

## Class Setup

Please perform the following setup **before** the start of Software Development Fundamentals class

### Software Installation


Install the following software

1. Git - <https://git-scm.com/downloads>

Windows users, please install the 64bit version. See the following video (<https://www.youtube.com/watch?v=4xqVv2lTo40>). For Windows installation.

Instructions for OSX users are on the download page.

2. Download and install JavaSE 18 from <https://www.oracle.com/java/technologies/downloads>
3. Install Visual Studio Code from <https://code.visualstudio.com>. Launch VSC once you have completed the installation. You will need to install the Java extension.

On the left-hand side of the editor, click on the extension button (). In the extension search bar, type 'Extension Pack for Java'. This is a Microsoft extension. Install this extension.

4. Download Apache Maven from <https://maven.apache.org/download.cgi>. The download bundle is just a Zip or Tar Gzip archive. Select either Binary tar.gz or Binary zip archive.

Windows users, unpack the contents into `c:\opt` directory. This will create a directory `apache-maven-version`. Add

`C:\opt\apache-maven-version\bin` to your PATH environment variable

OSX users have the option to use brew or install directly from the archive. To install with brew, type the following in a terminal

```
brew install maven
```

## 5. Install OpenSSH client.

Window users, see

[https://docs.microsoft.com/en-us/windows-server/administration/openssh/openssh\\_install\\_firstuse](https://docs.microsoft.com/en-us/windows-server/administration/openssh/openssh_install_firstuse). Note you only need to install OpenSSH Client.

OSX should have OpenSSH client installed. To verify, open a terminal and type

```
which ssh-keygen.
```

This should display the location of `ssh-keygen` binary.

Once you have installed (Windows and OSX), open a terminal and type the following command to check the version

```
ssh -V
```

You should see something similar

```
OpenSSH_8.2p1 Ubuntu-4ubuntu0.4, OpenSSL 1.1.1f 31 Mar 2020
```

Note the version must be at or above `1.1.1f`.

## Verify Your Setup

Once you have installed all the above software, open a new terminal and type 'version' for each of the above. This step ensures that you have set the PATH variable correctly

- `git version`
- `java -version`
- `mvn --version`
- `ssh -V`

## Accounts

Create the following accounts

1. Github – if you do not have an account, please go to <https://github.com> to create an account.

After you have created and verified your Github account, open a terminal and configure your git software with your name and email.

In the terminal type the following command entering your name and email

```
git config --global user.name your_name
```

```
git config --global user.email your_email
```

The name and email should ideally be the one you used to register the Github account