

Preparation

Java EE Development Environement





Preparation

Course Objectives



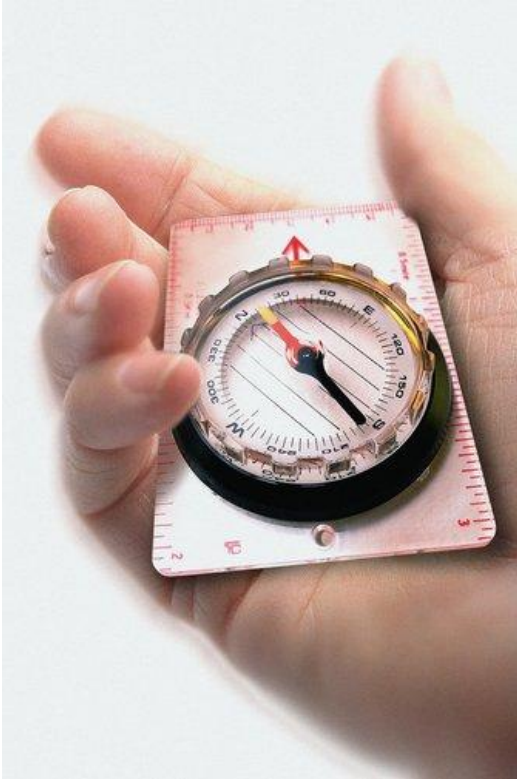
After completing this course you will be able to:

- Enumerate which tools we will use
- Successfully install them
- Describe the website we'll develop



Preparation

Course plan



- Discover tools
- Install tools
- Test
- SupCommerce



Preparation

DISCOVER TOOLS



Discover tools

Eclipse

- Multi-language software development environment
 - With an extensible plug-in system
- Written in Java
- Free and Open Source
- Platform independent
- Supported by the Eclipse Foundation





Discover tools

Apache Tomcat



- Servlet and JSP container
- Allow to deploy web services
- Open source





Preparation

INSTALL TOOLS





Install tools

Eclipse installation



- Download Eclipse at <http://www.eclipse.org/>
- Take the “Eclipse IDE for Java EE Developers” version
- Decompress the archive
- That's it



Eclipse IDE for Java EE Developers, 219 MB

Downloaded 1,871,470 Times

[Details](#)



Mac OS X 32 Bit

Mac OS X 64 Bit



Tomcat installation



- Download the **Core** version of Tomcat 7
 - <http://tomcat.apache.org/download-70.cgi>
 - Decompress the archive
- That's it
- For Linux and Mac users
 - Make the scripts in the **bin** folders of Tomcat executable
 - `chmod +x`



