Setting up Ubuntu 22.04 on UTM Virtualization App for Mac

Step 1: Basic Installation

Download and install UTM from https://mac.getutm.app/

Start UTM from the Applications directory

Choose ‘Create a New Virtual Machine’

Choose ‘Virtualize’

Click on the blue link for ‘Download Ubuntu Server for XXX’, where XXX is your architecture.

Download Ubuntu 22.04 Server from the site the previous step took you to (into your Downloads folder)

Once completed, back in UTM, click on Browse to select the .iso file that was just downloaded … accept
and then click on continue. Accept the defaults on the next page, and the one after that
(64 GB should be fine).

For the Shared Directory, click Browse and choose your downloads folder. Do NOT click the
Share is read only radio button, as you want to be able to share in both directions.

At the Summary page, click Save.

Now, boot the server for the first time.

At the GNU GRUB menu, choose *Try or Install Ubuntu Server/Desktop

Follow the menus to install the server/desktop

When finished, the system will reboot. At the GNU Grub menu, choose ‘Boot from Next Volume’

———————————————

Step 2: Install Productivity Tools

```
    sudo apt install -y gcc g++ make default-jdk git
firefox gnuplot
```

Step 3: Installation of (Basic) Apache NetBeans IDE

1. Go to https://netbeans.apache.org/download/index.html
2. Download Apache NetBeans 14 Installer for Linux
3. Run the installer:

```
    cd
    bash Downloads/Apache-NetBeans-14-bin-linux-x64.sh
```

Step 4: Activation/Installation of C/C++ Plugin in Apache NetBeans IDE

1. Start up Apache NetBeans
2. Go to Tools->Plugins
3. Choose the 'Installed' tab
4. Click on the C/C++ radio button on the left window
5. Click on 'Activate' near the lower left corner
6. Go to Settings, and make sure that the NetBeans 8.2 Plugin Portal radio button is checked.
7. Go to Available Plugins, and click on Check for Newest
8. Find the C/C++ plugin in the newly updated list, click on the radio button, and then click on install.

Step 5: Creating Your First C Project (HelloWorldTest)

Each program that you create for this course will be a new project. Before you

begin, you should create a folder for the COURSE, and then within this folder, you will create new folders for each project.

1. Start up Apache NetBeans
2. Go to File->New Project
3. Under Choose Project, select Categories = C/C++, and Projects = C/C++ Application, and then click Next.
4. Choose the Project Name: HelloWorldTest
5. Accept the default project location and project folder

— IMPORTANT NEXT STEP —

6. CHOOSE THE LANGUAGE AS C99!!!
7. Click on Finish

8. In the Projects tab on the left side, expand Source Files, and then open the file called main.c
9. In the editor, add a statement: printf (“Hello World!\n”); before the return statement in the main function.
10. Click on the Run button, and make sure that the program compiles, links, and runs correctly!

———————————————————

Step 6: Cloning your GitHub Repository

1. Make sure you have set up your GitHub repo, as a forked copy of my GitHub repo - see that document for more information!
2. In NetBeans, go to Team->Git->Clone Repository
3. Specify the location of your repo: https://github.com/<username>/NetBeansProjects, where you replace <username> with your GitHub username.
4. Specify the location where you will store the cloned repository locally (usually your home directory).