Tutorial 2: Creating a New Project from Scratch

Instructor:
Dr. Carl Latino
carl.latino@okstate.edu

Graduate Teaching Assistants:
Francisco E. Fernandes Jr.
feferna@okstate.edu

School of Electrical and Computer Engineering
Oklahoma State University
Fall 2019

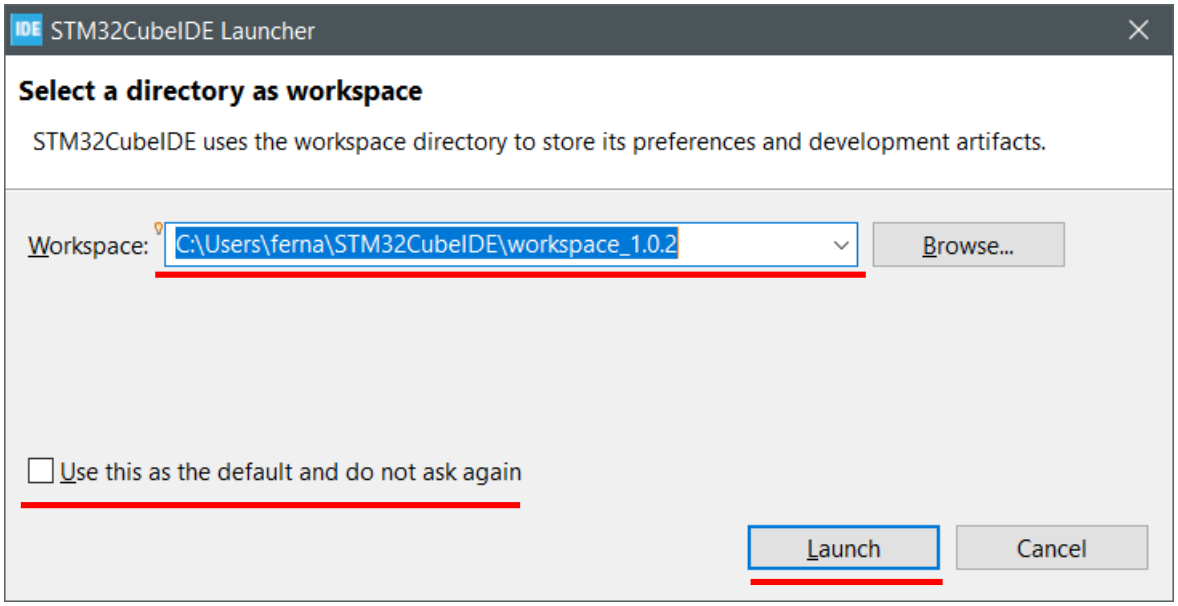
Creating a New Project on **STM32CubeIDE**

- This document shows step-by-step how to create a new project on **STM32CubeIDE**.

- Follow the tutorial exactly as it is shown here. Otherwise, you can face compilation errors with your code.

Creating a New Project on **STM32CubeIDE**

- The first time you open the **STM32CubeIDE**, you will have to select a folder where all your projects will be located.



