## **Objectives**



- Create a simple web application that logs requests
  - Clone a web application from github
  - Edit the provided servlet
  - Deploy the application to a servlet container

### Servlet Providing Text



- A servlet is a Java class that has methods to handle requests
- Extended the base Servlet class and overrode the doGet() method
- URLs are relative to the base URL of your web application

### Request and Response



- Notice that the framework methods such as doGet receive two arguments
  - HttpServletRequest: access information related to the request, url parameters for example
  - HttpServletResponse: access functionality related to the response, such as the writer, content headers, and so on
- Also notice that a Servlet is also a Java class
  - For this exercise it is ok to store data in a static variable attached to the servlet class

# Cloning the Web Application



- We have set up a public repository containing a basic Java web application<sup>1</sup>
- You can clone this project and import to Eclipse as you have done previously
- Make sure you are in the Java EE perspective (upper right corner)

<sup>1</sup>https://github.com/marks1024/logging-exercise-361

#### Installing the Web Server



- Java EE is an open standard with many different implementations to choose from
- Tomcat<sup>2</sup> is probably the easiest to obtain and use
  - Simply download and unzip in a known location on your computer
  - Choose the 8.5 version
- To run the application we have at least two options
  - Tell the IDE where the server is ("run on server" option in eclipse)
  - Package our web application as a .war file and copy to Tomcat's webapps/ directory

<sup>&</sup>lt;sup>2</sup>http://tomcat.apache.org/

## Task: Logging Application



- Use the web app skeleton from github to create a simple logging application
- Servlet that records every request made to the servlet (time of access, host, path)
- Store a log in a static variable on the servlet class (use an ArrayList) for example (see the documentation for HttpServletRequest<sup>3</sup>)
- Deploy your application either locally and access from your browser at localhost:8080

 $<sup>^3 {\</sup>tt https://tomcat.apache.org/tomcat-5.5-doc/servletapi/javax/servlet/http/HttpServletRequest.html}$