back** (Alt + Left Arrow) to go back to the last editor. This makes working with several open editors a whole lot easier.

#### Go to the last edit location

**Navigate > Go to Last Edit Location** (Ctrl + Q) go back to the last editing location in the editor. You can also use the Arrow in the menu bar.



## Customize key bindings

If you use a command several time again you can assign a key binding which calls this command by pressing the keys. You can assign new key bindings and see a list of existing key bindings on **Workbench > Keys**.

Keys		
Keyboard Shortc	uts Advanced	
Active configura	ation: Default	•
Command		
Category:	Compare 👤	
<u>N</u> ame:	Copy All from Left to Right	
Assignments:	When	Key Sequence
Key Sequence		
Na <u>m</u> e:		
Assignments:	When	Command
	<	
When: In Wind	dows	▼ (extends Ir
Add	Remove Restore	
		Restore

### **Key Binding Assistance**

Eclipse supports key bindings that contain more than one key stroke. Example of such key bindings is **Alt + Shift + Q**, **Y** ("Open Synchronize View" in the Default key configuration). Its very hard to lern these keys and it can be hard to remember them if you don't use them very often. It is now possible to get a little pop-up showing you the possible completions for the keys you have pressed already. Activate the option **Help Me With Multi-Stroke Keyboard Shortcuts** in the Tab **Advanced** under **Window > Preferences > Workbench > Keys**.

Alt+Shift+Q, O Alt+Shift+Q, P Alt+Shift+Q, S Alt+Shift+Q, T Alt+Shift+Q, X Alt+Shift+Q, Y	Outline Java Package Explorer Search Java Type Hierarchy Problems Synchronize
Alt+Shift+Q	

## Tiling the editor work area

You can use drag and drop to modify the layout of the editor work area. Grab an editor tab and drag it to the egde of the editor work area. The black arrow show you the way.



## **Collapse all items**

With the button **Collapse All** on your tool bar of the navigator (or similar views) you can collapse all expanded project or folder items.

写 Navigator 👂	3		-	° 🗆
	$\langle \ominus \rangle$	Q	🖻 🔄	-
🗄 🗁 test				
🗄 🗁 test2			Collap	se All

### Show line numbers on the text editor

Open the properties of eclipse, **Window > Preferences** and check **Show line numbers** on **Workbench > Editor > Text Editor** to show the line numbers in the text editor.



## Show line numbers on java editor

Showing the line numbers on java editor can be set on **Window > Preferences**. Check **Show line numbers** on **Java > Editor**.

	Editor		
Build Order	Java Editor settings:		
Help	Appearance Syntax Typing Hove		
i ± Install/Update ⊡ Java	Displayed tab width: 4		
	Print margin column: 80		
	Show overview ruler		
Compiler	Show ling numbers		
	Highlight matching brackets		
- Installed JREs	Highlight current line		

### Maximize a view or editor window

Double click on the view or editor tab to maximize it. Double click on a maximized tab to restore the size. The standard short cut is "Ctrl + M".



### Customize the menu bar

On **Window > Customize Perspective** you can customize the main tool bar and the menu bar.

Ę	Customize Perspective		
	Shortcuts Commands Select the shortcuts that you want to affect the current perspective (MyEo	he following su	
	Submenus:	Shortcuts:	
	Open Perspective 🔽	Shortcut	Description
	Shortcut Categories:	CVS Repository Explo	

### Switch workspaces

To change the workspace without exiting ecplise you can use the function **File > Change Workspace**.

## List of open editors

Ctrl + E can be used to show a list of all open editors. Within the list you can choose a editor by selecting it with the mouse or filter the editors by typing the name. It is usefull if you work on several editors at the same time.



## **Development tips and tricks**

## Content assist (auto completion)

By pressing the key combination **Ctrl + Space** a popup window appears with a list of auto completions or a auto completion will be chosen automatically. You can use the same functionality on JavaDoc comments.

The assist can be used on methods, parameters, variables and field names to speed up the development.



