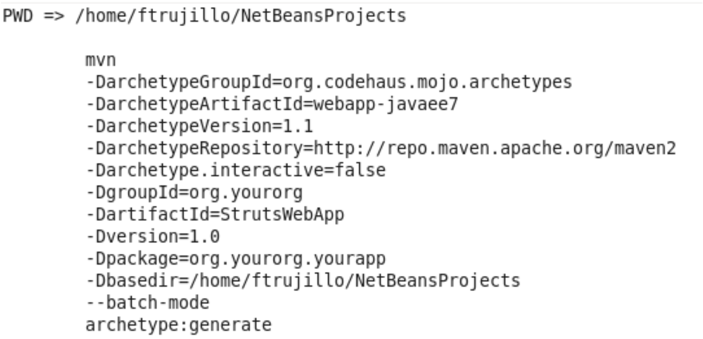
Create a Maven Archetype from an existing project in 8 steps.

Source => http://www.luckyryan.com/2013/02/15/create-maven-archetype-from-existing-project/

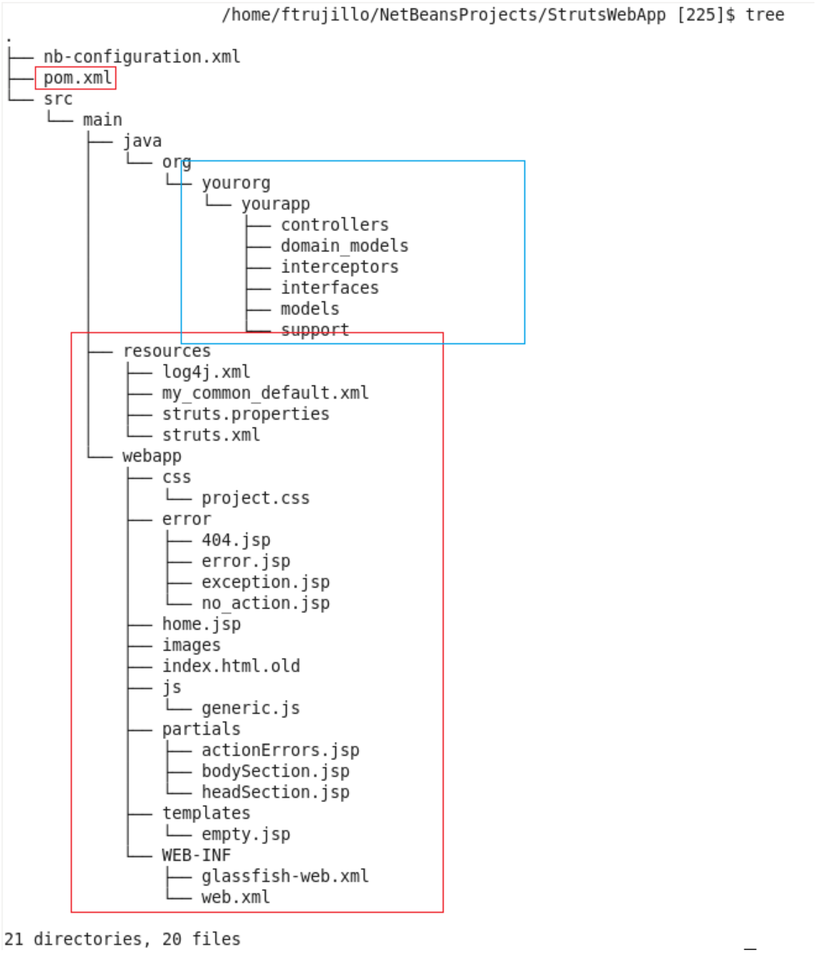
1. Create your **POM based project** as normal with base files that you want as starter for archetype.
   a. This is a **GENERIC pom based project** that you will save in SVN/GIT and use as baseline starter for your type of project. In this case, I chose a struts2 web application that requires a lot of xml config out of the box.
   b. I started my web app from another maven archetype, but you can write your code from scratch if need be. (The mvn command must be on ONE line or continue with /)



```
PWD => /home/ftrujillo/NetBeansProjects

        mvn
        -DarchetypeGroupId=org.codehaus.mojo.archetypes
        -DarchetypeArtifactId=webapp-javaee7
        -DarchetypeVersion=1.1
        -DarchetypeRepository=http://repo.maven.apache.org/maven2
        -Darchetype.interactive=false
        -DgroupId=org.yourorg
        -DartifactId=StrutsWebApp
        -Dversion=1.0
        -Dpackage=org.yourorg.yourapp
        -Dbasedir=/home/ftrujillo/NetBeansProjects
        --batch-mode
        archetype:generate
```

After your base project works.

