

1. Download github and install.

2. If you do not have an account please register for a github account.

Send your github account name to hammond@tamu.edu to get access to the repository.

3. Clone

Once you have access to the repository, open the github application on your computer, click the coursesketch repository and click “clone to computer”. **Make sure to note the location that it is installed.**

if you have a mac then you will have an easy life using github

if you have windows and you are struggling using github then you can download other git clients or if you are advance you just the command line. (something that will probably happen at least once because the windows interface sometimes breaks)

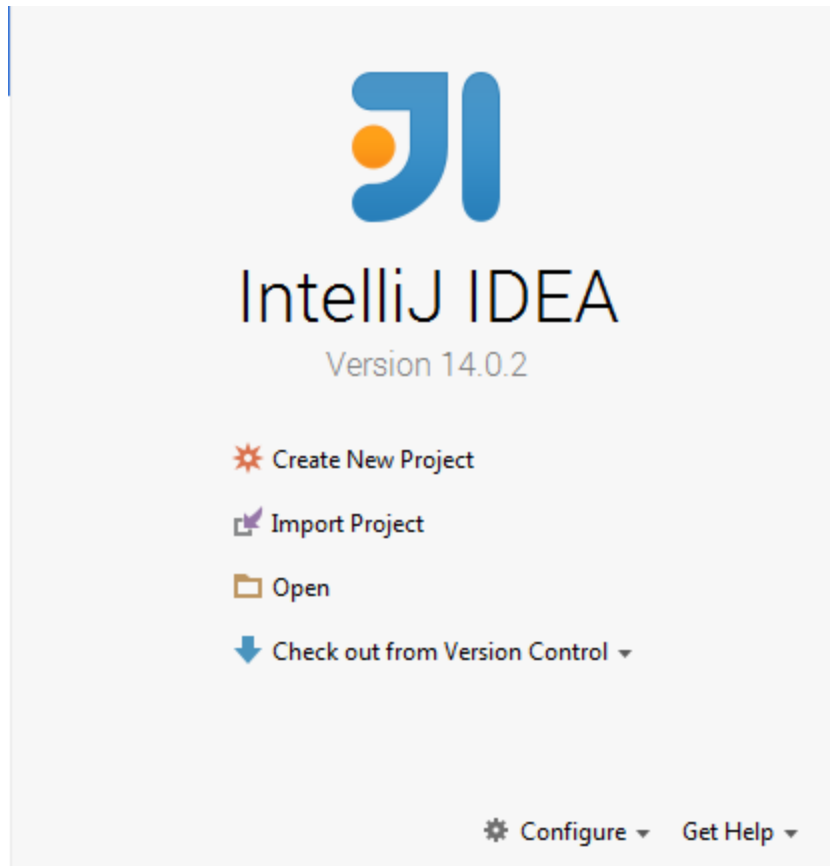
4 Download intillij (latest version):

and install it (this is done by moving it the location you want to put it and open it)

If it does not open chances are that the sdk is not installed

google “java sdk 7” and follow the instructions to download it and install it.

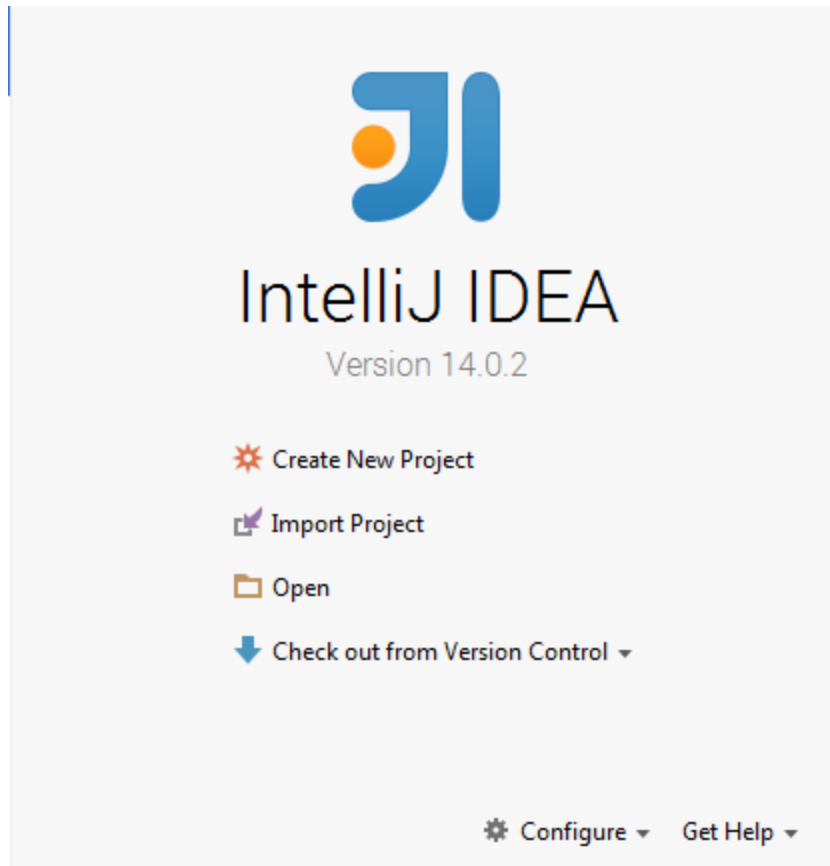
When you open intillij for the first time it should look like this



