Figure 1:

Dear students, From previous experience with students, I know that it is common for students to decide they have Eclipse already, and they don't want to go through this installation procedure. Then, they encounter difficulty. Then they come around to using this install procedure. This is a record of an experience setting up Eclipse for C/C++ on a Windows platform. Summary of the

first part: want sequence diagrams, so get Java, Eclipse for Java, and a package for UML diagrams UMLet.

0.1   Getting Java, used by Eclipse

I started with a new Windows laptop,
which has edge and chrome, and
does not seem to have Java.
Java 12.0.2 seemed to be the most recent, as of 20190817.
(As of 3/16/2020, `https://www.oracle.com/java/technologies/javase-jdk13-downloads.html`, see Figure 1.)
 I accepted the license agreement, and
clicked the link for downloading bin.exe, and
chose run, (It took about 10 seconds to download.)
agreed to allow it to make changes to device (being the laptop),
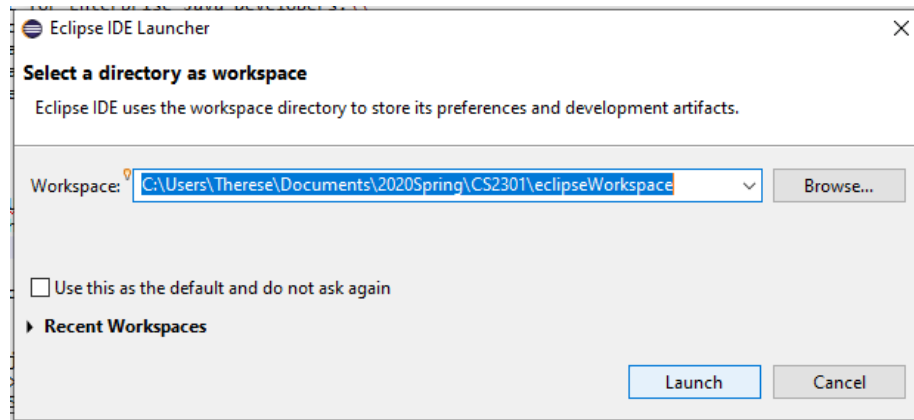accepted the default directory, namely: `C://ProgramFiles/Java/jdk12.0.2`.

Figure 2:

0.2 Getting Eclipse

Next downloaded eclipse, e.g., from `www.eclipse.org/downloads/download.php?file=/oomph/epp/2019-06/R/eclipse-inst-win64.exe`.
(`https://www.eclipse.org/downloads/download.php?file=/oomph/epp/2019-12/R/eclipse-inst-win64.exe`, as of 03/16/2020.)
You can choose to save the executable. When you run this executable, which is an installer,
choose Eclipse IDE for Enterprise Java Developers.
It's going into your user directory, something like `C:\Users\YourName\eclipse\jee-2019-12`.
You will want to accept user agreement, and
accept licenses, and
accept certificates, and
launch.
You can choose to accept the default workspace.

0.3 Getting UMLet

In Eclipse, use the menu Help/ Eclipse Marketplace.