2. **cd** into your project directory containing your **pom.xml** file.
   a. **mvn clean** (to get rid of target from compile/run OPTIONAL)

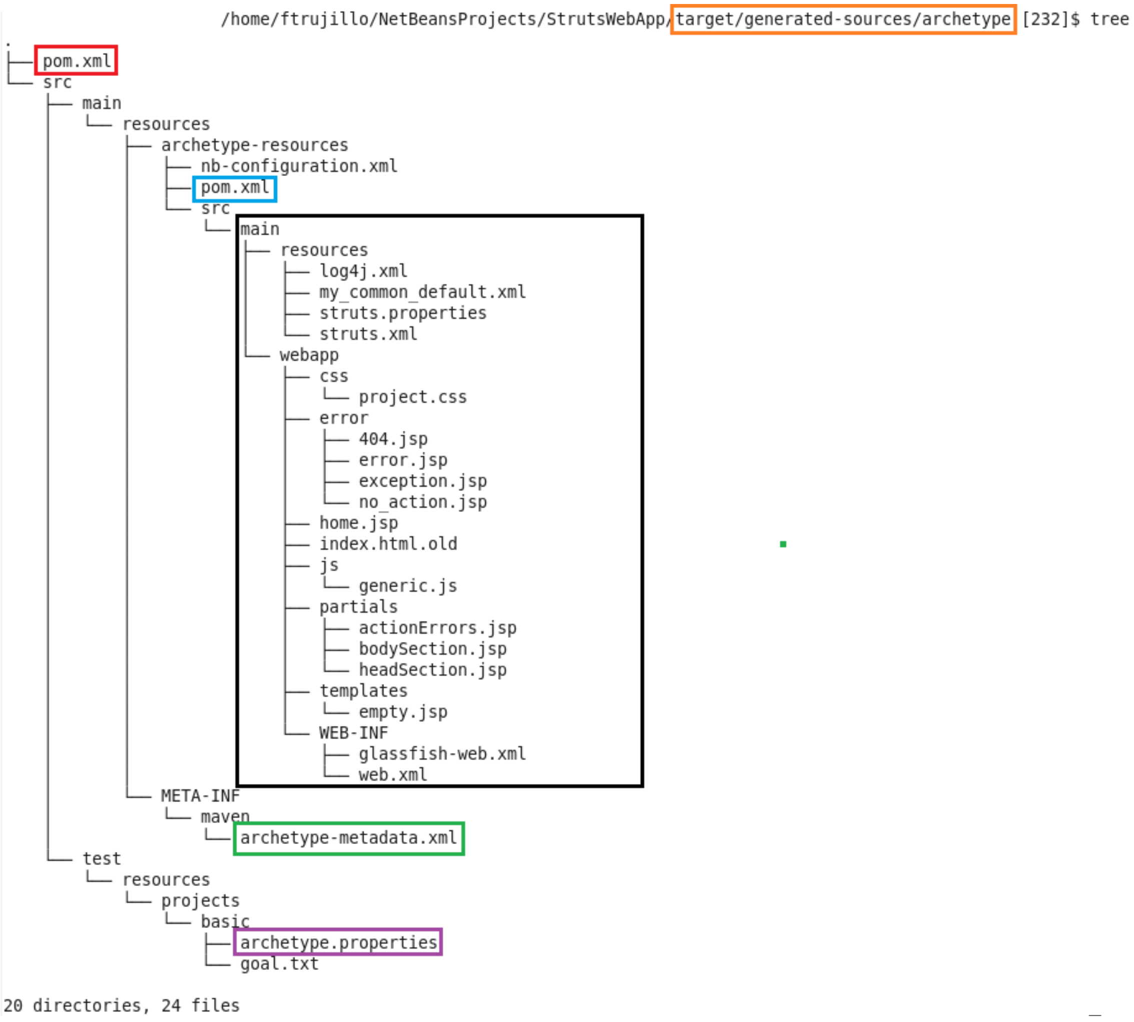


```
                      /home/ftrujillo/NetBeansProjects/StrutsWebApp [225]$ tree
.
├── nb-configuration.xml
├── pom.xml
└── src
    └── main
        ├── java
        │   └── org
        │       └── yourorg
        │           └── yourapp
        │               ├── controllers
        │               ├── domain_models
        │               ├── interceptors
        │               ├── interfaces
        │               ├── models
        │               └── support
        ├── resources
        │   ├── log4j.xml
        │   ├── my_common_default.xml
        │   ├── struts.properties
        │   └── struts.xml
        └── webapp
            ├── css
            │   └── project.css
            ├── error
            │   ├── 404.jsp
            │   ├── error.jsp
            │   ├── exception.jsp
            │   └── no_action.jsp
            ├── home.jsp
            ├── images
            ├── index.html.old
            ├── js
            │   └── generic.js
            ├── partials
            │   ├── actionErrors.jsp
            │   ├── bodySection.jsp
            │   └── headSection.jsp
            ├── templates
            │   └── empty.jsp
            └── WEB-INF
                ├── glassfish-web.xml
                └── web.xml

21 directories, 20 files
```