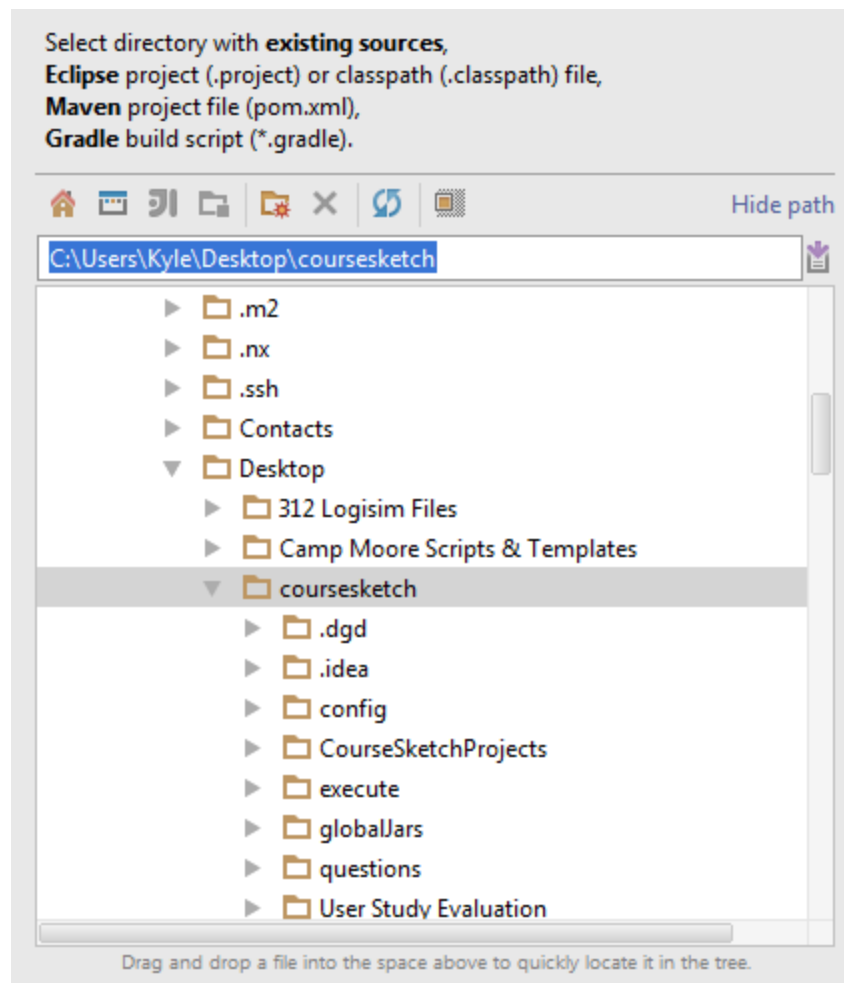
From this page we import the project

5. IMPORT PROJECT

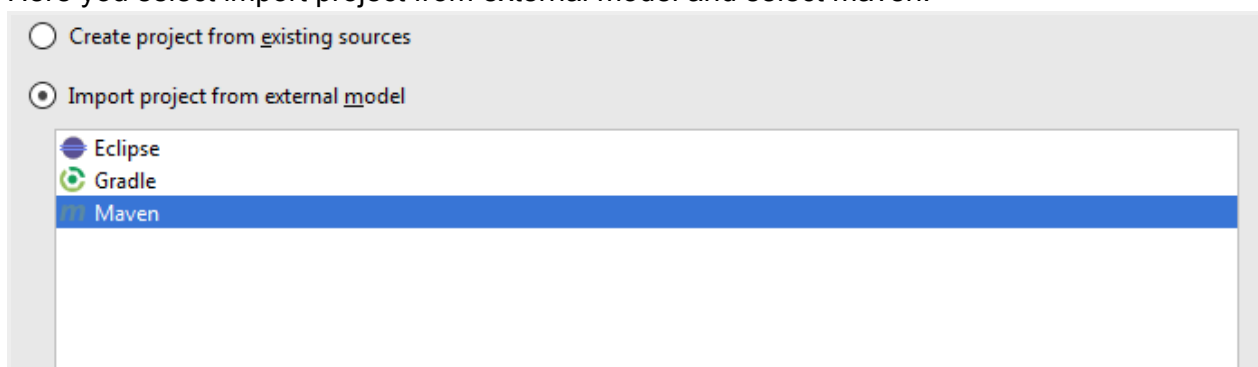
On this page click import project



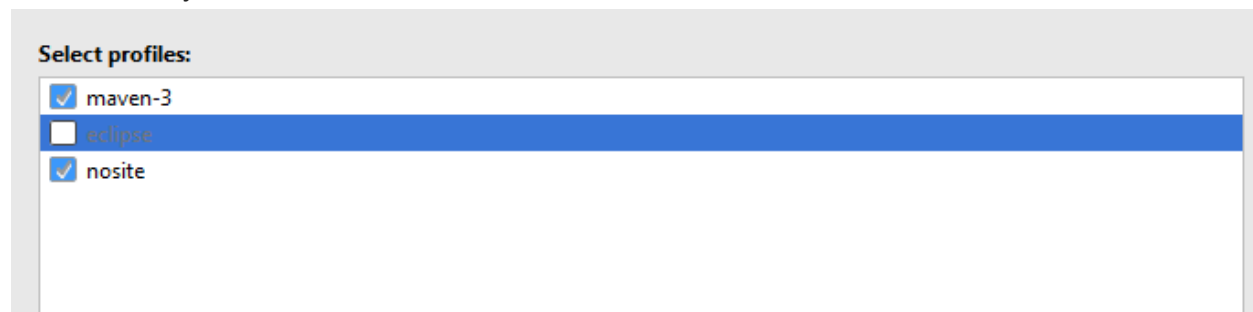
It should bring you to a file viewer. Find the coursesketch folder select it and press next



Here you select import project from external model and select maven.

