

# Assignment 1 - Delivery Sep 14

INF 5750 – Open Source Software development.

## Technologies involved

Use of Subversion and Maven.

## Overview

This assignment will test and give you basic knowledge and hands-on experience with Subversion, Maven, and Eclipse.

## Description

1. Go to <https://www.ifi.uio.no/system/svn> and log in with your IFI username and password. Create a new repository, call it “inf5750” and select “User” as type.
2. Click “Edit user access” and add the lab teachers as new users with read access.
3. Check out a working copy from your newly created repository to wherever you like, e.g. to a directory on your IFI account or to your laptop.
4. Create a directory within the local working copy called assignment1-<username>.
5. In this directory, create a Maven project descriptor file (pom.xml) by hand. I.e. do not use the *archetype:create* Maven command.
6. Build project files for Eclipse using Maven.
7. Import your project into Eclipse.
8. In Eclipse, create the following directories as source folders inside your assignment folder: src/main/java, src/main/resources.
9. Put the *appropriate* files under version control with the svn add command and commit them to your repository. Remember to commit the inf5750 root folder, not only the assignment1-<username> folder, in order to pass on the folder structure.
10. Create a package called no.uio.inf5750.assignment1.<username> in src/main/java in Eclipse.
11. Create a Java class *HelloWorld.java* in this package. This class must have a main method that prints “Hello World!” to stdout.
12. Add manifest information (see below) to the project descriptor file so that Java can find the main class.
13. Build the project with Maven, run the *JAR* file from the command line and verify that it works.
14. Put the newly created files under version control and commit the changes to your repository.
15. When you’re done, send a mail to your group teacher with the subject “<username> - Assignment 1”. Do not send us the source code; we will check it out from your repository.

## Hints

- Repeat the lecture slides and read the first chapter of the SVN book!
- Don't put generated resources like the target folder and the project files under version control. These files are products, not sources, and can be generated by the java compiler and Maven respectively.
- To get Maven to create the desired manifest file, add the following code to the pom.xml file:

```
<?xml version="1.0"?>
<project>
  <modelVersion>4.0.0</modelVersion>

  <groupId>no.uio.inf5750</groupId>
  <artifactId>assignment1</artifactId>
  <version>1.0-SNAPSHOT</version>
  <name>Assignment 1</name>
  <url>www.ifi.uio.no/inf5750</url>
  <description>First mandatory assignment in the course INF 5750
    Open Source Software Development.</description>

  <build>
    <plugins>
      <plugin>
        <groupId>org.apache.maven.plugins</groupId>
        <artifactId>maven-jar-plugin</artifactId>
        <configuration>
          <archive>
            <manifest>
              <mainClass>no.uio.inf5750.assignment1.reference.HelloWorld</mainClass
            >
          </manifest>
        </archive>
      </configuration>
    </plugin>
  </plugins>
</build>
</project>
```