3. **mvn archetype:create-from-project**

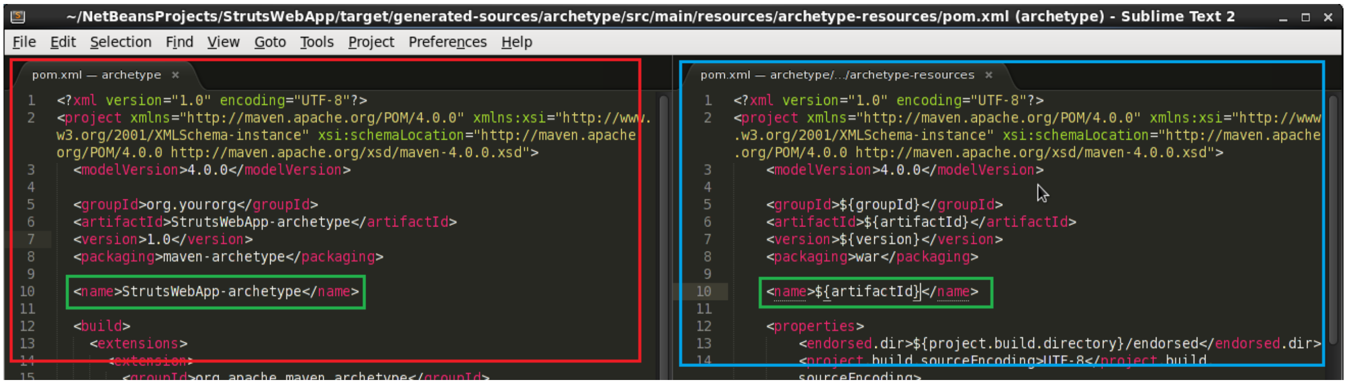
4. **cd target/generated-sources/archetype** (ARCHETYPE ROOT)
   a. **DO NOT CHANGE DIRECTORIES for steps 5-8.**

5. **mvn clean**
   a. There are two pom.xml files. The **pom.xml at the top** is to create this archetype, the one in **BLUE** is the file that **will be the pom.xml file when we generate a new project** later. **See changes below.**
   b. ***** Notice no empty directories get created. *****



```
/home/ftrujillo/NetBeansProjects/StrutsWebApp/target/generated-sources/archetype [232]$ tree
.
├── pom.xml
└── src
    ├── main
    │   └── resources
    │       ├── archetype-resources
    │       │   ├── nb-configuration.xml
    │       │   ├── pom.xml
    │       │   └── src
    │       │       └── main
    │       │           ├── resources
    │       │           │   ├── log4j.xml
    │       │           │   ├── my_common_default.xml
    │       │           │   ├── struts.properties
    │       │           │   └── struts.xml
    │       │           └── webapp
    │       │               ├── css
    │       │               │   └── project.css
    │       │               ├── error
    │       │               │   ├── 404.jsp
    │       │               │   ├── error.jsp
    │       │               │   ├── exception.jsp
    │       │               │   └── no_action.jsp
    │       │               ├── home.jsp
    │       │               ├── index.html.old
    │       │               ├── js
    │       │               │   └── generic.js
    │       │               ├── partials
    │       │               │   ├── actionErrors.jsp
    │       │               │   ├── bodySection.jsp
    │       │               │   └── headSection.jsp
    │       │               ├── templates
    │       │               │   └── empty.jsp
    │       │               └── WEB-INF
    │       │                   ├── glassfish-web.xml
    │       │                   └── web.xml
    │       └── META-INF
    │           └── maven
    │               └── archetype-metadata.xml
    └── test
        └── resources
            └── projects
                └── basic
                    ├── archetype.properties
                    └── goal.txt

20 directories, 24 files
```

The top pom.xml file will control the archetype build, the other pom.xml file's name MUST be changed to use property. ${artifactId}