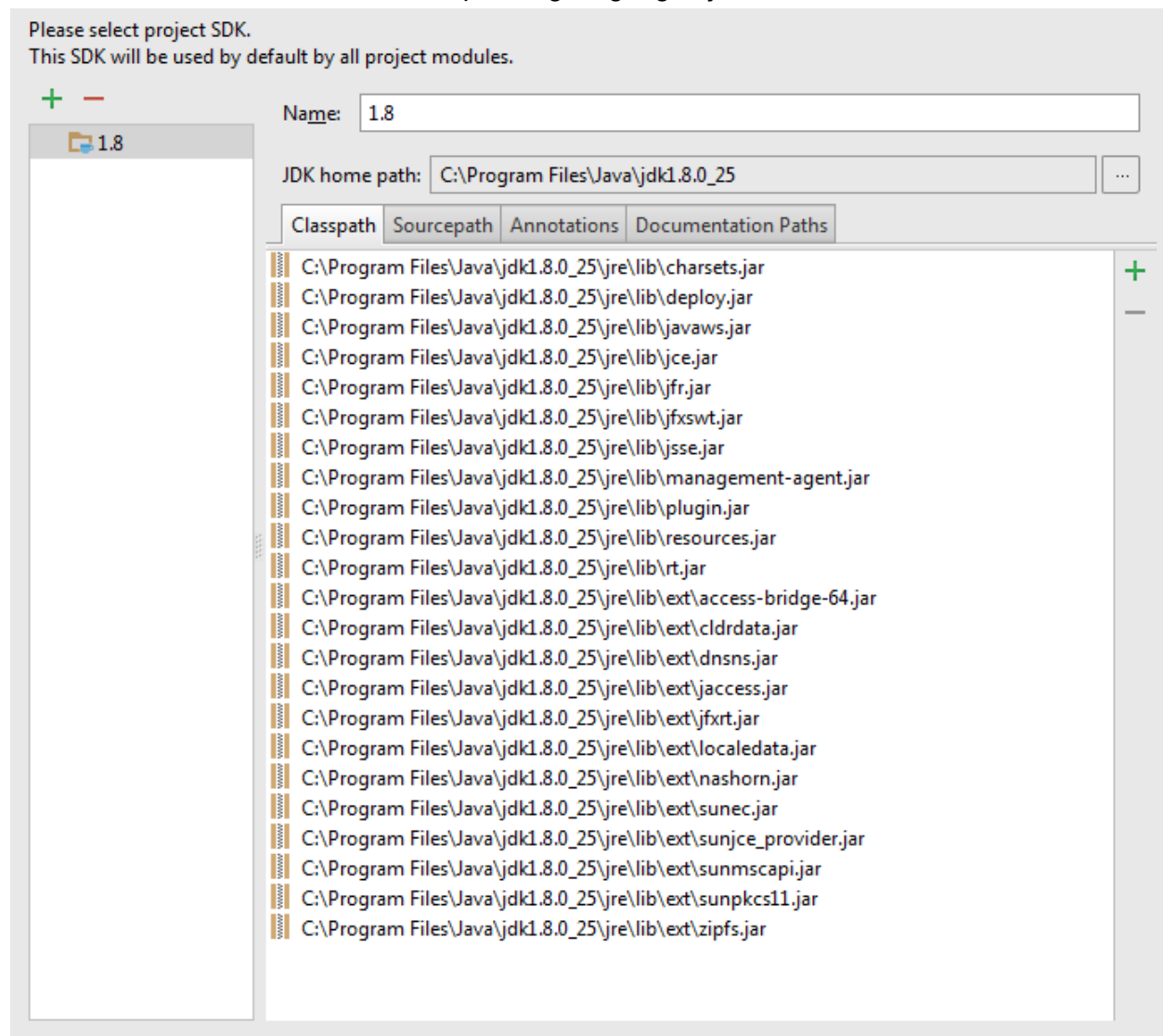


Click next till you find this screen

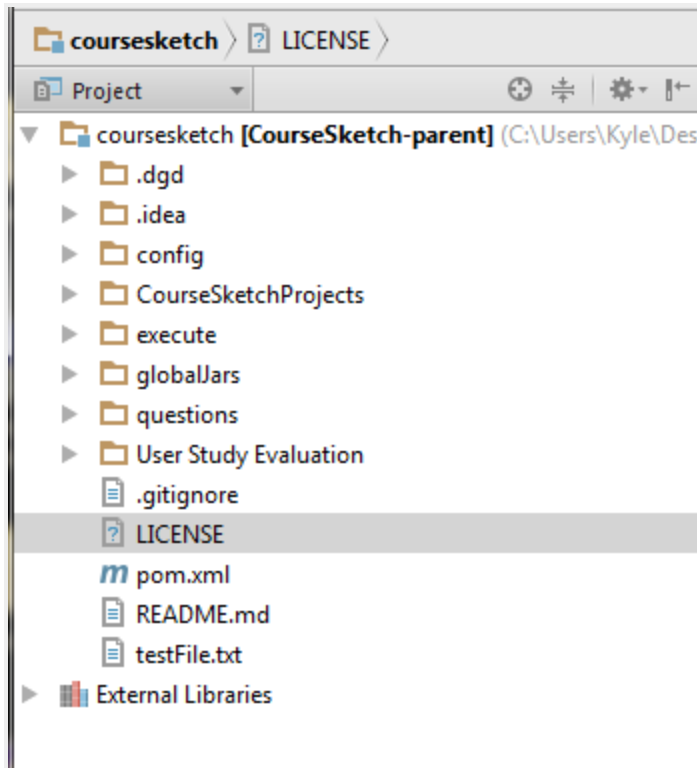


Click next till you find this screen: NOTE it may be blank

If it is blank press the + button and select the jdk you installed earlier (or install it now) The location of it is different for different operating so google "jdk location <OS>"



press next till you are done. It should show this on the left hand side.



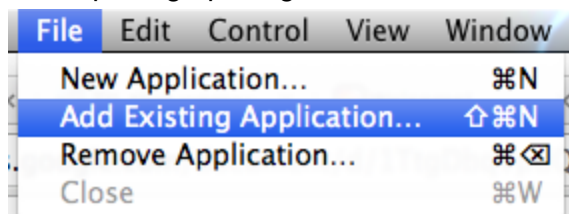
6. Download google app engine (python)

<https://developers.google.com/appengine/downloads>

7. IMPORT APPLICATION into Google App Engine

after downloading open up google app engine launcher (it may be various places depending on the operating system)

After opening up we go to file and add an existing application



Navigate to course sketch -> CourseSketchProjects and select "coursesketchwebclient"

click ok

after adding it should show a line in the launcher

8. RUNNING google app engine

select the new application and click the run button (should be an arrow)

after the browse button is available click browse.

(on a mac you may have to click on the launcher to have it redraw and enable the button)

9. Download and run mongodb

(<http://docs.mongodb.org/manual/installation/>)

After you have installed it you only have to run mongodb (stop after step #2) and the second half of the guide focuses on testing so you do not need to worry about.

10. Download maven

if you have a package manager use that, if you are using windows then we have a script that *should* set it up for you. This can be found in the config section of course sketch.

If not windows (and no package manager):

google “install maven <OS>”

after it is installed you should be able to run:

mvn -v

and it should not throw any errors

the next thing you have to do is set the JAVA_HOME variable.

Mac

<http://stackoverflow.com/a/26456579/2187510>

Then

```
/usr/libexec/java_home -v '1.7*' Or 1.8* if you installed Java 8 instead
```

Windows

Run the batch file (RunMe.bat) in the coursesketch config\windows folder. This will setup maven, protobuf, and protoc in the directory of your choice. You may skip to step 12.

11. Download protobuf

We are currently using version 2.6

google “protobuf download 2.6”

then follow instructions

12. Compiling servers

On a mac open up terminal

change directory till you are inside course sketch:

On windows go to github and select the course sketch repo. Then open a terminal (it should open in the directory of CourseSketch)

Both:

```
$ mvn clean install -Dsmart -Dnosite
```

Different possible errors:

can not compile to target version 1.7: It means your JAVA_HOME is not set to the correct version (probably running 1.6) point it to 1.7 or 1.8 (which ever one you have)

JAVA_HOME is not defined: You never set the path for java home (needs to be found)

you have X number of checkstyle errors: Everything was installed correctly. But you either have an old version of master or you should fix them.

Can not find binary for protoc: it means protobuf is either in the wrong spot or was never installed correctly.

[ERROR] Failed to execute goal com.google.protobuf.tools:maven-protoc-plugin:0.3.2:compile (default) on project ProtoFiles: protoc did not exit cleanly. Review output for more information. -> [Help 1] - it means protobuf is either in the wrong spot or was never installed correctly.

13: RUNNING COURSE SKETCH

App Engine

make sure google app engine is running (see #8)