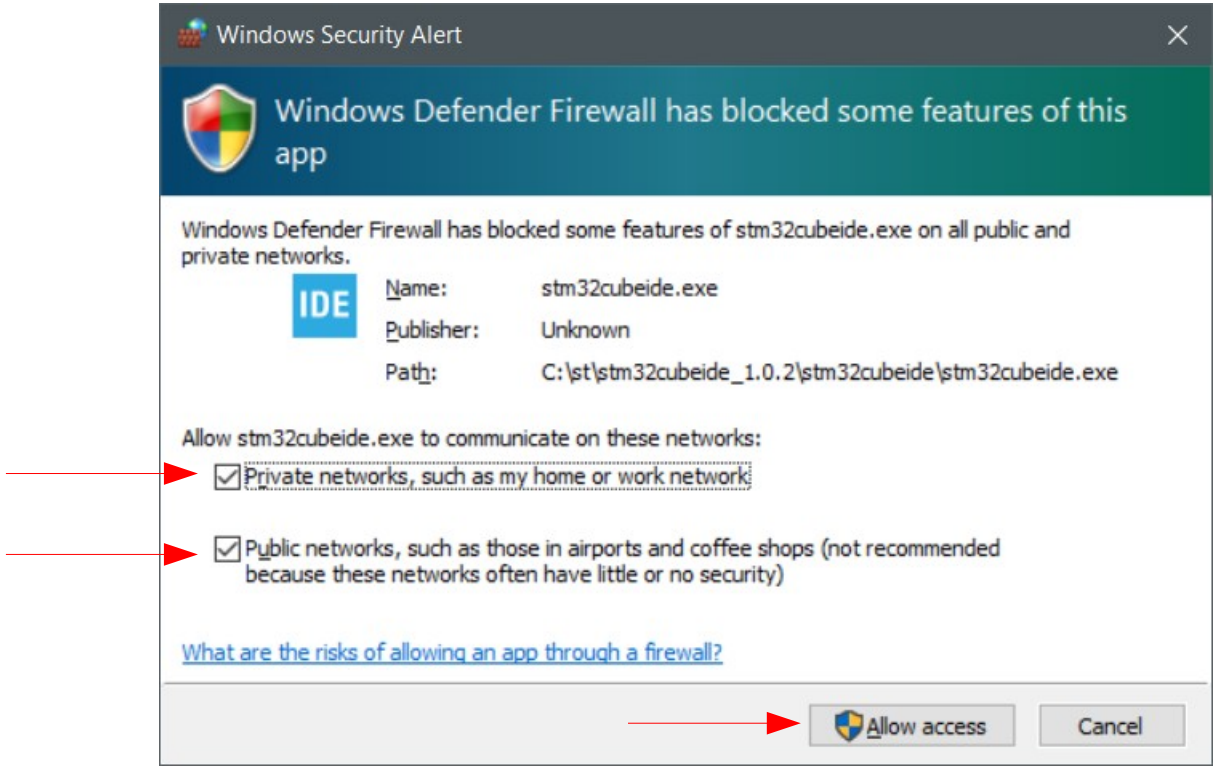
Important: Your workspace folder CANNOT contain any spaces in its name! Otherwise, you will face compilation errors.

It is recommended to use the folder suggested by the IDE during the first start up.

- If you don't want to be asked about the workspace folder every time you open the IDE, you can check the box **`Use this as the default and do not ask again`**.
- Click on the OK button to open the IDE.

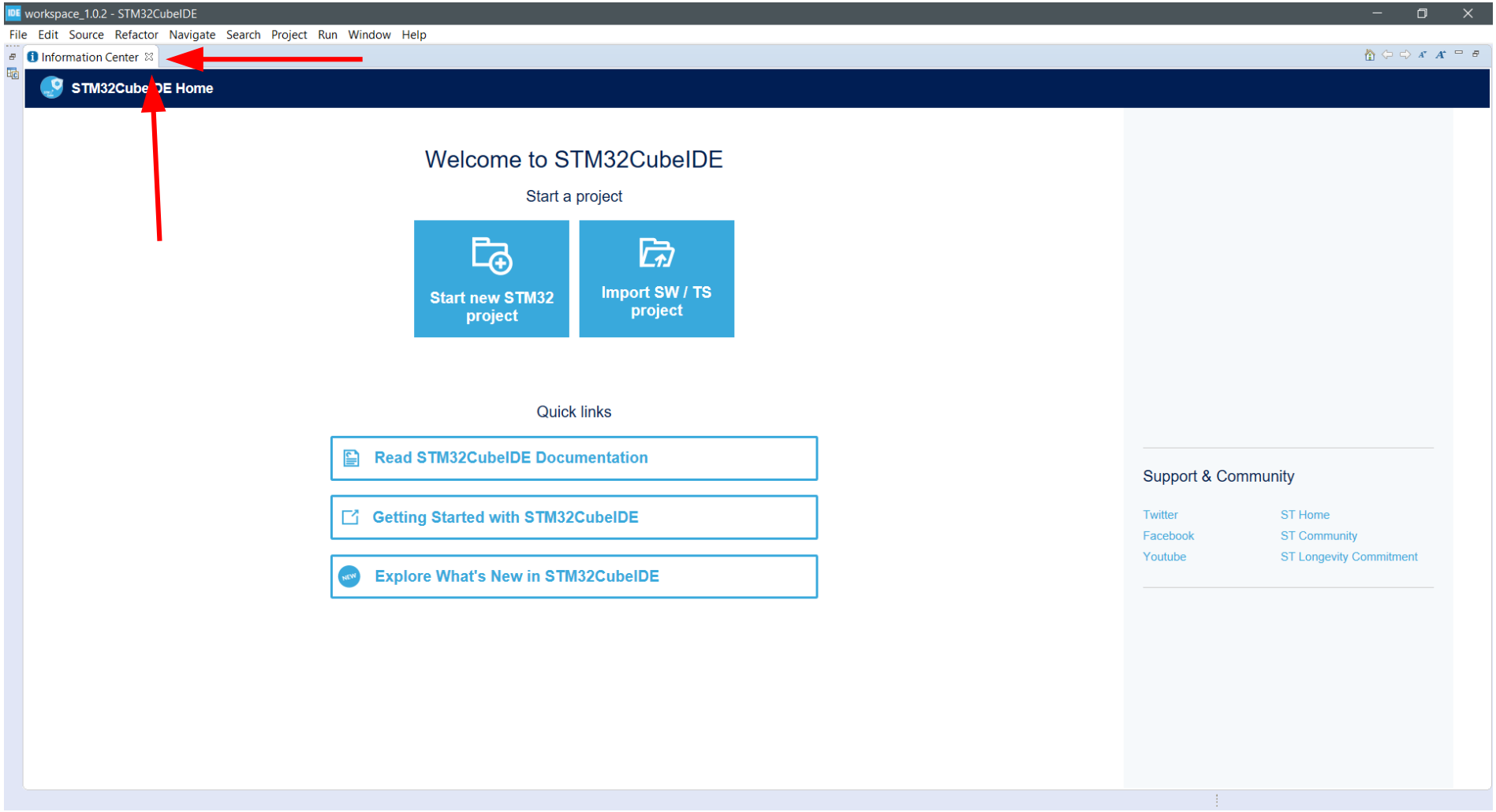
Creating a New Project on **STM32CubeIDE**