~/NetBeansProjects/StrutsWebApp/target/generated-sources/archetype/src/main/resources/archetype-resources/pom.xml (archetype) - Sublime Text 2

pom.xml — archetype

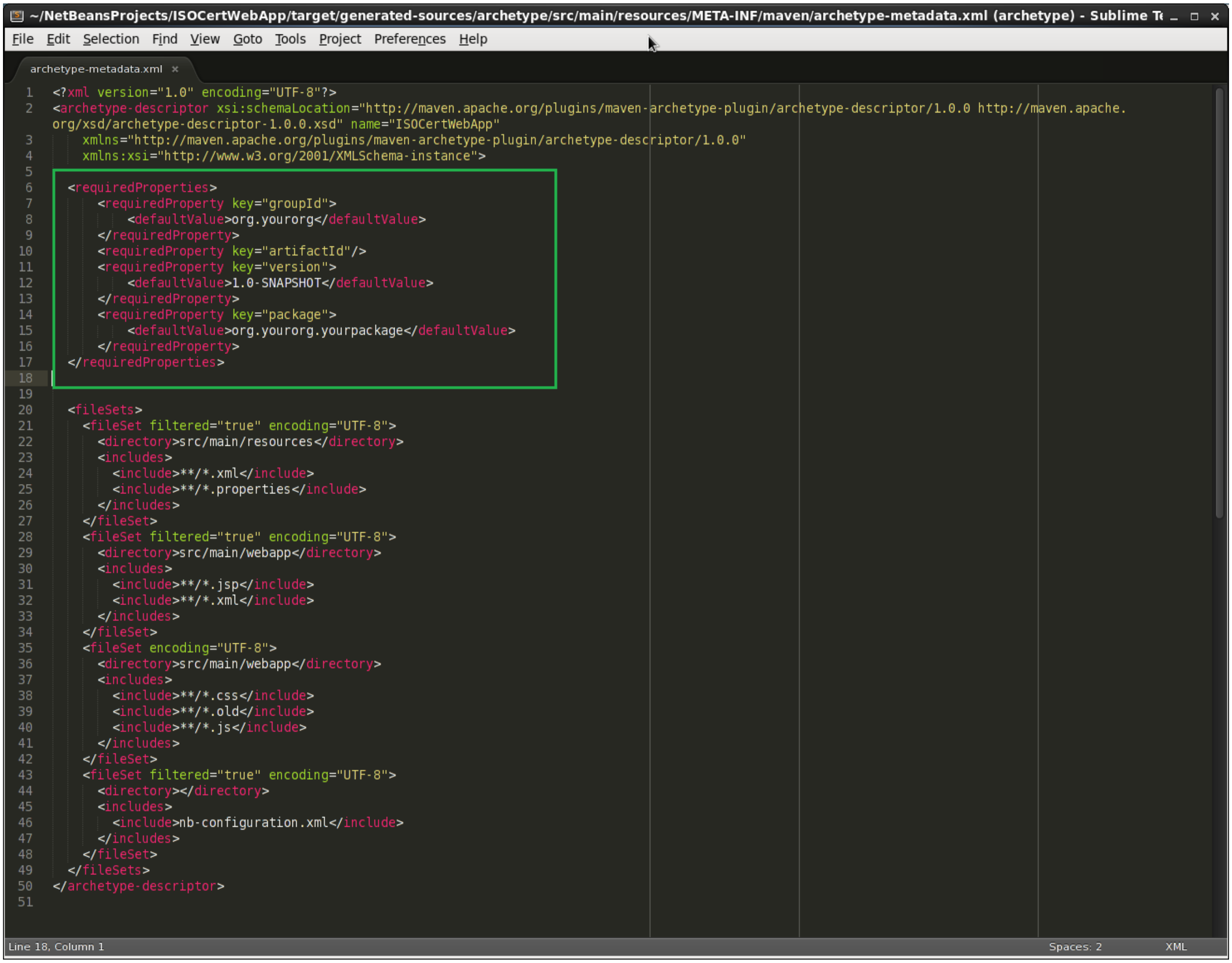
```
<?xml version="1.0" encoding="UTF-8"?>
<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.
w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://maven.apache
org/POM/4.0.0 http://maven.apache.org/xsd/maven-4.0.0.xsd">
  <modelVersion>4.0.0</modelVersion>

  <groupId>org.yourorg</groupId>
  <artifactId>StrutsWebApp-archetype</artifactId>
  <version>1.0</version>
  <packaging>maven-archetype</packaging>

  <name>StrutsWebApp-archetype</name>

  <build>
    <extensions>
      <extension>
        <groupId>org.apache.maven.archetype</groupId>
```

pom.xml — archetype/.../archetype-resources

```
<?xml version="1.0" encoding="UTF-8"?>
<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www
.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://maven.apache
.org/POM/4.0.0 http://maven.apache.org/xsd/maven-4.0.0.xsd">
    <modelVersion>4.0.0</modelVersion>

    <groupId>${groupId}</groupId>
    <artifactId>${artifactId}</artifactId>
    <version>${version}</version>
    <packaging>war</packaging>

    <name>${artifactId}</name>

    <properties>
        <endorsed.dir>${project.build.directory}/endorsed</endorsed.dir>
        <project.build.sourceEncoding>UTF-8</project.build
        sourceEncoding>
```

