

# Exercises: Getting Started with JSF 2

1. Bookmark the following two URLs in your browser.
  - JSF 2.2 Docs page: <https://javaserverfaces.java.net/nonav/docs/2.2/>
  - Java API: <http://docs.oracle.com/javase/8/docs/api/> or <http://docs.oracle.com/javase/7/docs/api/>
2. Deploy the jsf-blank project as described in the notes. Make sure you can run it in a browser with <http://localhost/jsf-blank/>.
3. Register the JSF 2.2 JAR file as described in the notes (Window --> Preferences --> Java --> Build Path --> User Libraries --> New, then point to JAR file). Note that if you are using my Eclipse workspace, this is probably done already. If you see a JSF 2.2 library after “User Libraries” above, it is already set.
4. Use the Eclipse Wizard to make a new JSF 2.2 project as described in the notes (File --> New --> Project --> Web --> Dynamic Web Project, or, if you have done it once before, File --> New --> Dynamic Web Project). Remember to specify “JavaServer Faces v2.2 Project” for the configuration.
  - Copy these two files from the jsf-blank project: WebContent/WEB-INF/web.xml and WebContent/index.xhtml. Put them in the corresponding locations in your new project.
  - Deploy your project, restart Tomcat, and access <http://your-project/>. Unless you also copy my Java code, nothing will actually happen when you click on the button, but the mere fact that you see a button at all shows that JSF was set up properly.
5. Make a new Eclipse project by copying the jsf-blank project. Here is the process:
  - R-click on jsf-blank and click Copy. R-click in Project Explorer on left and click Paste.
  - Give the project a new name. For Tomcat and most other servers, leave the project exactly as is. But, if you use JBoss, Glassfish, or another Java EE server, you should delete the JAR files from WEB-INF/lib because the classes defined in those JARs are already built into the server.

Unfortunately, due to an Eclipse bug, you have to fix the references to the old project name as shown in the notes. (Open Navigator with Window --> Show View --> Navigator)

- Go to file system or Eclipse Navigator (not Project Explorer), edit `eclipseWorkspace/yourNewProject/.settings/org.eclipse.wst.common.component`
- Change all three instances of old project name (jsf-blank) to new one, then save file
- **Close Navigator window**

Deploy the project and access <http://localhost/yourNewProject/> (which forwards to a .jsf page).

6. Take a look at WebContent/WEB-INF/web.xml in jsf-blank. See if you can figure out the purpose of the various entries.
7. Make a copy of one of your previous projects (don't forget to fix the internal project name by editing the .component file as in #5 above). Change the JSF file extension from .jsf to .faces. Note that you do *not* rename the physical files (e.g., blah.xhtml is still blah.xhtml, but you will access it with blah.faces now instead of blah.jsf as before). Hint 1: we did *not* explain this in class, so you will be guessing based on what you discovered in #5. Hint 2: change a second entry in web.xml.