- The first time you open the **STM32CubeIDE**, it will try to connected to the internet, and the Windows Firewall will ask your permission to connect.
- Check all boxes and click on “Allow access”.



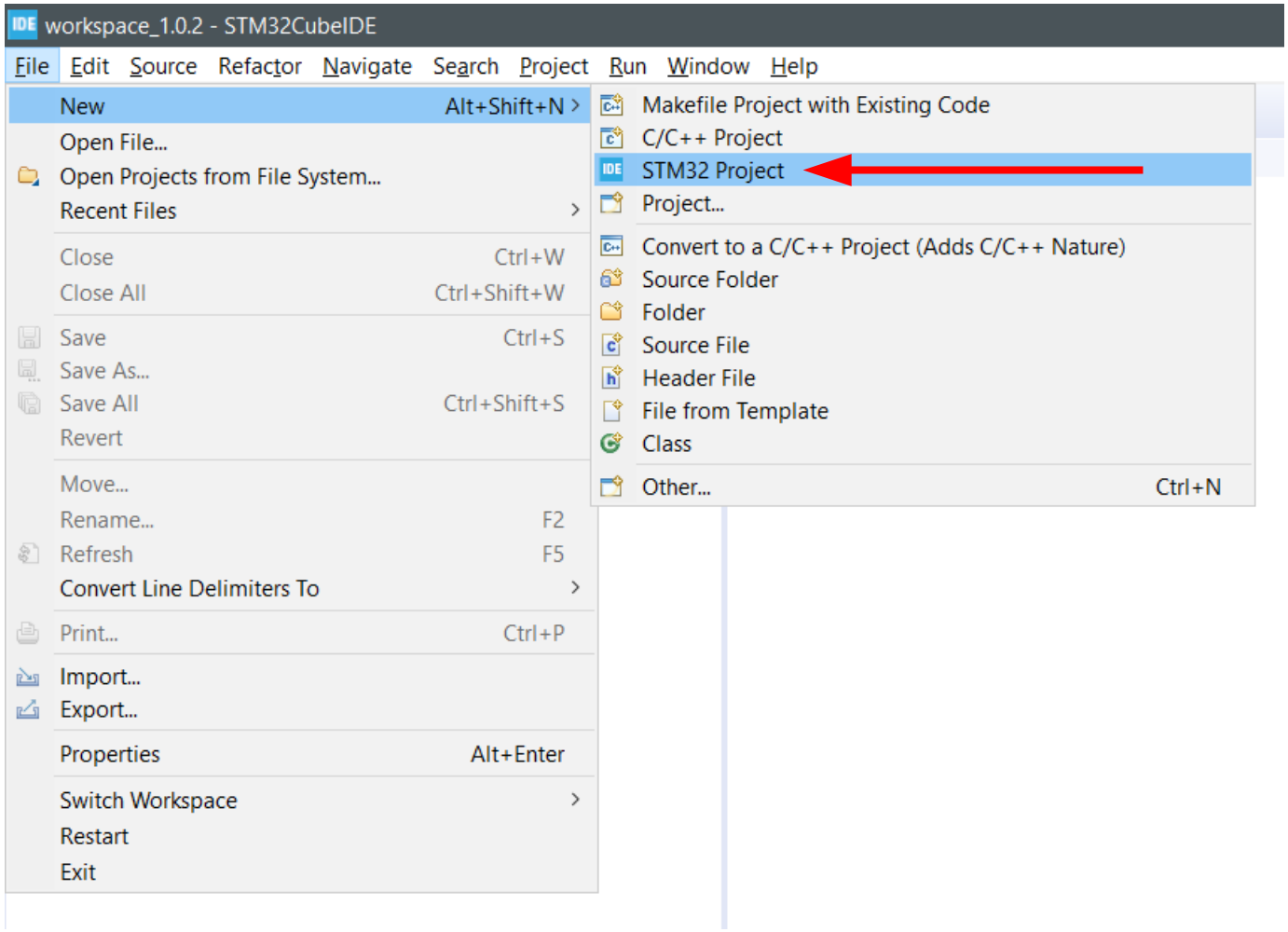
Creating a New Project on **STM32CubeIDE**