Preparation

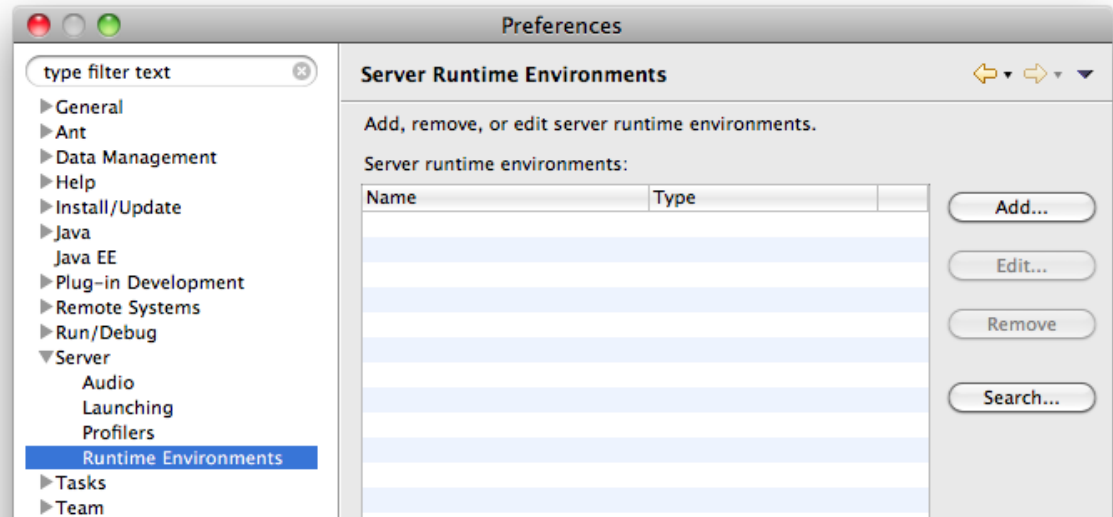
TEST





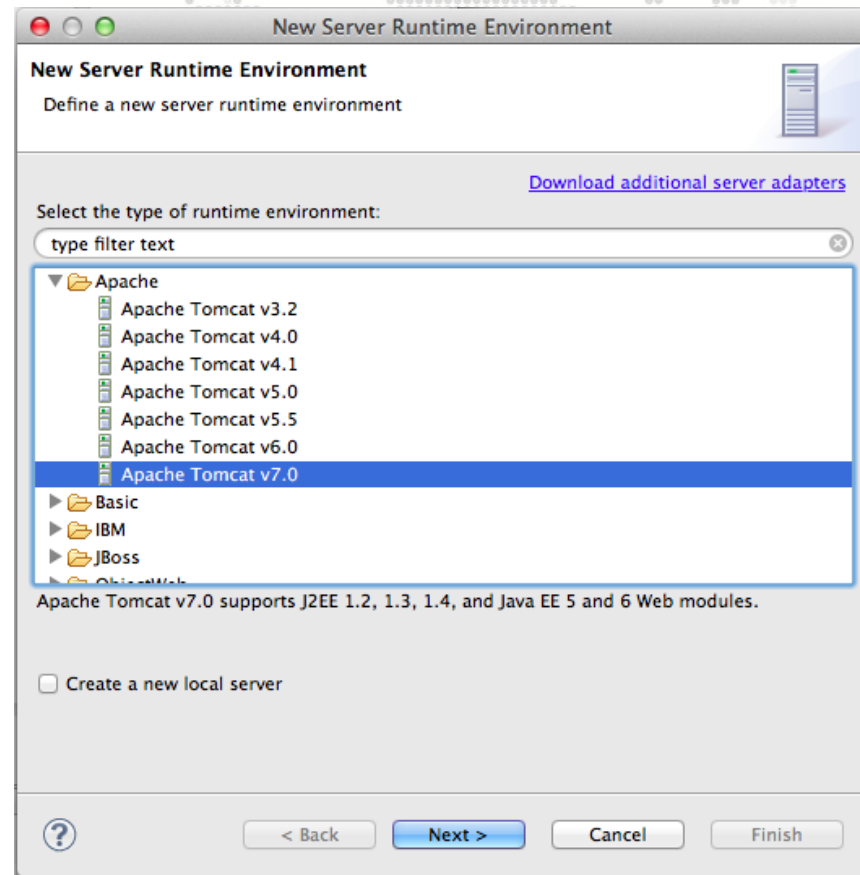
Register Tomcat inside Eclipse

- Run Eclipse
- Go to the Preferences > Server > Runtime Environments
- Click on **Add**



Register Tomcat inside Eclipse

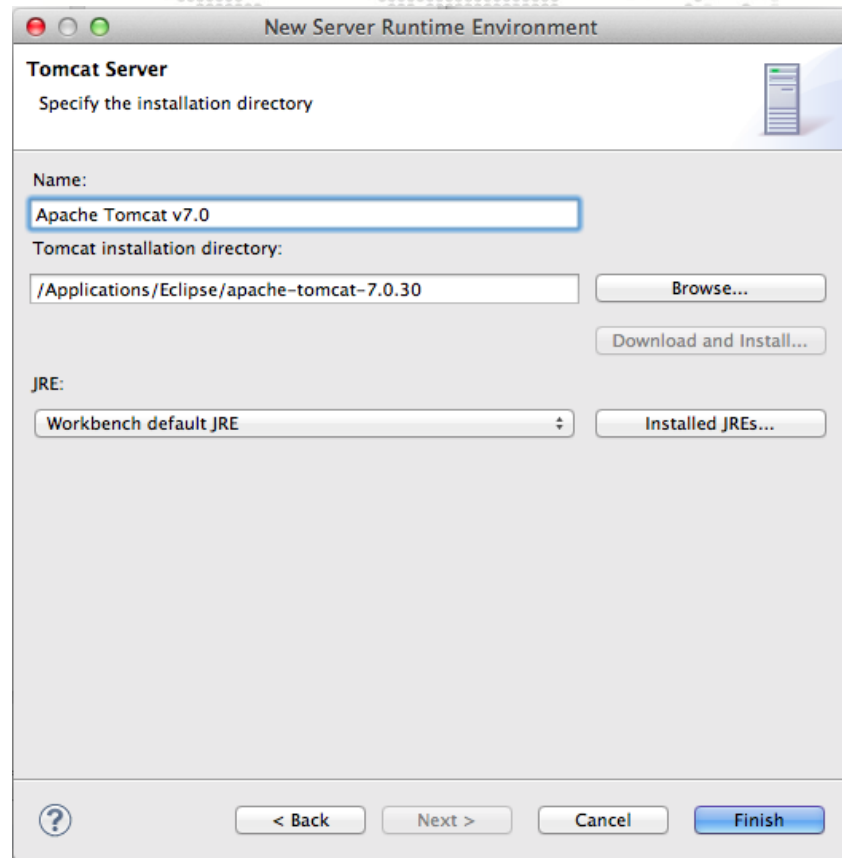
- Choose **Apache Tomcat v7.0** under the **Apache** node
- Click on **Next**





