

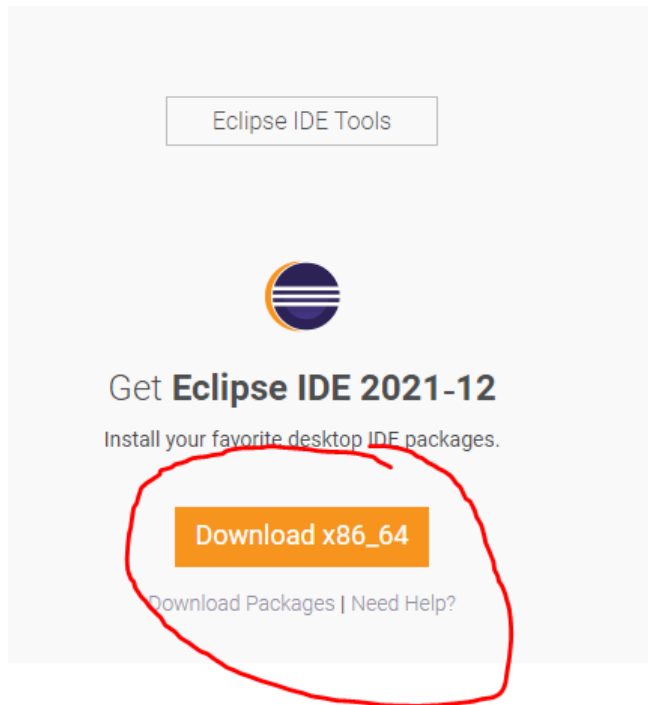
3S03 Testing Tools Setup

We'll be installing and setting up:

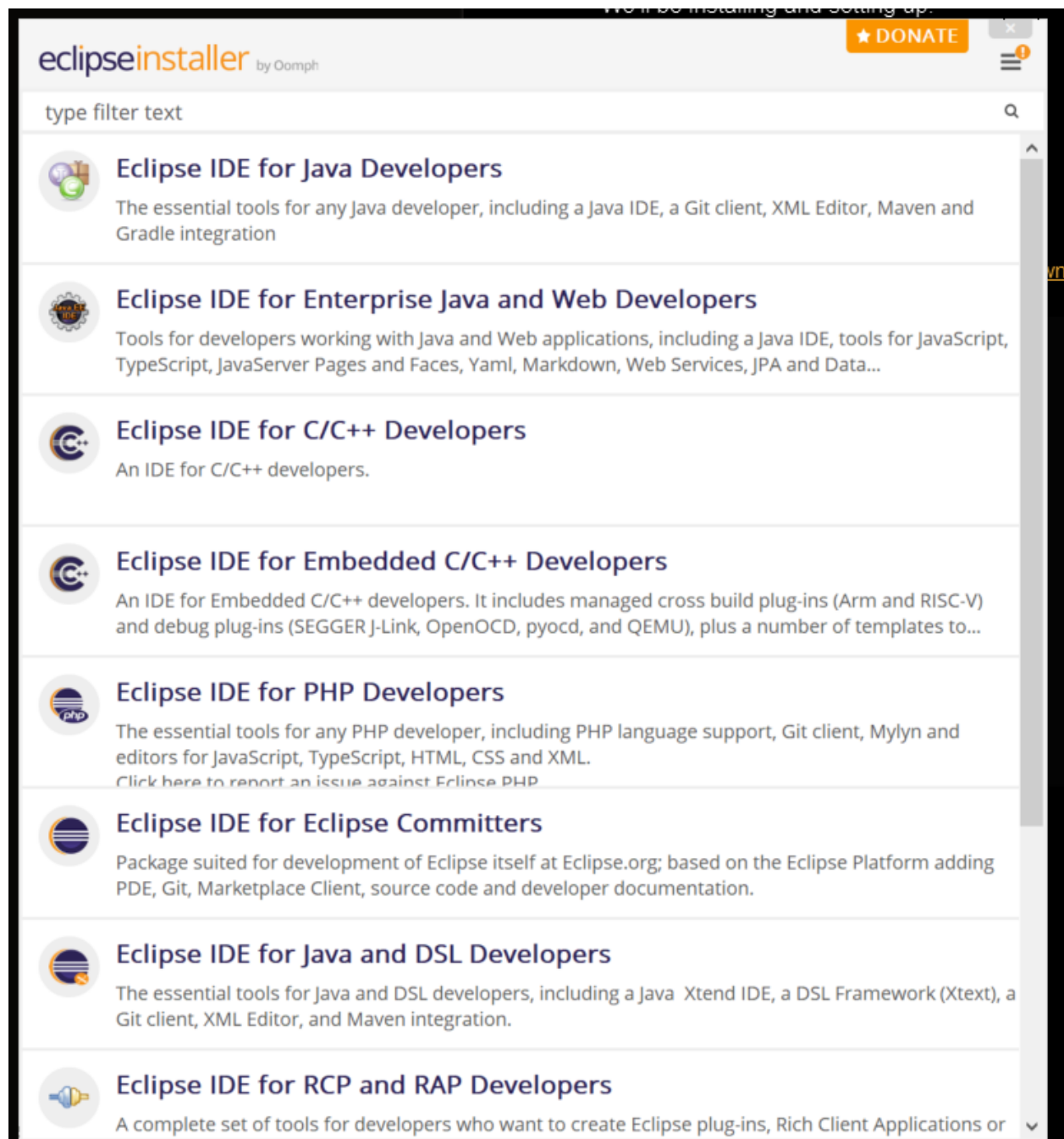
- Java (If you don't already have it)
- Eclipse IDE
- JUnit Testing Library
- EcEmma (Code Coverage Tool)