Mongodb

Open up the terminal

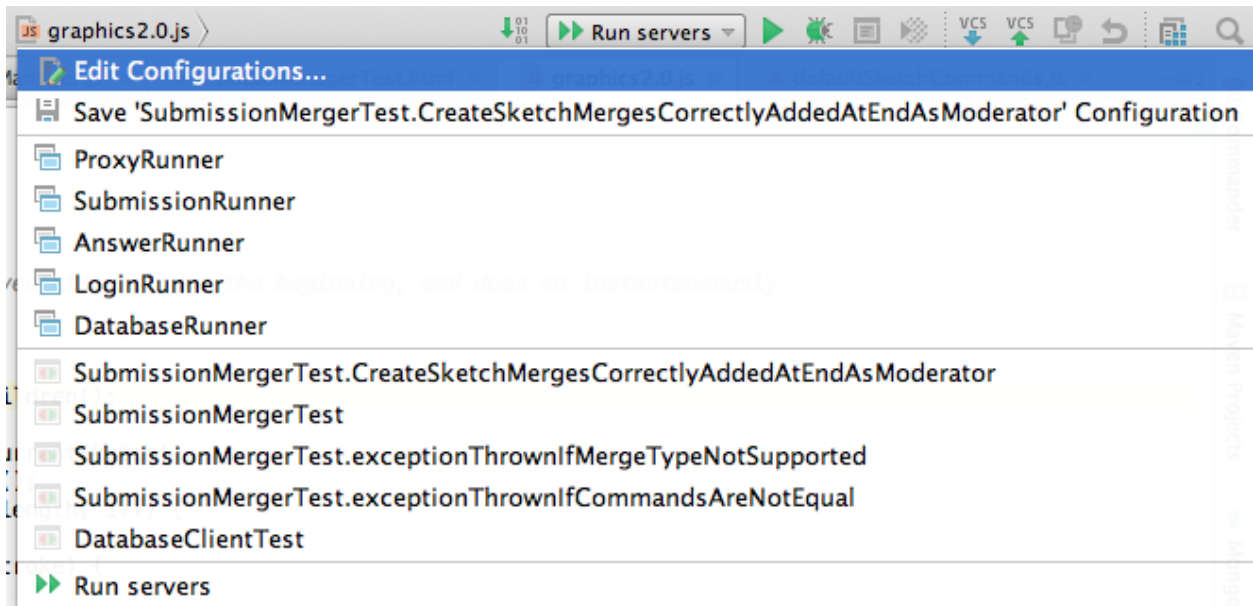
type:

```
mongod
```

mongodb should now be running

Servers

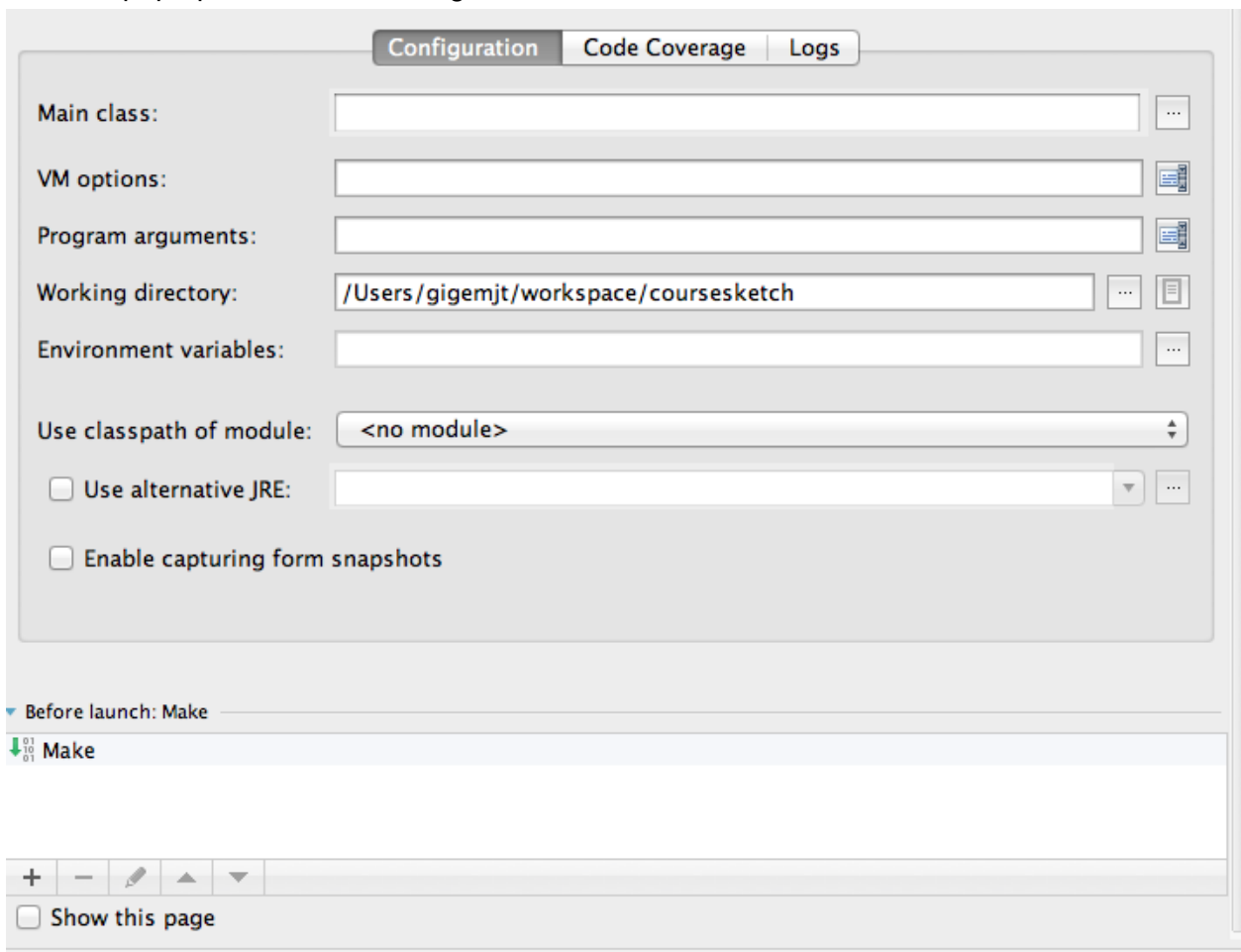
you have to create a launch configuration (select the down arrow next to the play arrow)



Click edit configurations

After the window pops up click the + button and choose "Application"

It should pop up with a blank configuration



Fill it out and a couple of additional configurations for each server:

Proxy

Name: ☐ Share ☐ Single instance only

Configuration | Code Coverage | Logs

Main class: ...

VM options:

Program arguments: ...

Working directory: ...

Environment variables: ...

Use classpath of module: ...

☐ Use alternative JRE: ...

☐ Enable capturing form snapshots

Submission

Name: ☐ Share ☐ Single instance only

Configuration | Code Coverage | Logs

Main class: ...

VM options:

Program arguments: ...

Working directory: ...

Environment variables: ...

Use classpath of module: ...

☐ Use alternative JRE: ...

☐ Enable capturing form snapshots

Answer checker

Name: ☐ Share ☐ Single instance only

Configuration Code Coverage Logs

Main class: ...

VM options: ...

Program arguments: ...

Working directory: ...

Environment variables: ...

Use classpath of module: ...

☐ Use alternative JRE: ...

☐ Enable capturing form snapshots

Login Server

Name: ☐ Share ☐ Single instance only

Configuration Code Coverage Logs

Main class: ...

VM options: ...

Program arguments: ...

Working directory: ...

Environment variables: ...

Use classpath of module: ...

☐ Use alternative JRE: ...

☐ Enable capturing form snapshots

Database Server

Name: ☐ Share ☐ Single instance only

Configuration | Code Coverage | Logs

Main class: ...

VM options: ...

Program arguments: ...

Working directory: ...

Environment variables: ...

Use classpath of module: ...

☐ Use alternative JRE: ...

☐ Enable capturing form snapshots

Run order:

LOGIN
DATABASE
SUBMISSION
ANSWER CHECKER
PROXY

Or install multirun (below in additional setup)