- If you are greeted with this welcome screen, just click on the little **x** next to **Information Center**, as indicated in the picture below:



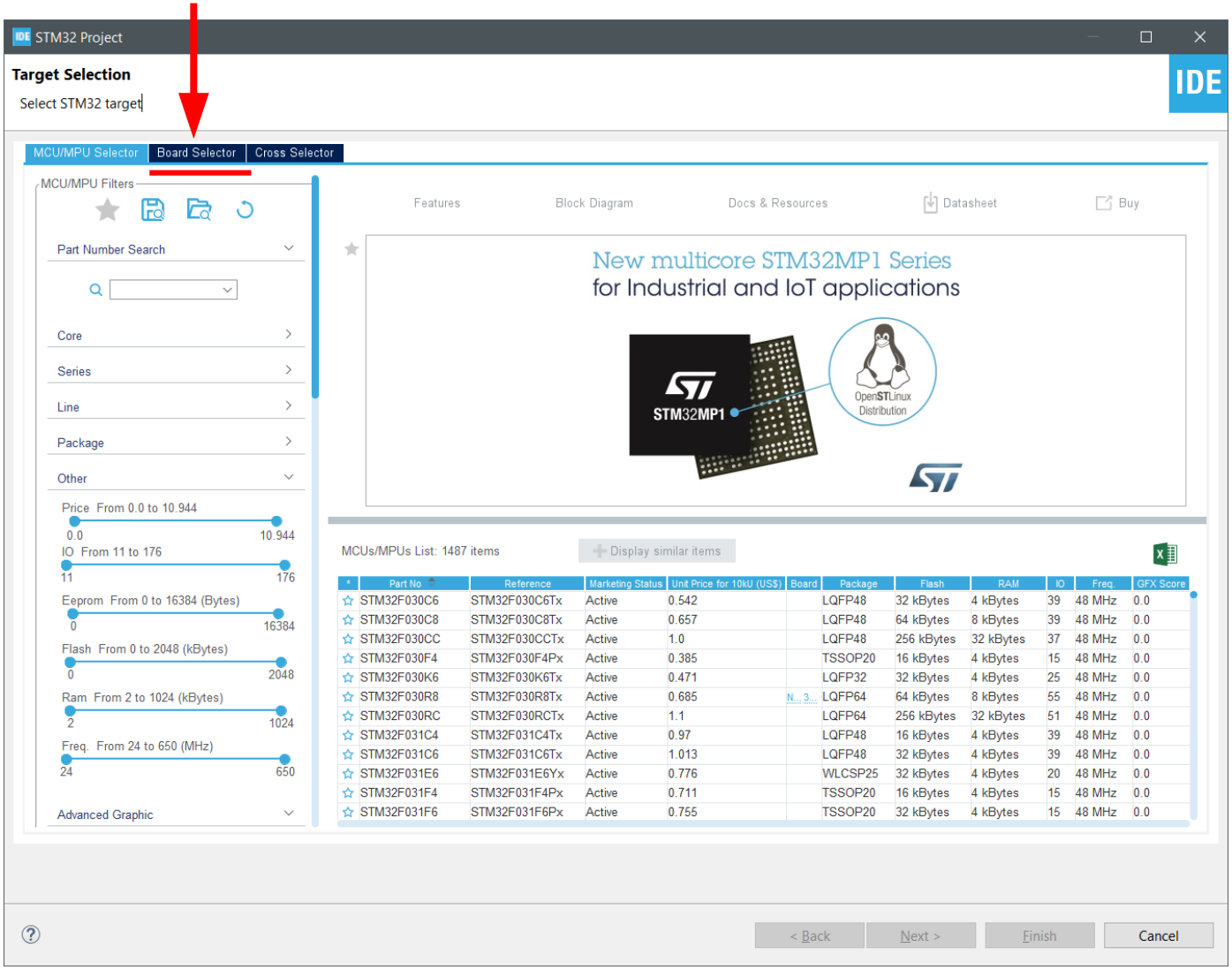
Creating a New Project on **STM32CubeIDE**