Eclipse IDE

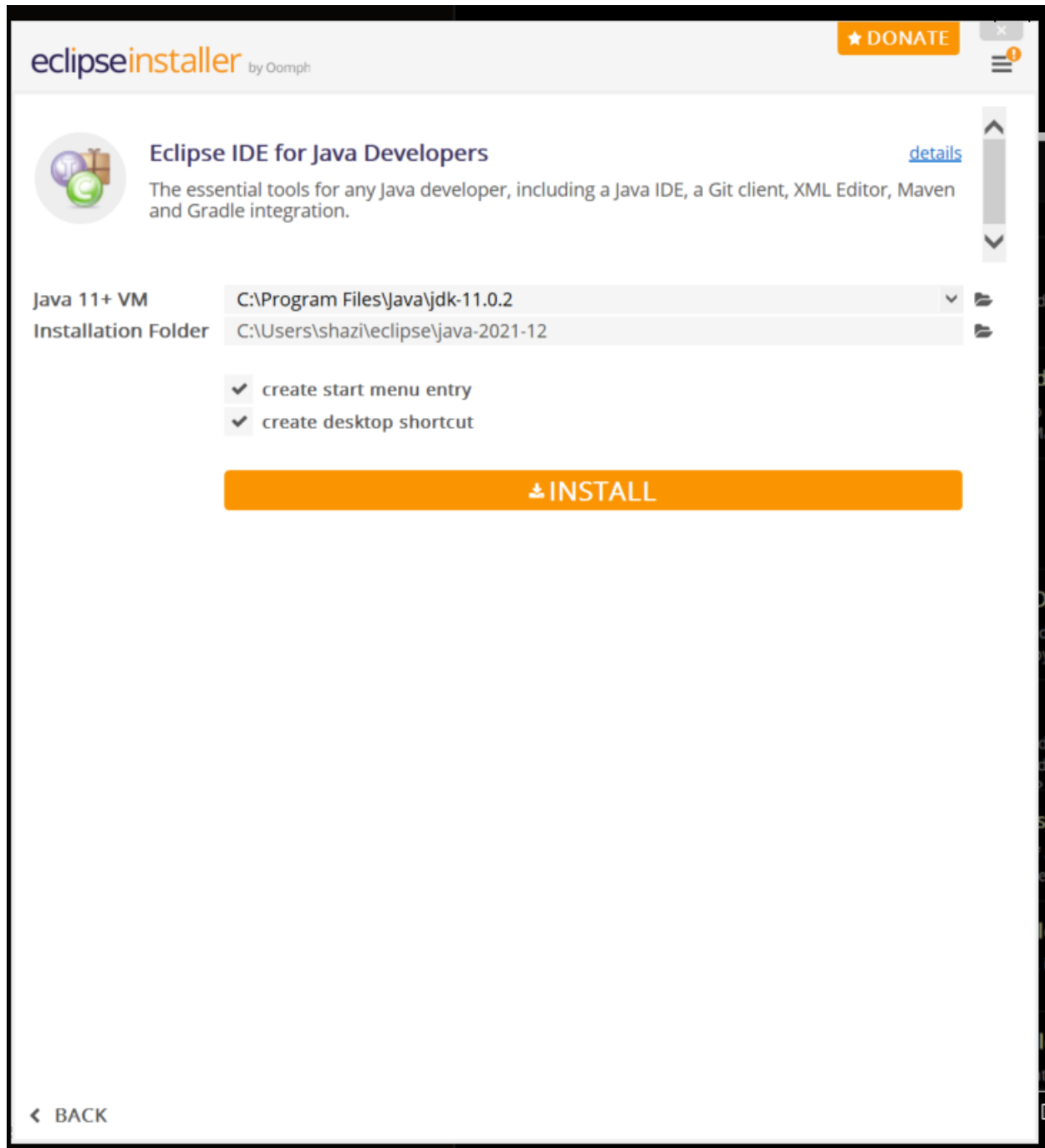
- Head over to <https://www.eclipse.org/downloads/> and click '**Downloads x86_64**'