#### Using content assist to add getter and setter methods

You can add getter or setter methods with the content assist. Type the first letters of the getter or setter and press (**Ctrl + Space**), then you can choose the getter or setter.



#### Using content assist to add constructors

Type the first letters of the constructor on the place where constructor will be added and use the content assist (Ctrl + Space).

Pro	
ProblemDecorator() - Default construct	or 🔼
ProblemDecorator(default package)	
🕒 Process - java.lang	.0

### **Delegate methods**

Eclipse provide a wizard to add delegate methods. This is useful when you use frequently composition of classes.

In the editor right click and then **Source > Generate delegate Methods** or you define a key binding to call the delegate wizard (Window > Prefrences > Workbench > Keys).

An example for a delegate method:

```
String string = new String();
/**
 * delegate method
 */
public char charAt(int arg0) {
        return string.charAt(arg0);
}
```

## Create getter and setter methods

Eclipse provides the option to generate getter and setter methods for attributes of classes. Right mouse button in the editor **Source > Generate Getters and Setters** or you define a key binding to call the wizard (Window > Prefrences > Workbench > Keys).

🚝 Generate Gette	ers and Setters				
Select getters and setters to create:					
				Select <u>A</u> ll	
	getFile() setFile(File)			Deselect All	
				Select <u>G</u> etters	
				Select Setters	
Insertion point:					
Last method				•	
S <u>o</u> rt by:					
Fields in getter/set	ter pairs			•	
Access modifier —					
• public	C protected	🔿 d <u>e</u> fault	0.	ori <u>v</u> ate	
🗖 <u>f</u> inal	synchronized				
Generate metho	d <u>c</u> omment				

## Override and implement methods

Eclipse provides an assistant to implement and override methods. For example, when you implement a interface you do not type the methods of the interface by hand.

In the editor right mouse button > **Source > Override/Implement Methods**.

🚝 Override/Implement Methods			
Select methods to override or implement:	Select <u>A</u> ll		
<ul> <li>ListenerRegistration</li> <li>addNotificationListener(ObjectName,</li> <li>removeNotificationListener(ObjectNai</li> <li>Object</li> <li>clone()</li> <li>equals(Object)</li> </ul>	Deselect All		
← finalize() ← → hashCode() ← ✓ ● toString()			
Insertion point:			
	<u> </u>		
Generate method comment			
i 3 of 7 selected.			

#### Java code templates

A template can be used to create a method or other source code. Open the properties of eclipse (Window > Preferences) and choose Java > Editor > Templates. Create a new template by pressing on New.



In the pattern window you can create your template. A placeholder for later filling with data can be defined by the syntax \${name}.

🗲 Edit Template 📃 🗆 🗙				
<u>N</u> ame:	_method_header	Context: java 💌		
Description:	create a method header			
<u>P</u> attern:	<pre>public \${returntype} \${methodname}(\${p } </pre>	arameter}){		
	ОК	Cancel		

After creating the template you can use it with the content assist by typing the first letters and the shortcut **Ctrl + Space**.



Pressing tab to jump between the place holders.

public class TestClass <u>(</u>					
,	public	String	getString	(parameter)	{
	}				
٤					

## Quick fix function (Ctrl + 1)

You can use the quick fix function for several tasks.

#### Quick fix on imports

Use the quick fix function (**Ctrl + 1**) to remove the never used imports automaticly. Set the cursor on the import area and press **Ctrl + 1** and choose in the popup menu the option **Organize Imports**.



#### Quick fix to create a new method

If you call a method which does not exists, quick fix can add the method for you. Set the cursor on the method and press **Ctrl + 1**.



#### Quick fix to change method signatures

Quick fix can modify method signatures for you. If you call a method with additional parameters use quick fix to change or create the method.



#### Use quick fix to add unimplemented methods

If you implement an interface you can use quick fix to add the unimplemented methods. Set the cursor to the class name, press **Ctrl + 1** and choose **Add unimplemented methods**.



