**Steps to Create “studentsApp” Dynamic Web Application**

1. Created the “Dynamic Web Project” by name “studentsApp” by selecting web module 2.5 to develop Dynamic Web Application

**NOTE:**

* In eclipse we should be in “Java EE” perspective to create Dynamic Web Project
* Dynamic Web Project has following 3 folders

1. src ---> “.java” files will be present
2. build ---> “.class” files will be present
3. WebContent ---> other than “.java” files will be present
4. Created the “index.html” file under “WebContent” folder
5. Created the servlet under “src” folder by extending “**HttpServlet**”

* Fixed the compilation error by copying the “servlet-api.jar” file to

“WebContent/WEB-INF/lib” folder

* Overridden a method by name “doGet()”
* **javax.servlet.\*** is the package representation of Servlet API
* In case of Dynamic Web Project, every JAR file **SHOULD be kept under** “WebContent/WEB-INF/lib” folder
* Any Class which extends “**javax.servlet.http.HttpServlet**” is called as Servlet

1. Configured URL for the servlet in “WebContent/WEB-INF/web.xml”

**Note:**

* Every Servlet (or Dynamic Web Resource) MUST have an unique URL &

that URL MUST be present in web.xml

* NO NEED to configure URL for Static Web Resources i.e. “index.html”

C:\Praveen\Source\_Code\bece14\_Workspace\studentsApp

C:\Praveen\apache-tomcat-8.5.9

1. Generated the WAR File from Dynamic Web Project (**Build Process**)

**NOTE:**

* To generate WAR file, right click on Dynamic web project, select “Export” & click on WAR File
* In the pop-up chose the destination to keep the WAR file

WAR (**W**eb **AR**chive) File:

* WAR file “**represents Dynamic Web Application”** & helps to transfer dynamic web application from one location to another location
* It’s a Collection of .class files

+ Other necessary resources

+ Dependent JAR files (one/more)

C:\Praveen\Source\_Code\becme145\_Workspace\studentsApp

WAR File

C:\Praveen\apache-tomcat-8.5.9

1. Transferred the WAR file to Web Server “Web Path” Location (**Deployment Process**)

**Web Path:**

* It’s a Path in Webserver in which Web Applications are present
* Web Path varies from Webserver to Webserver, we have to refer

the manual to get this information

* In case of Tomcat web path is “**<Tomcat\_Location>\webapps**”
* Hence in Tomcat, WAR file SHOULD be kept under “webapps” folder

1. Started the Webserver

**Note:**

* When we start the webserver it should not throw any exception in the console
* At the time of starting the server, webserver extracts the contents of WAR file to a folder by same name inside “webapps” folder

1. Accessed the developed dynamic web application resources using Web browser by using corresponding web URL’s
2. Accessed the HTML Page (**Static Web Resource**)

<http://localhost:8080/studentsApp/index.html>

**NOTE:**

* In case of Static Resource URL consists of “**Resource File Name”**
* HTML generates “Static Response”

1. Accessed the Servlet by typing the configured URL present in web.xml (**Dynamic Web Resource**)

<http://localhost:8080/studentsApp/currentDate>

**NOTE:**

* In case of Dynamic Resource web URL consists of “**configured URL”** present in web.xml
* Servlet generates “Dynamic Response”