Register Tomcat inside Eclipse

- Give a name for your server
- Specify the directory of the uncompressed Tomcat installation
- Click on Finish





Preparation

SUPCOMMERCE



SupCommerce

Overview



- An e-commerce website
- Developed with Java Technologies
 - Servlet
 - JSP



Overview



- Two parts
 - Front-Office
 - Accessible by everyone
 - Used to browse the product catalog
 - Back Office
 - Only accessible by authenticated users
 - Used to manage products in catalog



Create the project



- Create a Dynamic Web Project with Eclipse
 - Name it SupCommerce
 - Choose Tomcat as Target runtime
 - Dynamic web module version 2.5
- Add the SupCommerce.jar file in /WEB-INF/lib
 - It's a library with two classes inside
 - SupProduct represents a product
 - SupProductDAO which give us some static methods to store and manage SupProduct objects in memory



SupCommerce

Create the project



- Add the SupCommerce.jar file in /WEB-INF/lib
 - It's a library with two classes inside
 - SupProduct represents a product
 - SupProductDAO which give us some static methods to store and manage SupProduct objects in memory



SupCommerce

SupProduct class



- SupProduct is a JavaBean with 4 attributes
 - Long id, a technical identifier
 - String name, the name of the product
 - String description, the description of the product
 - float price, the price of the product



SupProductDAO class



- SupProductDAO have 6 methods:
 - `List<SupProduct> getAllProducts();`
 - Return all the products stored in memory
 - `void addProduct(SupProduct p);`
 - Generate an id for a product and add it in memory
 - `SupProduct findProduct(Long id);`
 - Find a product by id



SupProductDAO class



- SupProductDAO have 6 methods:
 - void removeProduct(Long id);
 - void removeProduct(SupProduct p);
 - Remove a product stored in memory
 - void updateProduct(SupProduct p);
 - Update a product stored in memory



SupCommerce

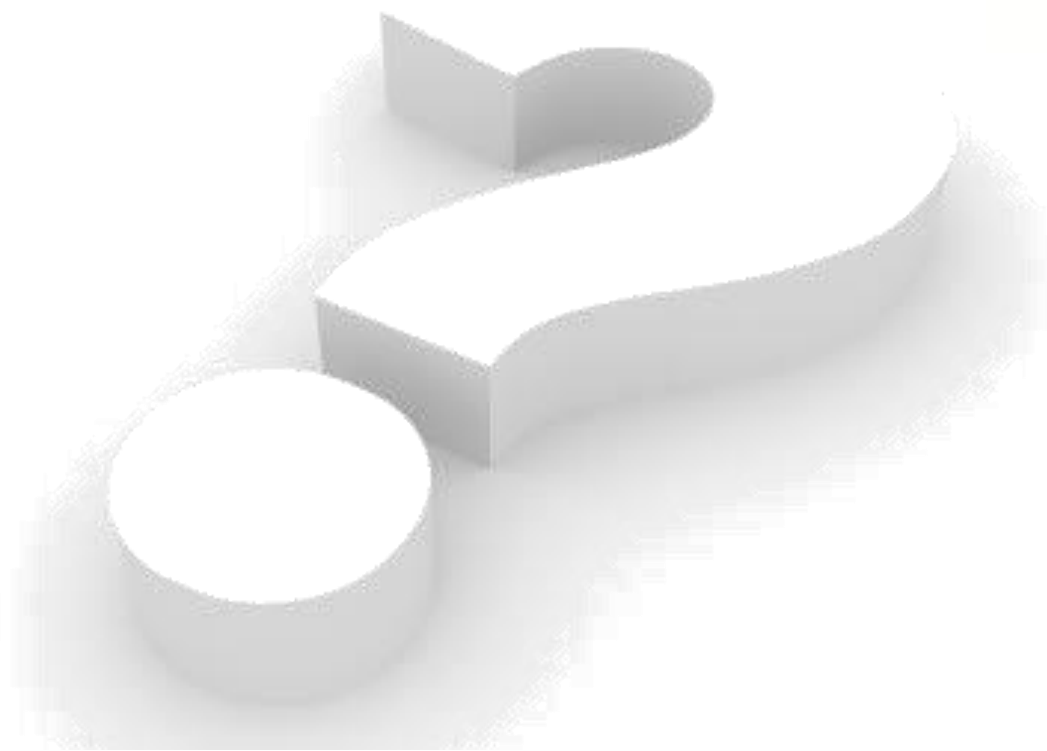
SupProductDAO class



- Be Careful:
 - SupProductDAO stores SupProducts **in memory** !
 - Each time you'll restart the server or redeploy your application, all of them **will be lost**
 - We'll persist them in database later... Be patient 😊



Questions ?





Preparation

The end



Sign of Success

Thanks for your attention