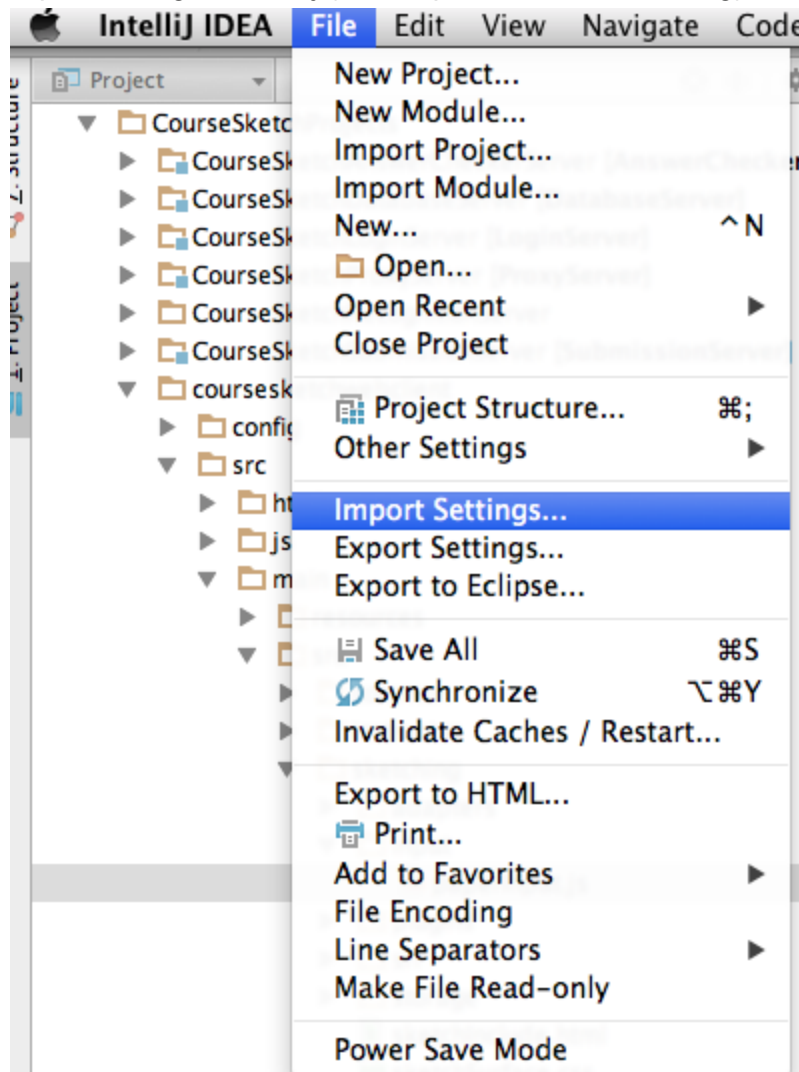
14: FINAL SETUP

good news if you made it this far you are 99%. please feel free to look at the code, follow additional optional setup below or follow any additional instructions you are given in class

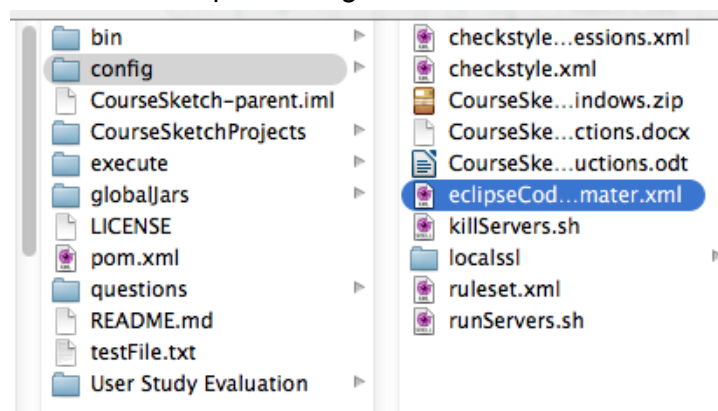
13. Additional Setup (Optional but recommended)

Import settings

Import settings for IntelliJ (this helps with auto formatting)