- Once the IDE has opened, you need to select **`File → New → STM32 Project`**.



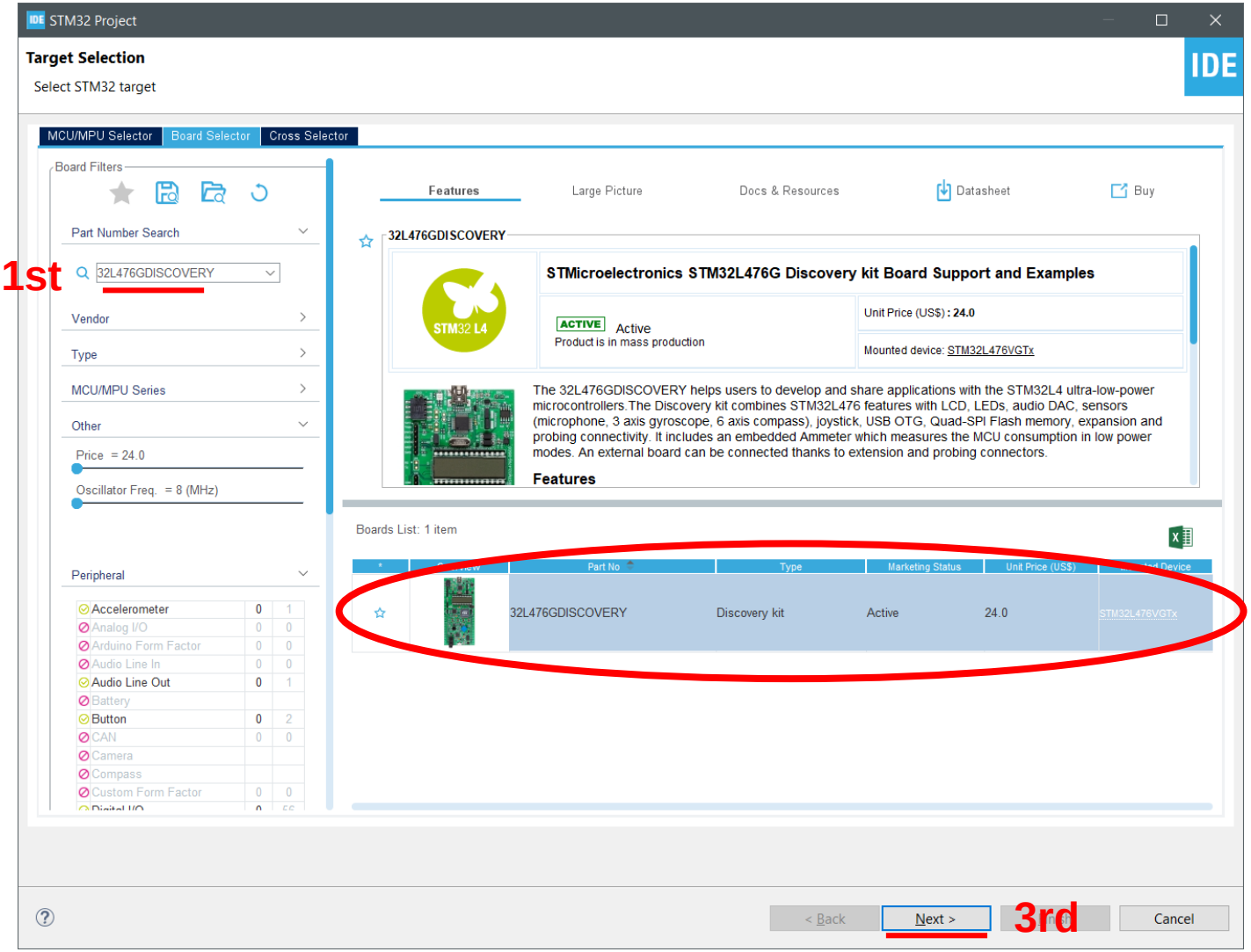
Creating a New Project on **STM32CubeIDE**