#### Quick fix to surround lines with if / while / for statement

Select the lines which you want to surround with a if / while / for statement and choose the template in the quick fix popup window (**Ctrl + 1**). All templates with the variable \${line\_selection} will be displayed in the list.

<ul> <li>Surround with 'do' (do while statement)</li> <li>Surround with 'for' (iterate over array)</li> <li>Surround with 'if' (if statement)</li> <li>Surround with 'runnable' (runnable)</li> <li>Surround with 'runnable' (blacker action at black)</li> </ul>	if (condition) { System.out.println("Hello"); }

#### Quick fix to remove a if / while / for statement

To remove a if / while / for statement set the cursor to the closed braket and press Ctrl + 1.



### The outline window

The easiest way to get an overview of a class or an XML file is using the outline window. You can activate it on **Window > Show View > Outline** or use the key binding **Alt + Shift + Q, O**.



If you open a class in the editor you will see the content (imports, attributes and methods) of the class in the outline window.



The outline window can not only be used to illustrate the content of a class or XML file, it can also be used to work with the content.

If you choose a item of the outline window, the cursor jumps to the item in the editor, so it is an easy way to navigate through the class.

By pressing the right mouse button on an item, for example a method, you can choose several actions. The outline window provides multiselection, for example to delete the items.



# MyEclipse tips and tricks

## Add capabilities to a project

MyEclipse provides a wizard to add capabilities for struts, JavaServer faces and hibernate. Right click on the project and choose one of the capabilities. You also can add the JSTL Libraries to your project.



On **Window > Preferences > MyEclipse > Project Capabilities** you can customize the capabilities (Libraries und other files).

#### Show line numbers in MyEclipse editor

To show the line numbers in JSP, HTML, JavaScript, etc files check **Show line numbers** on **Window > Preferences > MyEclipse > Editors > Common Editor Preferences**.



### Content assist for JSP and XML Files

With MyEclipse it is also possible to use the content assist in JSP and XML files. Type the first letters and press **Ctrl + Space**.



The assist supports tags of tag libiries too, for example struts or JavaServer faces.

<body></body>	Content Assist
<html:< th=""><th></th></html:<>	
<html:< th=""><th>&lt;&gt;html:base</th></html:<>	<>html:base
<tab< th=""><th>&lt;&gt;html:button</th></tab<>	<>html:button
<t< th=""><th>&lt;&gt;html:cancel</th></t<>	<>html:cancel
	<>html:checkbox
	<>html:errors
</th <th>&lt;&gt;html:file</th>	<>html:file
<t< th=""><th>&lt;&gt;html:form</th></t<>	<>html:form
	<>html:frame
	< > html:hidden
</th <th></th>	
<t< th=""><th>r&gt;</th></t<>	r>
	<html:sub< th=""></html:sub<>

### **Design Mode for HTML files**

MyEclipse provides a WYSIWYG editor to create HTML files. Open a HTML file in the editor and choose in the left edge the tab **Design**.

**Note**: There is a **preview** function too.

(	Source Preview Design
	🚼 Problems छ Tasks Proper
	2 errors, 0 warnings, 0 infos

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	Ж	Đ	12	Ω ≕ ⊞ A 🔩 🤊 🤍 🗐 🖉 📟 🥳 🌜 📓 ≕ Ω
	B	I	U	abe  ×, ×'   雪 雪 雪 冒   迂 迂   譚 譚   🌆 ¶   🍒 🌆
4	<u>4</u>	For	mat	Normal  Font Times New Roman  Size small  Zoom 100%
		$\checkmark$	۲	
This is my HTML page.				

### MyEclipse Database Explorer

If you work with databases and do not want to left MyEclipse each time, there is a database explorer you can use to view or modify data in your database. You can choose the perspective of the MyEclipse Database Explorer under **Window > Open Perspective > Other** or select the icon in the symbol bar of the perspectives.



At the top of the database browser you will find the tool bar, which you can use to do different functions.



You can do different actions with a table like **Edit table data**, **Create Table Script** etc. A special action is to create hibernate mappings.