6. Edit **./src/main/resources/META-INF/maven/archetype-metadata.xml**. Add the part in **GREEN**.

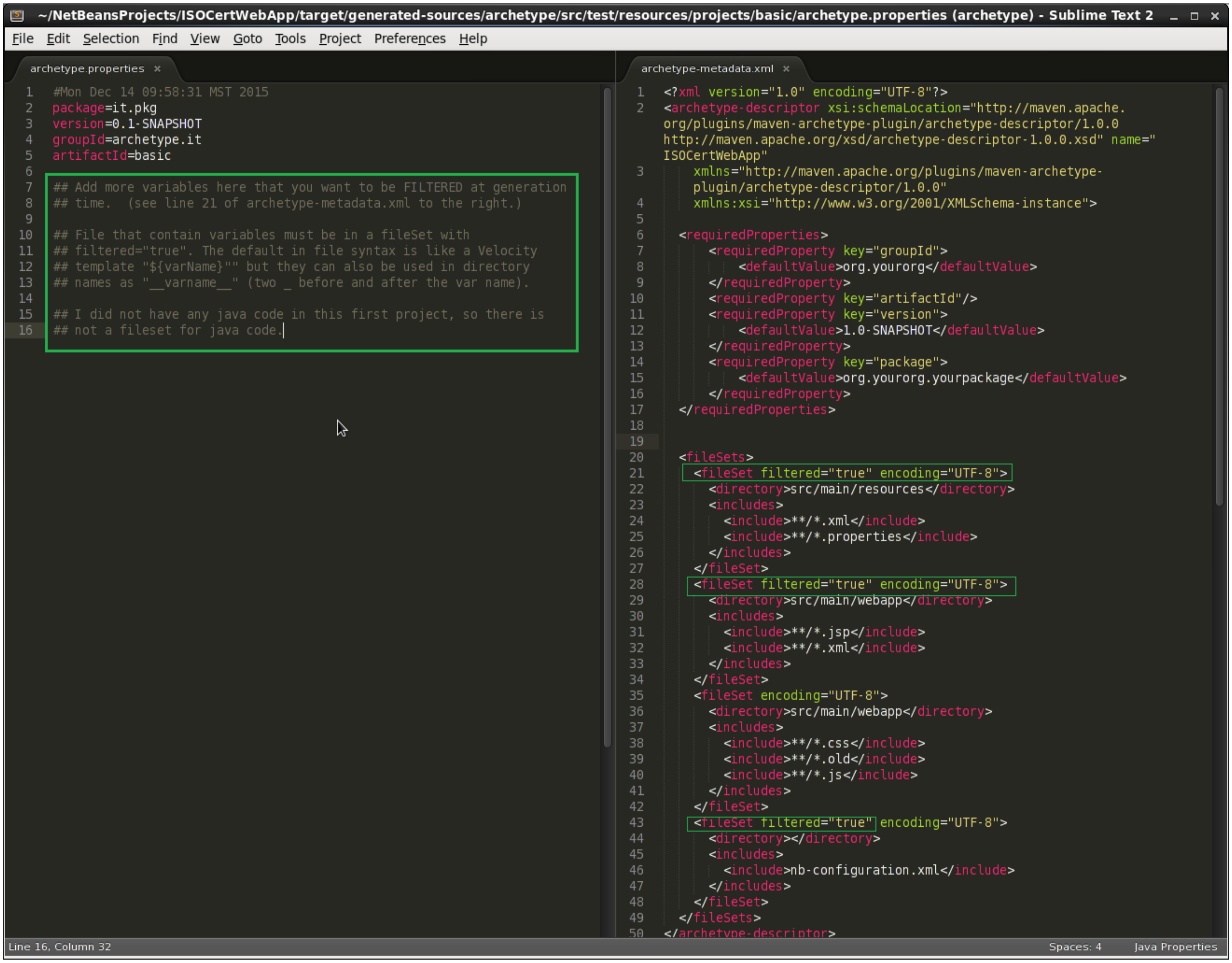
```
<requiredProperties>
   <requiredProperty key="groupId">
      <defaultValue>org.yourorg</defaultValue>
   </requiredProperty>
   <requiredProperty key="artifactId"/>
   <requiredProperty key="version">
      <defaultValue>1.0</defaultValue>
   </requiredProperty>
   <requiredProperty key="package">
      <defaultValue>org.yourorg.yourapp</defaultValue>
   </requiredProperty>
</requiredProperties>
```