Choose the eclipse settings

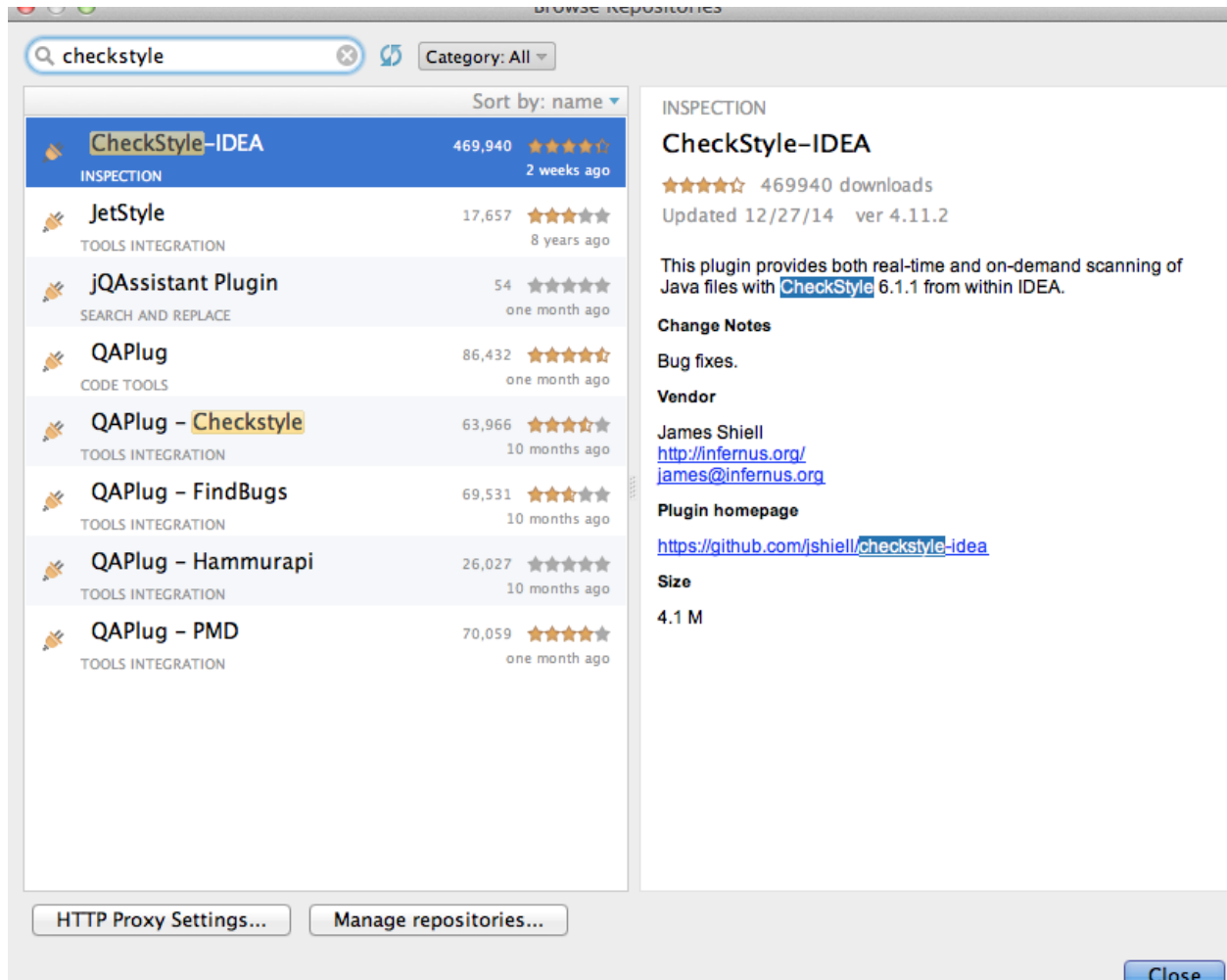


Install checkstyle

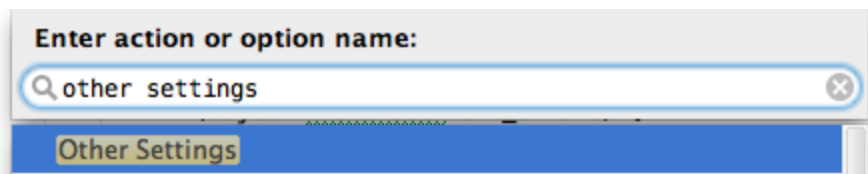
go to help -> find actions

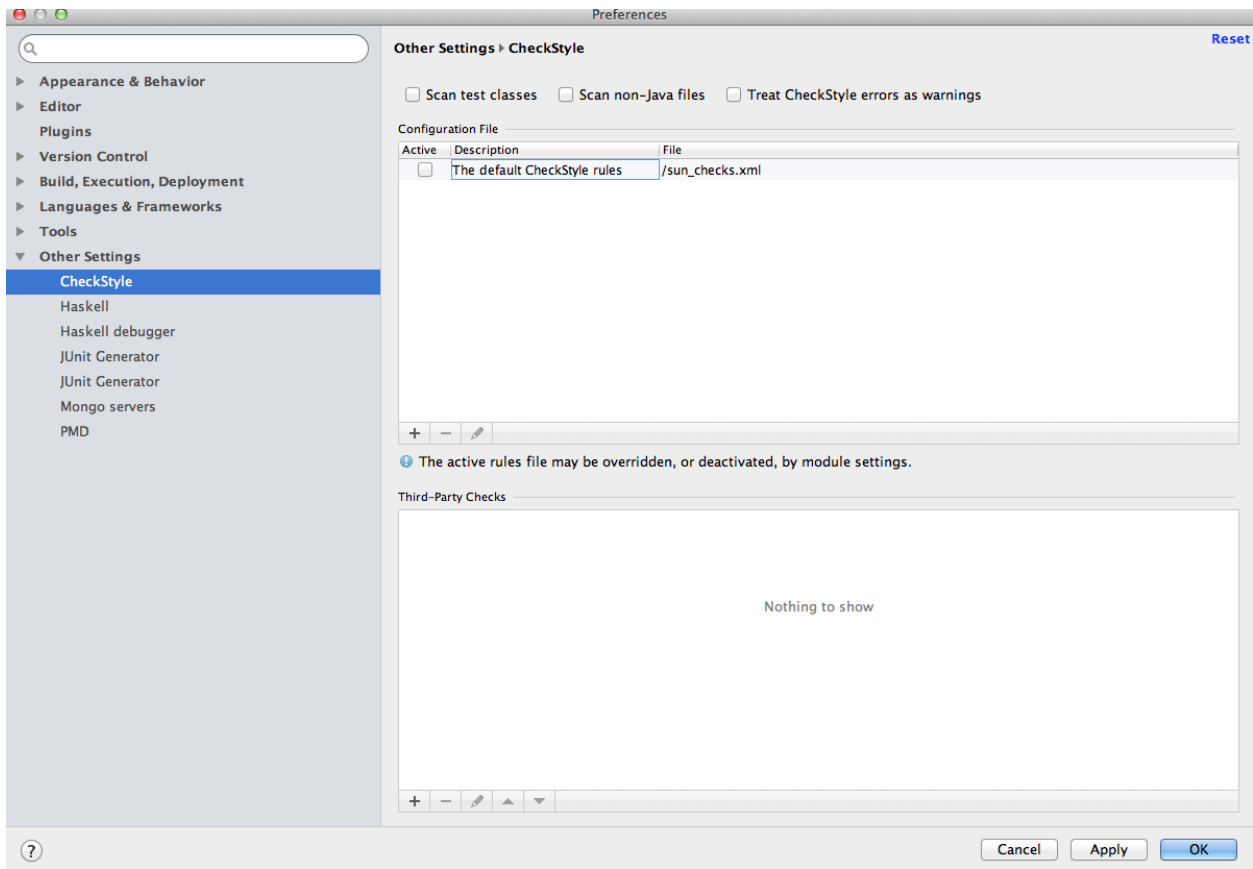
then type plugins

then click browse repositories

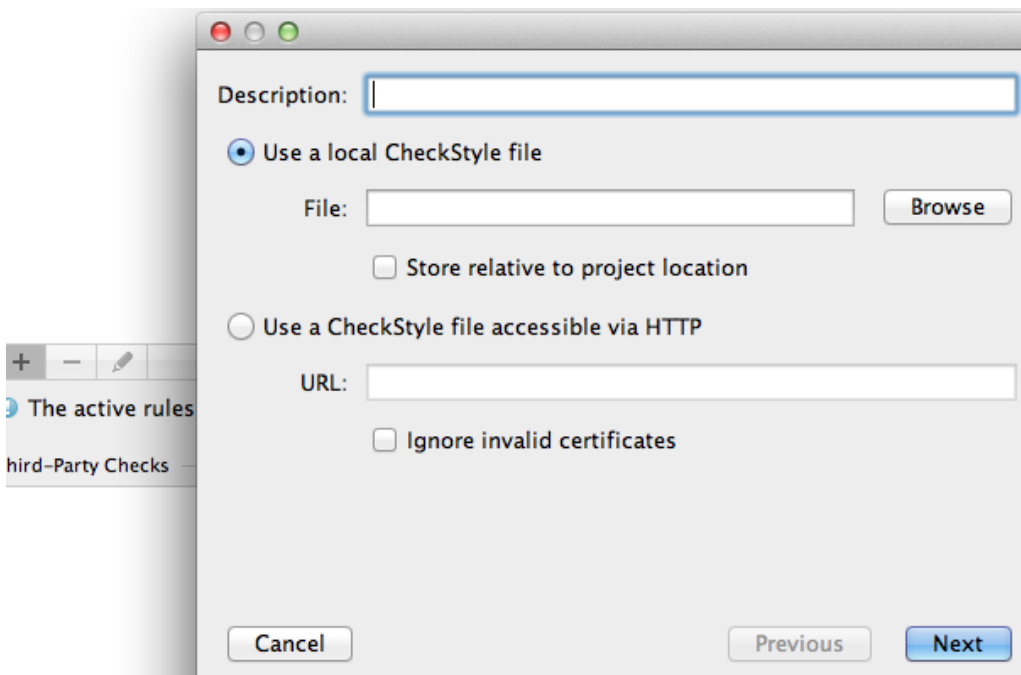


Now go to other settings

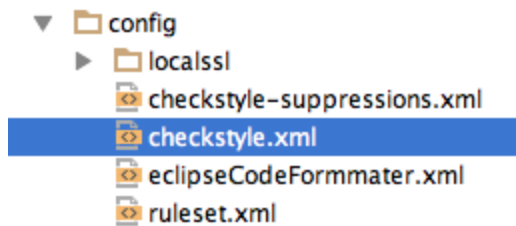




After you are at this page under "Configuration File" click the +

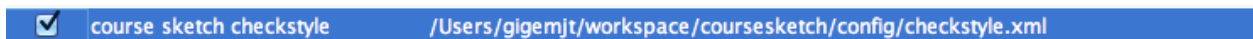


Click browse and find the file under config -> checkstyle.xml



Add a description and click next then finish

And select the newly added line. And click Apply



Install Multirun

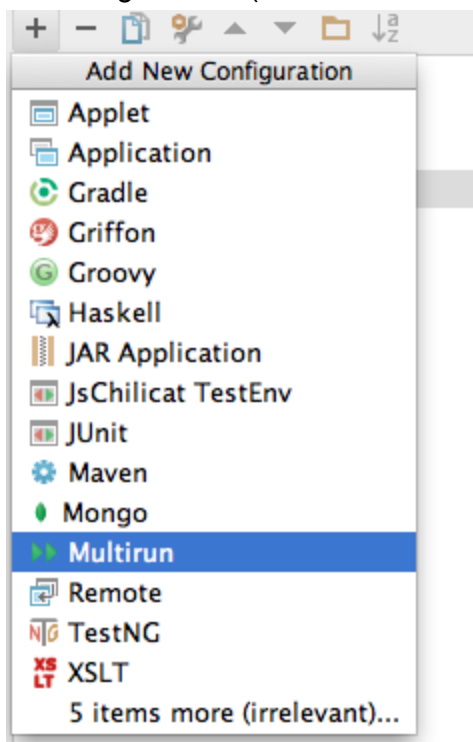
same process as above with installing checsktyle

