To build the project, copy/paste following commands into the terminal/command-line

STEP 1: INSTALL MAVEN (Mac)

- 1) Click on this link to download Apache Maven v 3.3.9: http://www.trieuvan.com/apache/maven/maven-3/3.3.9/binaries/apache-maven-3.3.9-bin.zip
- 2) Navigate into your "Downloads" folder in the terminal and paste this command: unzip apache-maven-3.3.9-bin.zip

Copy and paste the next commands on your terminal/command-line:

- 3) cd /usr/local
- 4) sudo mkdir apache-maven

(You

may be prompted to provide password after this command)

5) cd ~/Downloads

(Navigate back to "Downloads" folder)

- 6) sudo cp -R *apache-maven-3.3.9* /usr/local/apache-maven (the text in bold will be the name of the unzipped folder of the maven downloaded earlier)
- 7) export M2_HOME=/usr/local/apache-maven/apache-maven-3.3.9
- 8) export M2=\$M2_HOME/bin
- 9) export PATH=\$M2:\$PATH

Make sure that JAVA_HOME is set to the location of your JDK, e.g below

10) export JAVA_HOME=/Library/Java/JavaVirtualMachines/jdk1.8.0_40.jdk/Contents/Home

MAVEN HAS BEEN INSTALLED

To check if maven has been installed on your system, enter the following command: mvn --version

STEP 2: BUILD THE FILES

- 1) The **pom.xml**, **web.xml** and the jar files in WebContent/WEB-INF/libs (**gson**, **json**, **jersey and junit**) are already provided along with the source code. No changes are required at this moment to any of the files.
- 2) Copy the root folder (lf2u) to your maven folder. Navigate to the directory where lf2u is placed enter the command: sudo cp -R lf2u /usr/local/apache-maven/apache-maven-3.3.9

- 3) Now navigate to the If2u folder in the maven directory. Enter the command: cd /usr/local/apache-maven/apache-maven-3.3.9/If2u
- 4) Enter 'mvn clean' and then 'mvn package'.

The output on the screen should say 'BUILD SUCCESSFUL' and files have been built. You will see a new 'target' folder and If2u.war file in it. cd /usr/local/apache-maven/apache-maven-3.3.9/lf2u/target.

5) Now this has to be copied to the tomcat folder (Tomcat has to be installed prior to this) (Following is the link to Tomcat version 8.0.39) (http://shinyfeather.com/tomcat/tomcat-8/v8.0.39/bin/apache-tomcat-8.0.39.tar.gz).

Lets assume that after installation, it was placed in '~Documents' folder

- 6) Enter the following command to copy (make sure you are in the lf2u folder which is in maven directory): cp target/lf2u.war ~Documents/apachetomcat-8.0.39/webapps
- 7) Start the server and run the application with GET, PULL, PUT calls

^{**} Please see the MEMO file to understand this project and how to run it