~/NetBeansProjects/ISOCertWebApp/target/generated-sources/archetype/src/main/resources/META-INF/maven/archetype-metadata.xml (archetype) - Sublime Te
File Edit Selection Find View Goto Tools Project Preferences Help
archetype-metadata.xml ×

```
<?xml version="1.0" encoding="UTF-8"?>
<archetype-descriptor xsi:schemaLocation="http://maven.apache.org/plugins/maven-archetype-plugin/archetype-descriptor/1.0.0 http://maven.apache.org/xsd/archetype-descriptor-1.0.0.xsd" name="ISOCertWebApp"
    xmlns="http://maven.apache.org/plugins/maven-archetype-plugin/archetype-descriptor/1.0.0"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">

  <requiredProperties>
      <requiredProperty key="groupId">
          <defaultValue>org.yourorg</defaultValue>
      </requiredProperty>
      <requiredProperty key="artifactId"/>
      <requiredProperty key="version">
          <defaultValue>1.0-SNAPSHOT</defaultValue>
      </requiredProperty>
      <requiredProperty key="package">
          <defaultValue>org.yourorg.yourpackage</defaultValue>
      </requiredProperty>
  </requiredProperties>


  <fileSets>
    <fileSet filtered="true" encoding="UTF-8">
      <directory>src/main/resources</directory>
      <includes>
        <include>**/*.xml</include>
        <include>**/*.properties</include>
      </includes>
    </fileSet>
    <fileSet filtered="true" encoding="UTF-8">
      <directory>src/main/webapp</directory>
      <includes>
        <include>**/*.jsp</include>
        <include>**/*.xml</include>
      </includes>
    </fileSet>
    <fileSet encoding="UTF-8">
      <directory>src/main/webapp</directory>
      <includes>
        <include>**/*.css</include>
        <include>**/*.old</include>
        <include>**/*.js</include>
      </includes>
    </fileSet>
    <fileSet filtered="true" encoding="UTF-8">
      <directory></directory>
      <includes>
        <include>nb-configuration.xml</include>
      </includes>
    </fileSet>
  </fileSets>
</archetype-descriptor>
```

7. Optionally edit **./src/test/resources/projects/basic/archetype.properties**. Add other properties you want to replace in your source code.


~/NetBeansProjects/ISOCertWebApp/target/generated-sources/archetype/src/test/resources/projects/basic/archetype.properties (archetype) - Sublime Text 2
File Edit Selection Find View Goto Tools Project Preferences Help
archetype.properties
archetype-metadata.xml
Line 16, Column 32
Spaces: 4
Java Properties

