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Java Web App Directory Layout

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3-4 Minuten

In order to get a Java web server or servlet container to run your Java web application, you need to package the resources inside it (servlets, JSP's etc.) in a standardized way. This text will show you how.

Here are the directories and files a web app should include:

- `MyWebApp` (dir)
- `WEB-INF` (dir)
- `web.xml`
- `classes` (dir)
- `lib` (dir)
- `index.jsp`

The Root Directory

The root directory of your web application can have pretty much any name you want. In the above example the root directory is called `MyWebApp`.

Underneath the root directory, you can put all files that should be accessible in your web application. For instance, if your web application is mapped to the URL

`http://mydomain.com/myWebApp/`

... then the `index.jsp` page will be accessible at the URL

`http://mydomain.com/myWebApp/index.jsp`

If you create any subdirectories under the root directory, and place files in these subdirectories, these will be available by the `subdirectory/file` path, in the web application. For instance, if you create a subdirectory called `layout`, and put a file inside it called `theLayout.jsp`, then you could access that file from the outside, via this URL:

`http://mydomain.com/myWebApp/layout/theLayout.jsp`

The `WEB-INF` subdirectory is an exception from this rule, as I will describe below.

The WEB-INF Directory

The `WEB-INF` directory is located just below the web app root directory. This directory is a meta information directory. Files stored inhere are not supposed to be accessible from a browser (although your web app can access them internally, in your code).

Inside the `WEB-INF` directory there are two important directories (`classes` and `lib`), and one important file (`web.xml`). These are described below.

web.xml

The `web.xml` file contains information about the web application, which is used by the Java web server / servlet container in order to properly deploy and execute the web application. For instance, the `web.xml` contains information about which servlets a web application should deploy, and what URL's they should be mapped to. I will not get into more detail about the `web.xml` file here. Just know, that it exists.

classes

The `classes` directory contains all compiled Java classes that are part of your web application. The classes should be located in a directory structure matching their package structure, just like if you were to run them directly from the commandline, or package them in a JAR file.

lib

The `lib` directory contains all JAR files used by your web application. This directory most often contains any third party libraries that your application is using. You could, however, also put your own classes into a JAR file, and locate it here, rather than putting those classes in the `classes` directory.