Servlets

Servlets are a class that responds to a particular type of network request, Commonly HTTP request.

Install apache Tomcat

<https://www.youtube.com/watch?v=pKMgr8uNvGM>

webapps folder holds tomcat files

Tomcat manages a lot of the backend, so you don’t need to program that into your java.

tutorial:

https://www.javatpoint.com/servlet-tutorial

servlets help with threaded programs, managing the requests, object pooling, security, life cycle management.

Jvm manages servlets, this makes the management of memory leaks, and garbage collection (etc.) easier for us.

possible servlet uses:

* Servlet is a technology which is used to create a web application.
* Servlet is an API that provides many interfaces and classes including documentation.
* Servlet is an interface that must be implemented for creating any Servlet.
* Servlet is a class that extends the capabilities of the servers and responds to the incoming requests. It can respond to any requests.
* Servlet is a web component that is deployed on the server to create a dynamic web page.

servlet classes I will be trying to use are:

init: only called to initialize communication with server

doPost: used in form submission

doGet: used in retrieving information

Previous technology was CGI, servlets is much better.

Servlets can dynamically create websites

**Get requests**

Only in header

Not secured

Can be bookmarked

More efficient

Remains in browser history

**Post requests**

Secured

Cannot be bookmarked

Lage amount of data can be sent

Servlet containers come in three types:

Standalone: java-based server where servlet container and web-servers are part of single program (eg. tomcat)

In-process: plug-in running the program outside of webserver. (eg. Tomcat running inside JBoss)

Out-of-process: webserver and servlet container are separate things. Webserver uses plug-in on servlet container to communicate.

Examples of app servers are: JBoss, Glassfish, Weblogic, Websphere