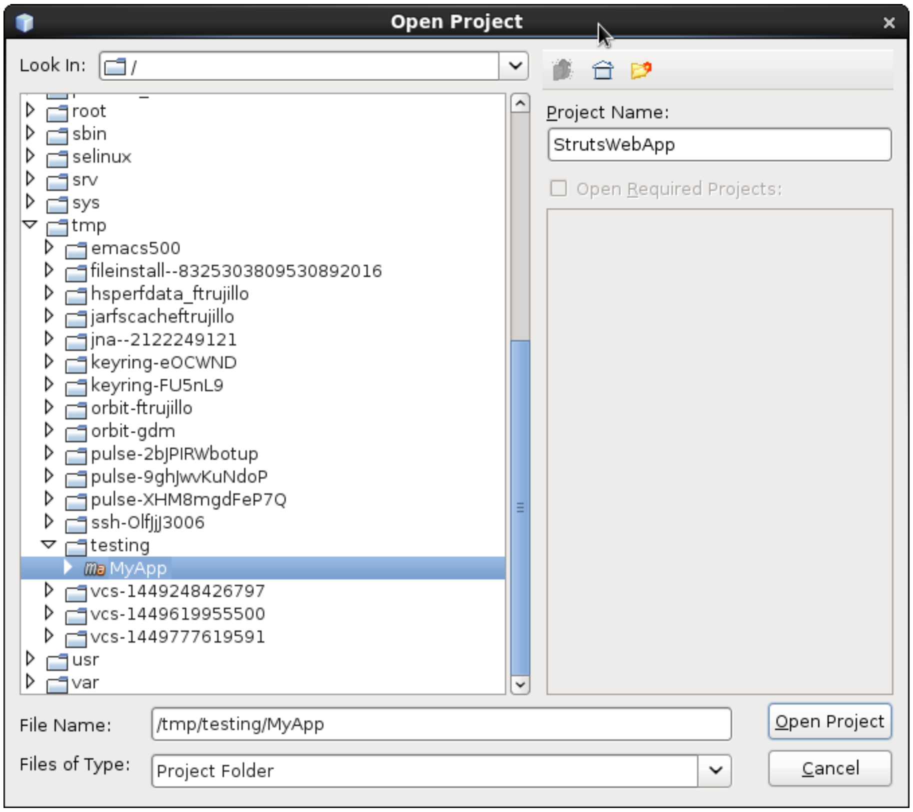
```
#Mon Dec 14 09:58:31 MST 2015
package=it.pkg
version=0.1-SNAPSHOT
groupId=archetype.it
artifactId=basic

## Add more variables here that you want to be FILTERED at generation
## time.  (see line 21 of archetype-metadata.xml to the right.)

## File that contain variables must be in a fileSet with
## filtered="true". The default in file syntax is like a Velocity
## template "${varName}"" but they can also be used in directory
## names as "__varname__" (two _ before and after the var name).

## I did not have any java code in this first project, so there is
## not a fileset for java code.
```

```
1   <?xml version="1.0" encoding="UTF-8"?>
2   <archetype-descriptor xsi:schemaLocation="http://maven.apache.
    org/plugins/maven-archetype-plugin/archetype-descriptor/1.0.0
    http://maven.apache.org/xsd/archetype-descriptor-1.0.0.xsd" name="
    ISOCertWebApp"
3       xmlns="http://maven.apache.org/plugins/maven-archetype-
        plugin/archetype-descriptor/1.0.0"
4       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
5
6     <requiredProperties>
7         <requiredProperty key="groupId">
8             <defaultValue>org.yourorg</defaultValue>
9         </requiredProperty>
10        <requiredProperty key="artifactId"/>
11        <requiredProperty key="version">
12            <defaultValue>1.0-SNAPSHOT</defaultValue>
13        </requiredProperty>
14        <requiredProperty key="package">
15            <defaultValue>org.yourorg.yourpackage</defaultValue>
16        </requiredProperty>
17    </requiredProperties>
18
19
20    <fileSets>
21      <fileSet filtered="true" encoding="UTF-8">
22        <directory>src/main/resources</directory>
23        <includes>
24          <include>**/*.xml</include>
25          <include>**/*.properties</include>
26        </includes>
27      </fileSet>
28      <fileSet filtered="true" encoding="UTF-8">
29        <directory>src/main/webapp</directory>
30        <includes>
31          <include>**/*.jsp</include>
32          <include>**/*.xml</include>
33        </includes>
34      </fileSet>
35      <fileSet encoding="UTF-8">
36        <directory>src/main/webapp</directory>
37        <includes>
38          <include>**/*.css</include>
39          <include>**/*.old</include>
40          <include>**/*.js</include>
41        </includes>
42      </fileSet>
43      <fileSet filtered="true" encoding="UTF-8">
44        <directory></directory>
45        <includes>
46          <include>nb-configuration.xml</include>
47        </includes>
48      </fileSet>
49    </fileSets>
50  </archetype-descriptor>
```

8. **mvn install**

9. Now, you can chdir to another directory and use the new LOCAL archetype.
    a. mkdir –p /tmp/testing; cd /tmp/testing
    b. mvn -artifactId StrutsWebApp -DarchetypeCatalog=local archetype:generate
    c. **Or, use non interactive mode**

mvn -DarchetypeGroupId=org.yourorg \
    -DarchetypeArtifactId=StrutsWebApp-archetype \
    -DarchetypeVersion=1.0 \
    -DgroupId=**org.me** \
    -DartifactId=**MyApp** \
    -Dversion=**1.0** \
    -Dpackage=**org.me.app** \
    -Dbasedir**=/tmp/testing** \
    -**DarchetypeCatalog=local** \
    archetype:generate