- Wait until this screen shows up, and click on **Board Selector**:



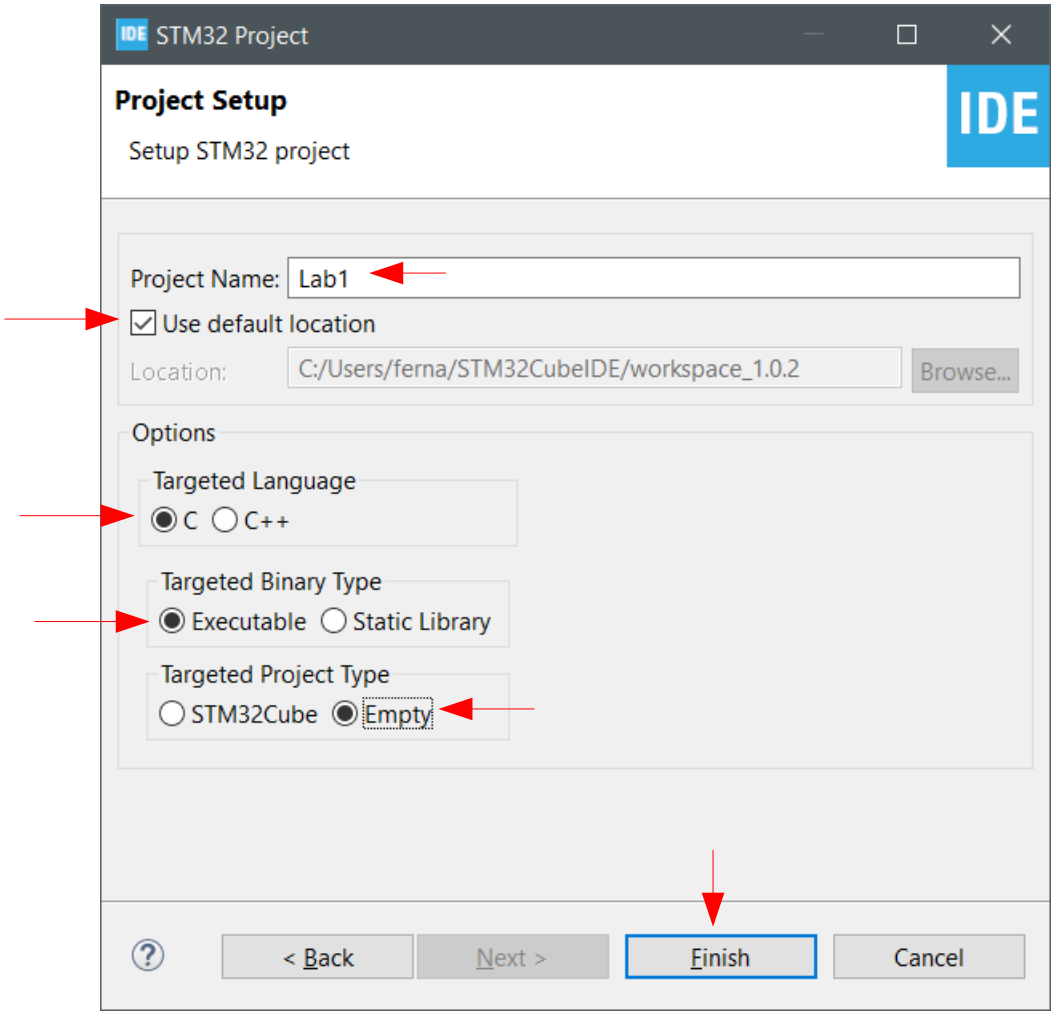
Creating a New Project on **STM32CubeIDE**