go to plugins and browse repository but type "Multirun" instead

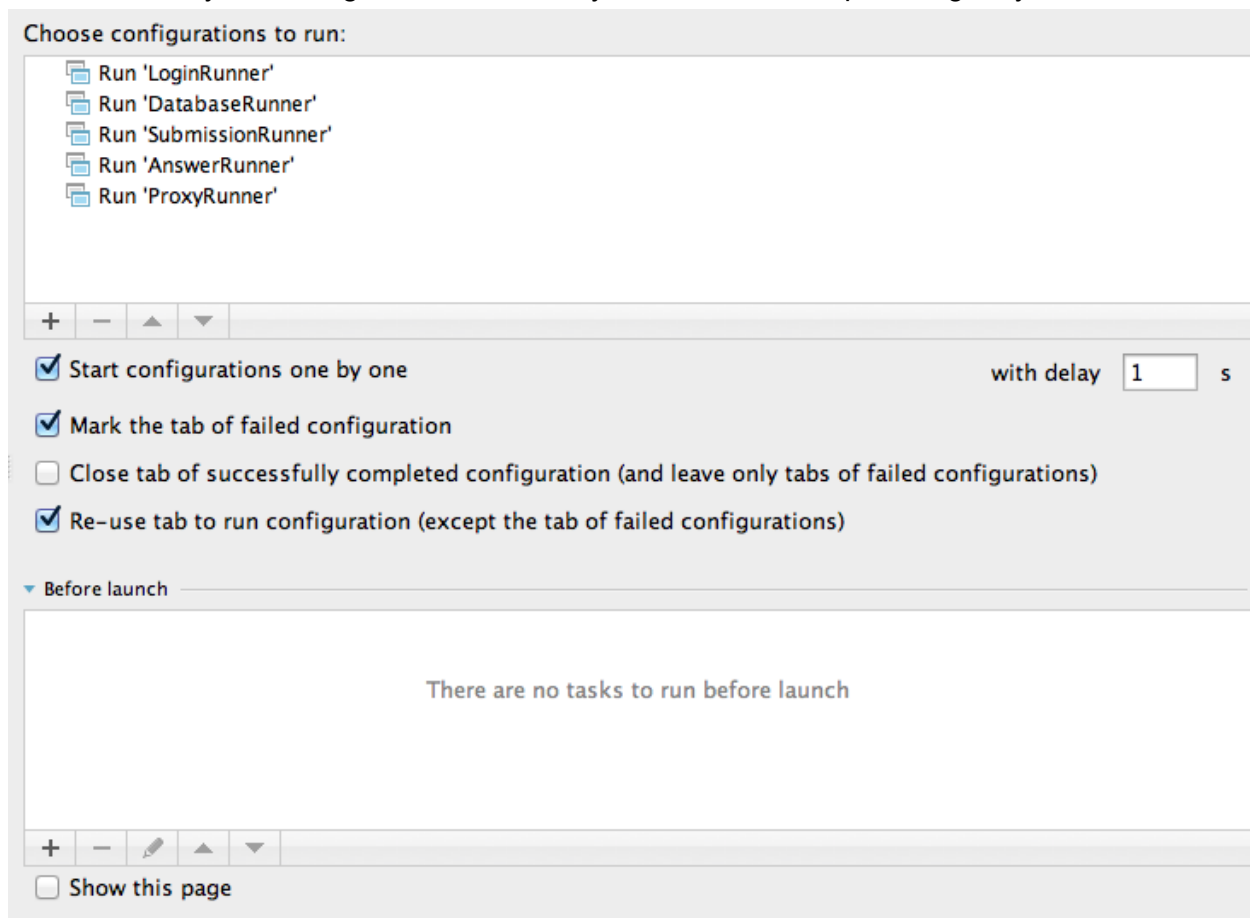
(this is the plugin webpage)

<https://plugins.jetbrains.com/plugin/7248?pr=idea>

When you add a new configuration you can create a multirun configuration that runs multiple run configurations (A lot of this is explained in running the application)



Here is what my run configuration looks like yours should end up looking very similar:



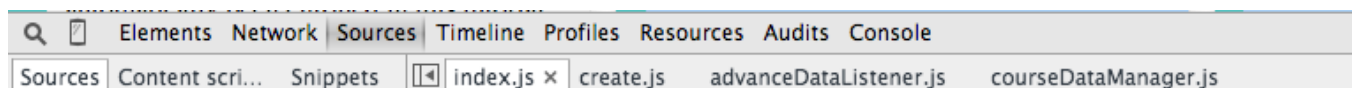
Chrome workspace

This allows you to edit files in chrome and have that reflected in your physical editor. Great for fixing tiny bugs with perfect autocomplete.

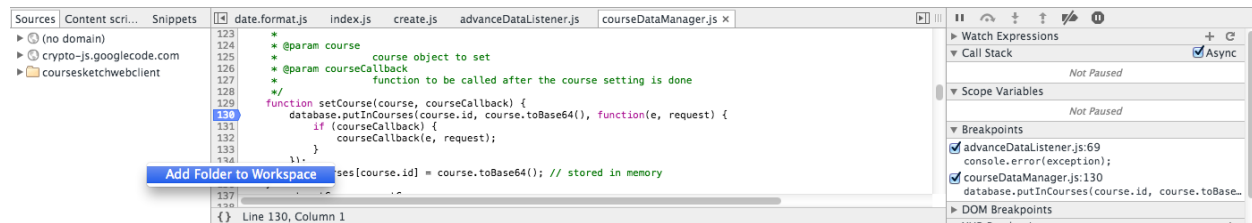
This requires that app engine is already set up (see #8)

(If you have any issues visit [here](#) but the instructions will accomplish your goal just fine)

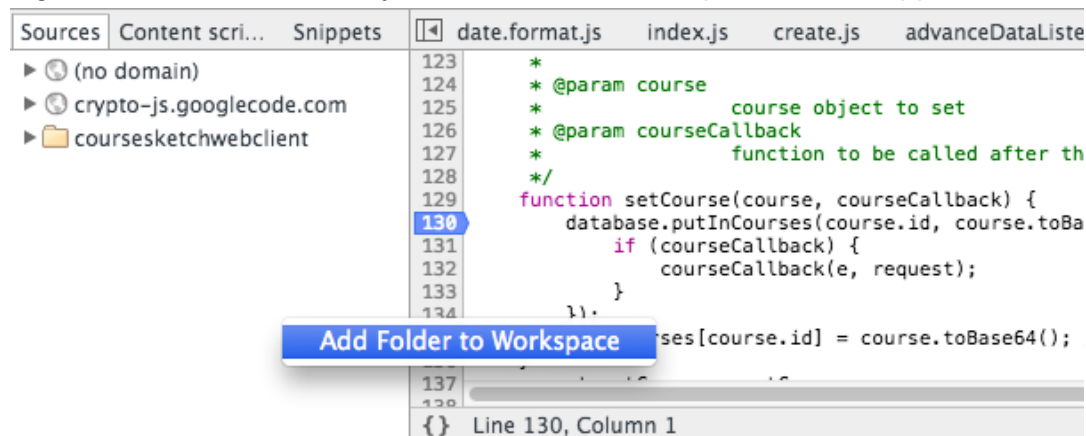
Go into the dev console (you can right click anywhere and click inspect element. Then go to the source page view