Look In: /

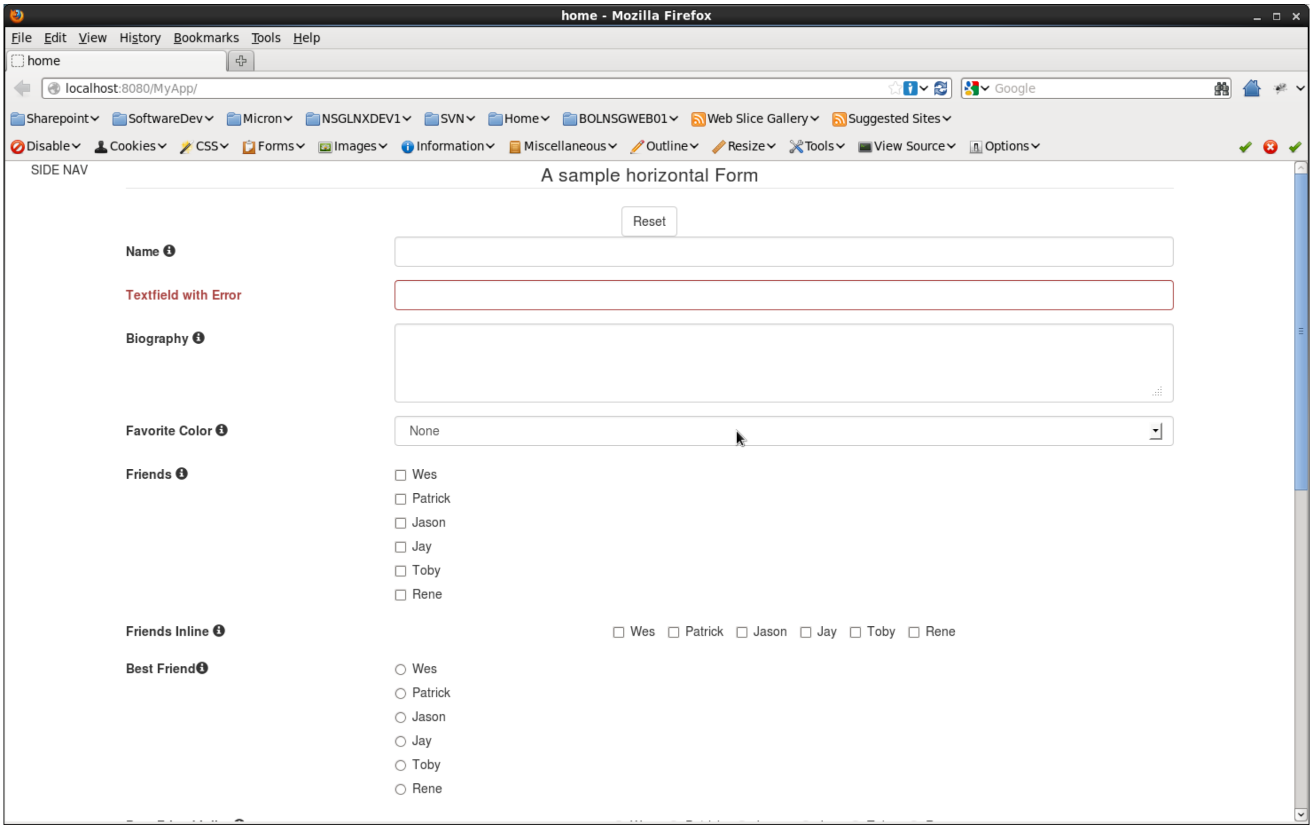
```
▷ root
▷ sbin
▷ selinux
▷ srv
▷ sys
▽ tmp
  ▷ emacs500
  ▷ fileinstall--8325303809530892016
  ▷ hsperfdata_ftrujillo
  ▷ jarfscacheftrujillo
  ▷ jna--2122249121
  ▷ keyring-eOCWND
  ▷ keyring-FU5nL9
  ▷ orbit-ftrujillo
  ▷ orbit-gdm
  ▷ pulse-2bJPIRWbotup
  ▷ pulse-9ghJwvKuNdoP
  ▷ pulse-XHM8mgdFeP7Q
  ▷ ssh-OlfJjJ3006
  ▽ testing
    ▷ MyApp
  ▷ vcs-1449248426797
  ▷ vcs-1449619955500
  ▷ vcs-1449777619591
▷ usr
▷ var
```

Project Name: StrutsWebApp

File Name: /tmp/testing/MyApp

Files of Type: Project Folder

It worked!!


home - Mozilla Firefox
File Edit View History Bookmarks Tools Help
home
Google
Sharepoint SoftwareDev Micron NSGLNXDEV1 SVN Home BOLNSGWEB01 Web Slice Gallery Suggested Sites
Disable Cookies CSS Forms Images Information Miscellaneous Outline Resize Tools View Source Options
SIDE NAV
Reset

localhost:8080/MyApp/

A sample horizontal Form

Name
Textfield with Error
Biography
Favorite Color: None
Friends: □ Wes □ Patrick □ Jason □ Jay □ Toby □ Rene
Friends Inline: □ Wes □ Patrick □ Jason □ Jay □ Toby □ Rene
Best Friend: ○ Wes ○ Patrick ○ Jason ○ Jay ○ Toby ○ Rene

If you have http set up to serve public_html, then you can do remote sharing. Add this to above command.

```
-DarchetypeRepository=http://yourhost.com/~username/maven2 \
```

10. Now, go back to directory in **step 4** where we installed the new archetype.
    a. **cd $HOME/NetBeansProjects/StrutsWebApp/**
    b. **mvn clean**

11. Check in your project to SVN or GIT so you can update later and re-generate new archtype at that time with a different version.