- On **Board Selector**, search for **32L476GDISCOVERY**, select the board in the table, and click on **Next**:



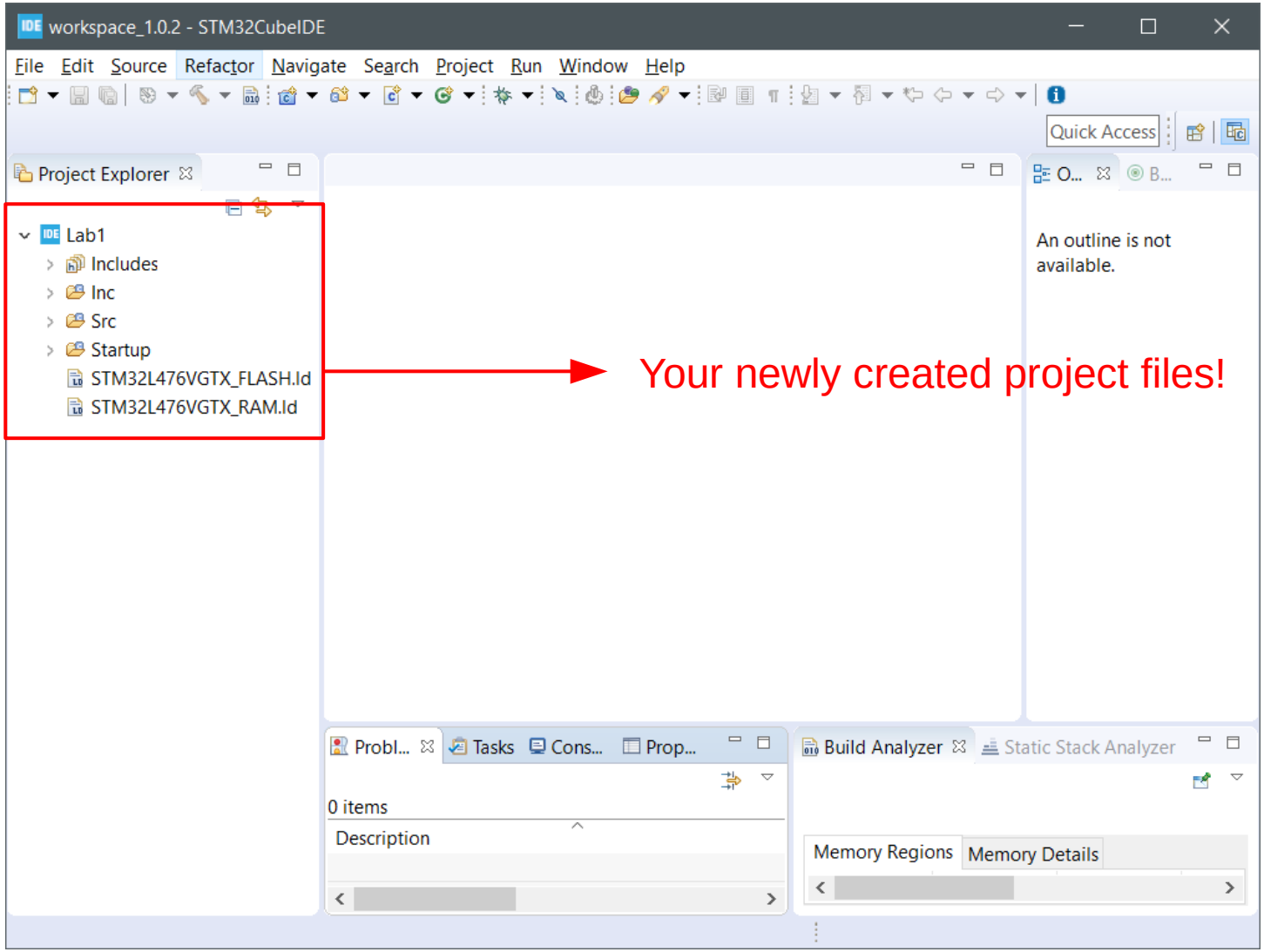
Creating a New Project on **STM32CubeIDE**