- Open the downloaded .exe file
- You'll see a number of options as follows:



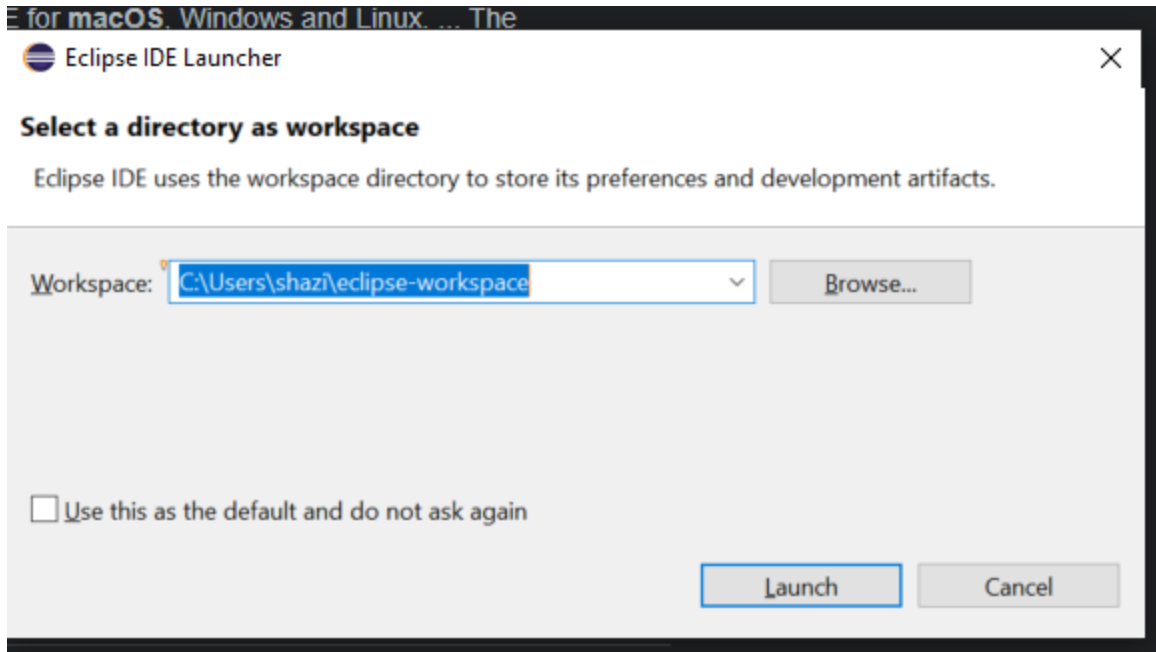
- Simply select the first one titled 'Eclipse IDE For Java Developers'. Click Install on the follow up window:



Note: If you don't have Java JDK installed, you'll have to install it. See here:

<https://www.oracle.com/java/technologies/downloads/#jdk17-windows>

- Now you should be able to launch Eclipse from your Desktop or the green 'Launch' button that appears on a follow up window
- When you first launch Eclipse, it'll ask you to select a 'workspace' directory. Pick a directory and continue to 'Launch':



JUnit

- Can setup JUnit directly in eclipse, go to **File -> Properties -> Libraries Tab -> Classpath -> Add Library -> JUnit -> JUnit 4**
- If that doesn't work, head over to this link and download the jar file, then follow the same steps above to add it to the classpath:
<https://search.maven.org/search?q=g:junit%20AND%20a:junit>
- Right click on the file containing your tests and click 'Run as -> JUnit Test'.
 - If you get an **InvalidModuleDescriptorException** delete the module-info.java file (if it's present)
 - If you get **Eclipse Java error: This selection cannot be launched and there are no recent launches**, make sure you have a main method present: **public static void main(String[] args) {}**

EclEmma

- In Eclipse, go to **Help -> Eclipse Marketplace** and search for EclEmma and click install
- You can run it by going to **Run -> Coverage**