find: UMLET
install (14.3)
Please accept the terms of the license agreement,
choose install anyway, and
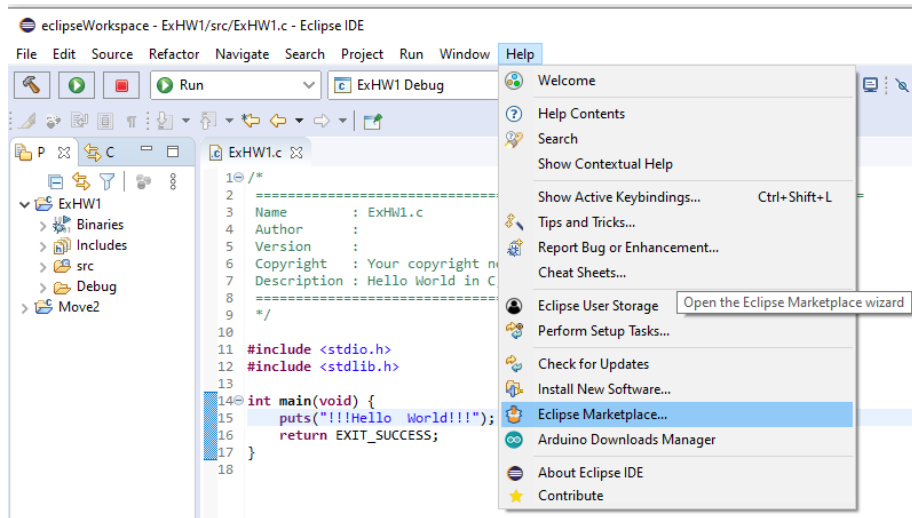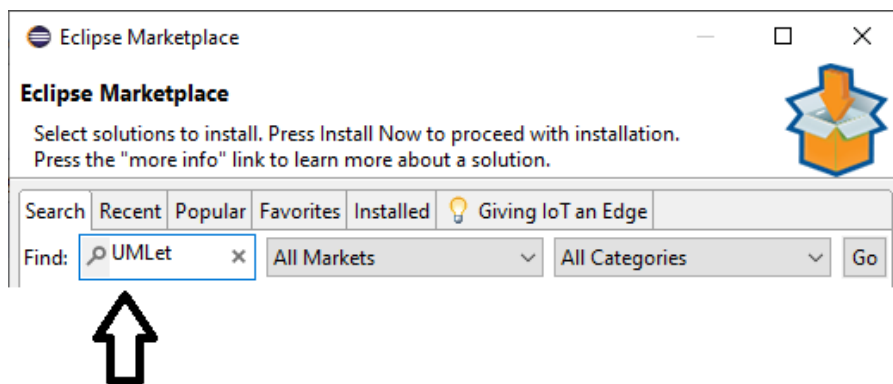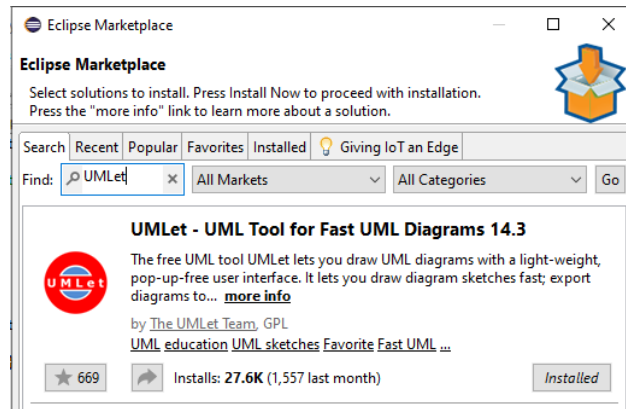restart now.

2

Figure 3:

Figure 4:

Figure 5: Do not worry if your image does not say installed. It should not. It should offer you an affordance to install.
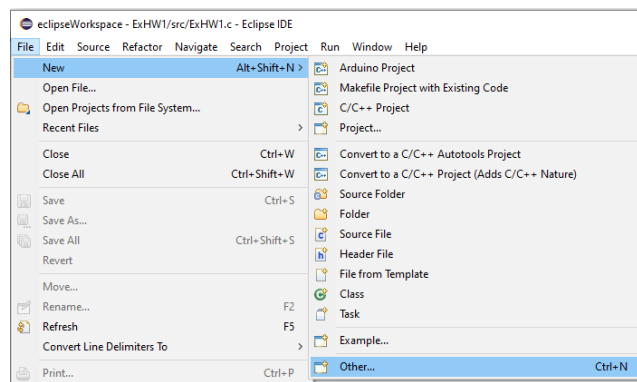

Figure 6:

0.3.1 Check out install of UMLet

Use Eclipse to:
create a Java Project.
The use File-¿New-¿Other-¿Other-¿Umlet diagram.

Now you are preparing to edit a new sequence diagram.
pull the editor window diagram to the right to see UML Common Elements
pull the properties pane boundary up, so can see in its panel.
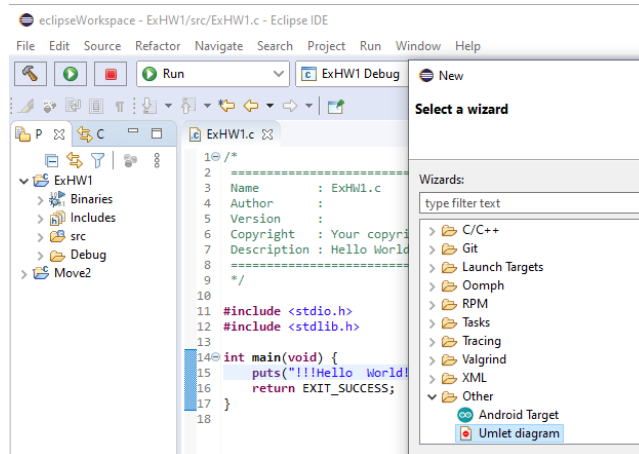With this tool, one can draw and save a sequence diagram.
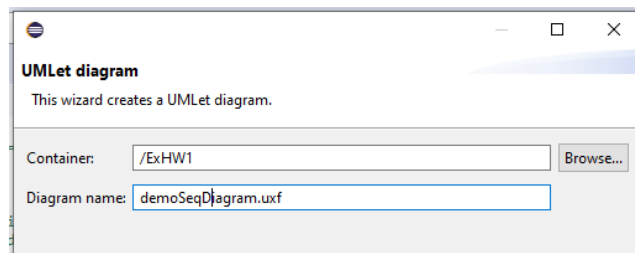
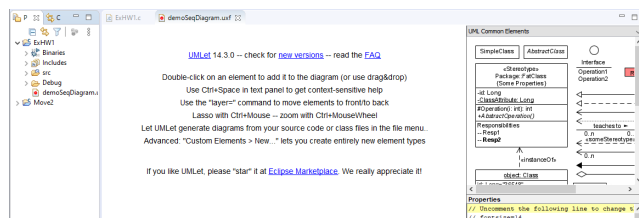Figure 7:

Figure 8: Give it a home project and a name.
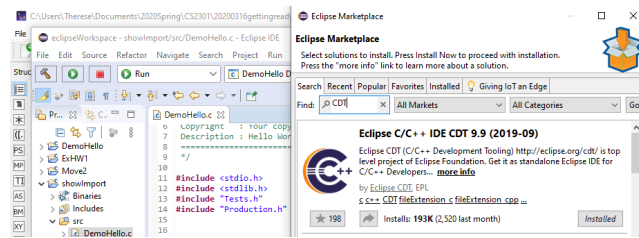

Figure 9:

Figure 10:

0.4 C

Navigate to `https://osdn.net/projects/mingw/releases/`, and
scrolling down, find MinGW.org Compiler Collection.
On the upper left of package list,
see mingw-get-setup.exe.
Click it to get download manager.
This should be run once.
Subsequently, run MinGW installation manager, for add/remove/upgrade.
This goes to `C:\MinGW`.
After it installs 113 items, offers continue command, click it, and
see Installation Manager.
I did not select ada or fortran. I did select (Mark for Installation) everything
else.
I have my own reasons not connected to the course for selecting objective c, you
won't need it for this class.
Perform installation-¿Apply Changes
Click apply in new window.
See All changes applied successfully, click close.

0.5 Getting C Development in Eclipse

Start Eclipse.
Use Eclipse Marketplace (under Help, as before).
In the find textfield, type CDT.

There is version 9.9.
Click install for 9.9.
Accept terms.
Restart to apply changes.
Use File/New/Project/C project to create a new project.
Hello World ANSI C Project (mandatory!) and note MinGW GCC on the right.
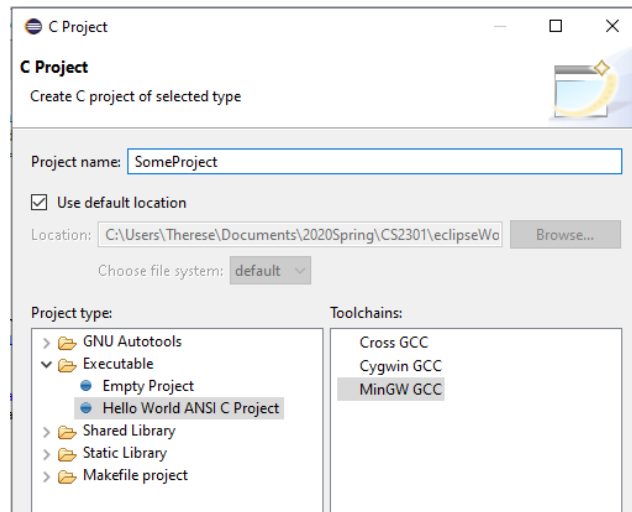
Build via project− >buildAll.

Figure 11:

Open project, look for Binaries folder.

Now check whether it will run.
There is a video for this.
Access run configurations, such as from the drop down to the right of the green arrow icon.
C/C++ row selected
Use the new icon.
The executable, a file ending in .exe should have been found, should appear in the text area.
Click Run.

McAfee could be preventing running.

In my case it was necessary to stop my security tool from rejecting the file. In case you have this problem, I solved it by running McAfee, selecting the cog on the upper right, going to real-time scanning, excluded files, and adding the executable to its list. I navigated to the executable at `C:/Windows/Users/Therese/eclipse-workspace/prepareCS2303/FirstC/Debug/FirstC.exe`. After this exclusion, I was able to run the file through Eclipse. It might be necessary to exclude each such executable. There is a video showing this.