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| 1.1 |  |
| set up eclipse ee instat tomcat (404)issue possible |  |
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| 1.2 |  |
| Use Eclipse EE |  |
| New project: new>other..>web>DynamicWebProject  1.set project name  2 set tomcat server  3 tick box to generate deployment descriptor  4 Click finish |  |
|  | To run on tomcat  1right click on Project Name  2 Run as.. 3 Run on server  4 Chose server 5Press Finish |
| web.xml TOMCAT START PAGE  Welcome file  <welcome-file-list>  <welcome-file>index.html</welcome-file>  That to show when entering application (Direct file)  IT RUNS files FROM WebContent file    <welcome-file-list>  <welcome-file>NewFile.html</welcome-file>  </welcome-file-list>  Address  [http://localhost:8080/<ProjectName>/](http://localhost:8080/%3cProjectName%3e/)  [http://localhost:8080/<ServletUrl>/](http://localhost:8080/%3cServletUrl%3e/)  [http://localhost:8080/<ModifiedServletURL>/](http://localhost:8080/%3cModifiedServletURL%3e/) | <display-name>JavaServlet</display-name>  <welcome-file-list>  <welcome-file>index.html</welcome-file>  <welcome-file>index.htm</welcome-file>  <welcome-file>index.jsp</welcome-file>  <welcome-file>default.html</welcome-file>  <welcome-file>default.htm</welcome-file>  <welcome-file>default.jsp</welcome-file>  </welcome-file-list>  </web-app> |
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| 1.3 First Servlet Part 2 <https://javabrains.io/courses/servlets_intro/lessons/First-Servlet-Part-2> | 1. New Servlet “SimpleServlet”  2. Setinng SimpleServlet url  http://localhost:8080/JavaServlet/SimpleServlet  <http://localhost:8080/JavaServlet/SimpleServlet2>  3. Editing doGet method  Print writer object printing Hello in html h3 heading on response  4 Play witch response |
| -Servlet java class that resides on tomcat instance -Servlet runs on tomcat -Has no main method -Has simmular default methods that get executed when u access the servlet  New Servlet right click on project name new>other..>web>Servlet |  |
| URL MAPPING You can map url of the servlet so it can be accesed under different url |  |
| Inherit Abstract Methods  doGet doPost |  |
| SERVLET ANNOTATIONS URL ACCESS  @WebServlet(description = "a simple servlet",  urlPatterns = { "/SimpleServlet",  "/SimpleServlet2"  }) | description= includes Servet descryption (not needed)  urlPatterns =**{** "/SimpleServlet","/SimpleServlet2"**}**) Address The Servlet |
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| When someone accesess servlet URL then doGET method is Automatically called LIKE IN MAIN |  |
| doGet (request , responce) “Uses URL” | response isused push out |

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| 2.1 Understanding servlets <https://javabrains.io/courses/servlets_intro/lessons/Understanding-the-Servlet> |  |
| This how Tomcat relates to Servlets / files  http://localhost:8080/JavaServlet/SimpleServlet  Tomcat uses Anotations urlPatterns  1 Type ProcjectName / Servlet urlPatterns what executes Servlet Annotation urlPatterns = Servlet Execution  doGet is default execution method |  |
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| Tomcat examines url |  |
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| 1 From browser Url gets passed to Tomcat  2 Tomcat creates request and response objects  3 Tomcats examines URL, identifies annotation and passes  request and respons object to annotated servlet and executes it  3.1. Inside servlet takes input parameters form request object  3.2. Then servlet process data (doGet method) 3.3 then results can be “publish” using response  4 Tomcat takes response object and passes back to the browser |  |
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| 2.2 Servlet XML Configuration https://javabrains.io/courses/servlets\_intro/lessons/Servlet-XML-Configuration | New Servlet XmlServlet Created as normal class but has Superclass (Inherites) from HttpServlet Editing Deployment Constructor (web.xml) instead of annotation To create servlet using XML notation |
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| web.xml Deployment Descriptor (web)  WebContent url(<ProjectName>/<WebContentContent>) |  |
| Creating servlet and mapping to url  **DO NOT USE**  **DO NOT USE**  **DO NOT USE**  **DO NOT USE**  **DO NOT USE**  **DO NOT USE**  **DO NOT USE**  **DO NOT USE**  **DO NOT USE**  **DO NOT USE**  **DO NOT USE** | Creates new Servlet  <servlet><!—  <servlet-name>xmlServlet</servlet-name>  <servlet-class>info.michalak.xmlServlet</servlet-class>  </servlet>  <!-- Takes Servlet and maps it with URL pattern -->  <servlet-mapping> <servlet-name>xmlServlet</servlet-name>  <url-pattern>xmlServletPath</url-pattern>  </servlet-mapping> |
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| 2.3 2.4 GET vs POST | 1New Form.Html file in (WebContent Folder)  Form method type get/post  action = “SimpleServlet2” URL ANNOTATION  Input name=”username”  Submit button Edit JavaServlet.java  doGet method String getName = request.getParameter("userName") SYSOUT(“getName”) |
| doGet  Uses open URL to pass information’s To Server  Parameters are passed in URL |  |
| doPost Uses post info not visible to pass information’s To Server parameters massed in HTML Request Body |  |
| 1 New form  method = method type get/post action = Direction of parameter to  *SimpleServlet2 =* URL Annotation of *SimpleServlet.class* Servlet name=*"userName"* = parameter name  *submit* = submit button  <form method=*"get"* action=*"SimpleServlet2"* >  <input type=*"text"* name=*"userName"* value=*"Type"*>  <input type=*"submit"* >  </form> |  |
| JavaServlet.java  doGet method  string form what Tomcat Passed to *SimpleServlet2* as userName from web browser String getName =request.getParameter("userName");  Sets response to content type to text/html  response.setContentType("text/html");  Sets response get writer to writer  PrintWriter writer = response.getWriter();    Response prints “String ” + inside of getName witch was pasef from web browser thrue tomcat by url annotation marked in html to *SimpleServlet.java* in request object  writer.println("This was passt in request" + getName) ; |  |
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| 2.5 doGET doPOST |  |
| get when getting somethings from website |  |
| post then when you want to pass data to process | repeating post operation can have affect on data passed |
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| Apache source code download to review |  |
| You can download tomcat source code to fing out what happens |  |
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| 2.6 |  |
| request and response are created on evry occasion that browser accesses service (created by access pre class) |  |
| servlets objects are re used (use threads) |  |
| thhp 9statles protocol0 not expect that user/data is remember |  |
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| session object remains with value and can be retrive |  |
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| https://www.tutorialspoint.com/servlets/servlets-life-cycle.htm |  |

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| ALL OTHER TUTORIALS UNREADABLE  Corrupted video |  |
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