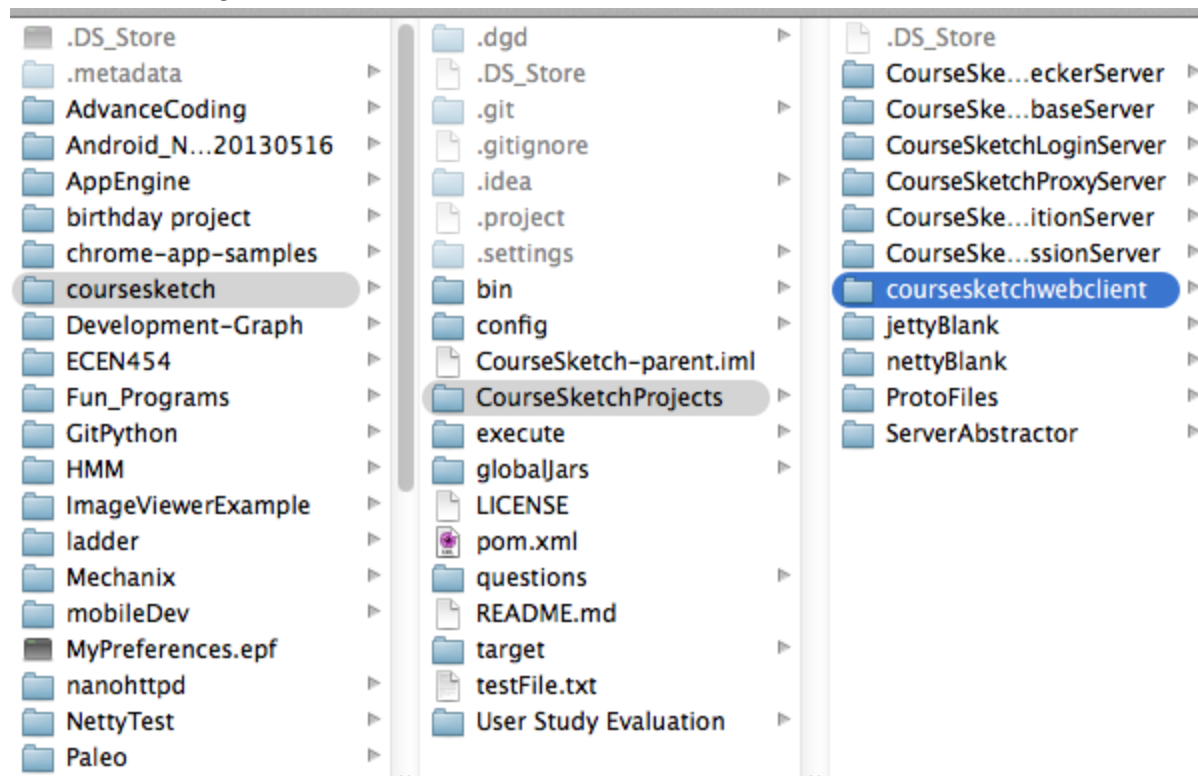
Next look on the left hand side and see a series of folders.



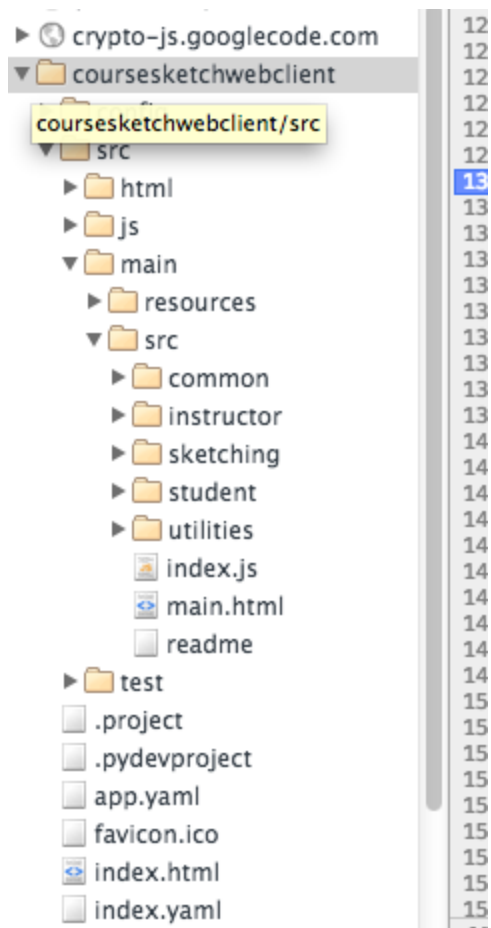
Right click and a box that says “Add Folder to Workspace” should appear.



Click it and navigate to the coursesketchwebclient



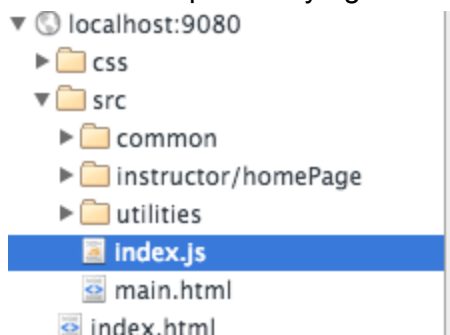
It should now have a folder that looks this when you expand it.



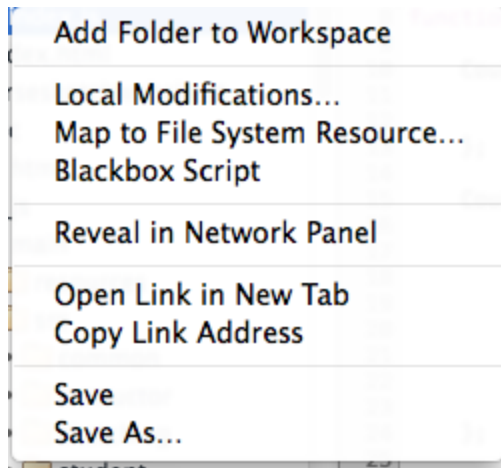
Now we need to map a file to the physical location.

So this is the actual website itself coming from the local server.

You need to specifically right click index.js (any other and a bunch of things get messed up)

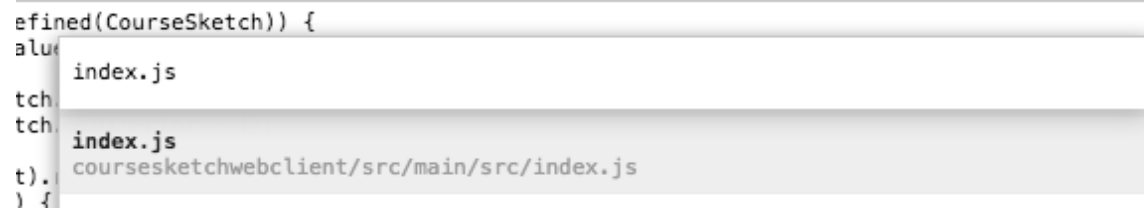


Now select “Map to File System Resource”



Then choose the option of index.js that is shown below.

It was the first one for me but it may not be the first one for you.



Now if you edit a js file in chrome it will update locally if you save it.

This also allows you to edit javascript without needing to reload the page and instead it will just run the new code.

Instruction TODO:

Inserting pre made data into course sketch.

(right now this is done only on a need to be done basis)

YOU MADE IT!!!!!!!

If you made it this far you followed all instructions and you are now 100% setup to develop coursesketch.