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e1: Video -

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Link: <https://www.oracle.com/technetwork/java/javase/downloads/index.html>

Hi and welcome to the next topic of this module. In this topic, we will setup software for MacOS.

Now if you are using a Linux Operating system then please skip this topic and directly go to the next topic.

Because this topic is only for learners who are using MacOS.

**MM**

So in this topic, we will download Java.

**MMM**

Now to setup Java in your system, you need to download **MMM** JDK.

Well, JDK stands for Java Development Kit. So to run Eclipse in your system you need to download and install this JDK.

So let’s get started.

**DEMO**

Just below the video, you will find a link from where we will download JDK.

Just copy that link and paste it in your browser. And hit enter.

You will land on this page. Just make sure this downloads tab is selected.

And then click on this Java icon over here.

Scroll down a little bit.

Here you will find the latest java version ready for download. Now depending on the time you are watching this video, the java version might vary. But please don’t worry about it. Downloading different java version won’t affect our training objective.

So just accept the license agreement.

And here you will find two download option for macOS. We need to download this dmg version. So make sure you download this dmg file, not the other file.

Click on it. And your download will start.

Just wait for the download to complete.

UP NEXT

Once your download completes, move to the next video where we will complete the installation process.

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e4: Video - Command Line Tools Download

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For Mac

* Download install JDK. On Mac complete JDK is required to install
* Download and install the compiler GCC from cmd line tools of Xcode
  + Go to <https://developer.apple.com/> and sign-in using app store account
  + Agree to terms and conditions
  + <https://developer.apple.com/download>
  + On the top right corner you will see this MORE option. Click it. If it is not here, then you can just append slash in url and type more. <https://developer.apple.com/download/more/>
  + Under categories, make sure only Developer Tools is selected.
  + And then in the search bar search for “Command Line Tools”.
  + At the top, it will show you the most recent version.
  + Then install and open the terminal to check gcc --version
* Download and install Eclipse for C/C++

**SLIDE**

Let us now proceed and download the required compiler.

**MMM**

Now as mentioned earlier, we are going to use GCC compiler.

But on MacOS, if you want to Setup GCC compiler **MM** then you need to download and install Command Line Tools.

Well, this tool basically contains a few software that are generally needed by a programmer using MacOS. And our GCC compiler is a part of this tool. So once we install Command Line Tool then we will automatically get the GCC compiler.

So let’s get started.

**DEMO**

Now again, just below the video, you will find a link to dveeloper.apple.com. So just copy that link and paste it in the browser and hit enter.

Go to account.

Here it will ask you to sign in.

If you don’t have a developer account then you can just sign up from here. The account is absolutely free. So just pause the video and create your account.

**PAUSE FOR 6 SECONDS**

Since I already have an account, so I will just log in.

Once you log in, go to the downloads section.

Now depending on the time you are watching this video, the interface might or might not be same. So you need to look up for this MORE menu option. For me, it is present on to the right of screen.

If you can see this option, just click on it. Otherwise, in your existing URL just append “more” at the end and hit enter.

Here just make sure this “Developer Tools” option is checked.

And in the search panel, look for “Command Line Tools” hit enter.

I will download this result at the top. Now to me, it shows a version of 11.3. Now to you, it must show a version greater than or equal to this. Well, it depends on the time you are watching this video. But remember don’t download any version older than this.

So I will expand it and click on this dmg file to start the download.

Just wait for the download to complete.

**SLIDE**

Once your download is complete, move on to the next video to complete the installation process.

**TODO** **VO**

So this is the file which we downloaded in the last video.

Now before we setup the compiler, you need to ensure that you are using the latest version of Mac operating system. Because the latest command line tools can only get installed in the latest macOS version. Well, I faced this problem while installing this tool, so I had to update my Mac.

You can try installing this tool by following this video and in case if it doesn’t let you install it, then you need to update your mac. Fine?

So let’s double click to launch it.

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e5: Video - Eclipse Download

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<https://www.eclipse.org/downloads/packages/>

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e6: Video - Creating First C Project

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Workspace name: c-training

Project name: learn-programming

Source file: learn-programming.c

Launch Eclipse:

* **Windows:** Show where to find eclipse.exe
* Search in windows
* Apps tab
* Go to the installed location
  + Create a shortcut to launch it
* **Mac:** Show where to find eclipse
  + CMD + space - launch eclipse

Welcome prompt: Don’t say prompt. Just say “when you launch it it will show you the path to the default workspace”.

* Talk about what is a workspace
* Create a new folder in desktop
  + Windows: Use File explorer
  + Mac: Use Finder window
  + Talk about why the name is **learn-programming**

Welcome screen:

* This is the welcome screen. I will just close it.
* So this is how our eclipse IDE looks like.

Let’s not waste time and let’s create our first project in C.

LEFT PANEL UNDER PROJECT WINDOW

Well, on the left you will find a few options to create a new project.

If you go to file → new, you will find the same options. Among these, there is an option to create a new C/C++ project. Creating a C project using this option is bit tricky. Since this is a beginner course I will use this simple option “Create a project” OR “Project...”. Let’s click it.

**You will get this wizard in front of you.**

Now, Expand this C/C++

There you will find this C project. Select it. Click on next.

**NEXT WIZARD**

Now here, you need to enter the name of your project.

**TVT** Name it learn-programming

Since our objective is to learn the fundamentals of C programming, so let’s name it somewhere close to our objective such as learn-programming

So this will be our project name.

Then here you will find **executable**, just expand it and you will get two option, the first is Empty project. If you create a C project using this option, then your project won’t contain any default source code.

And if you select HELLO WORLD ANSI C PROJECT, then it will by default create a C program file for you having some code. So let’s go for this option. And then on the right you will find two compilers.

Make sure you select MacOSX GCC compiler OR MinGW GCC compiler which we installed just now.

Then click on FINISH.

This will create your new project and it will automatically open a file in front of you which contain some code. Well, right now don’t worry about them. I will discuss them shortly.

But right now I want you to remove these code written in this file completely. And just below the video, you will find a link. I want you to open that link. There you will find some code. Just copy those code and paste it in this file.

Like this.

Now throughout this training, wherever required I will ask you to go to the link present below the video and get the required code which will be needed to get started with a particular topic.

This will make your learning experience better. So instead of typing the same kind of code, again and again, you can just focus on learning a new concept in each video. Fine?

Now, please don’t worry about the code written in front of you. We will discuss about writing programs throughout the training. So before that, it is very important for us to know about the tools and functionalities of our IDE.

So in the next video, we will explore Eclipse IDE.

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e6: Video - Creating First C Project

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