- A new window will show up now, give a name for your project, and select the options indicated in the picture below:



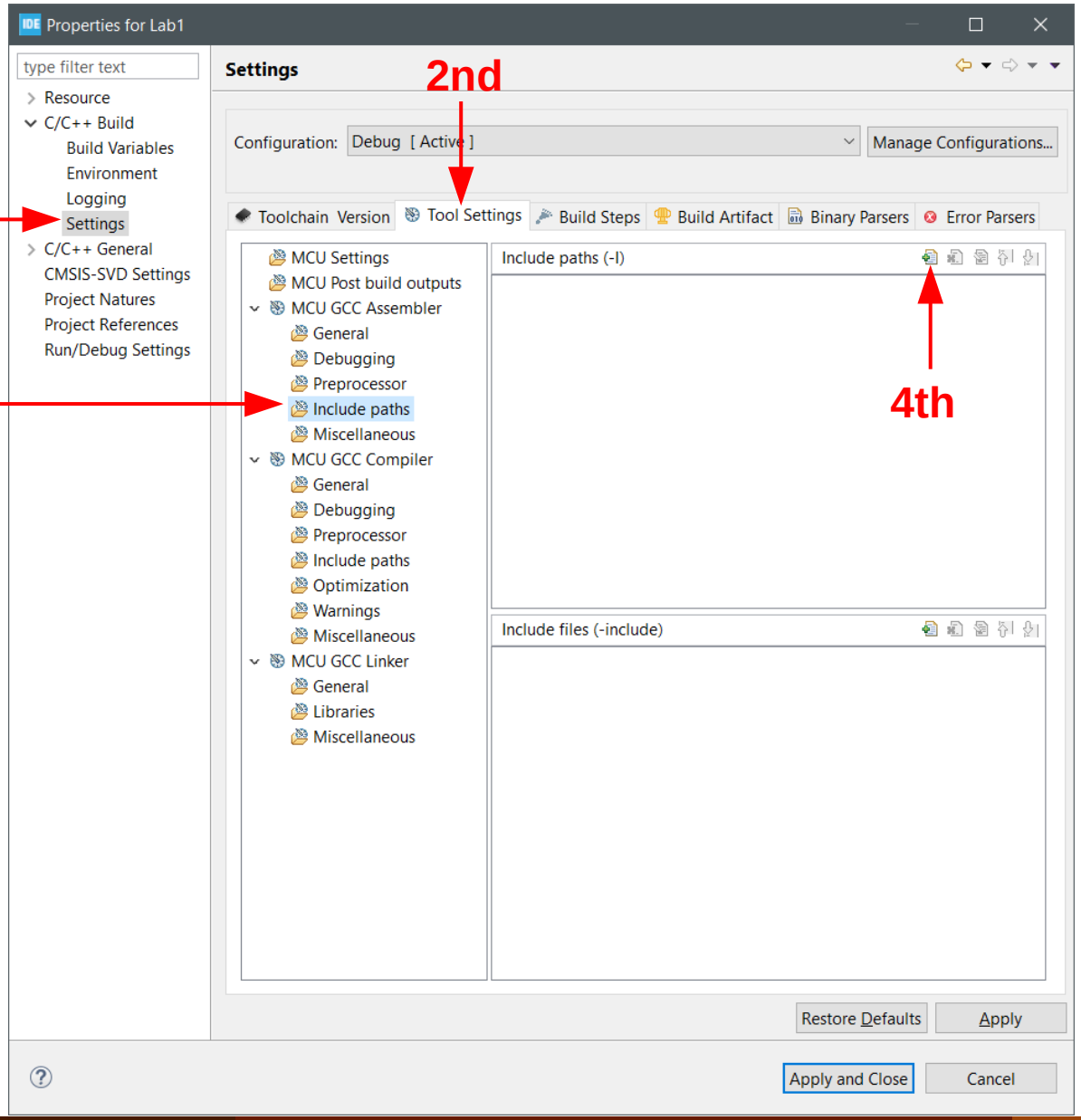
Creating a New Project on **STM32CubeIDE**

- Now, your project is created and you will have access to all code files on the panel on the left in the IDE.



Creating a New Project on **STM32CubeIDE**

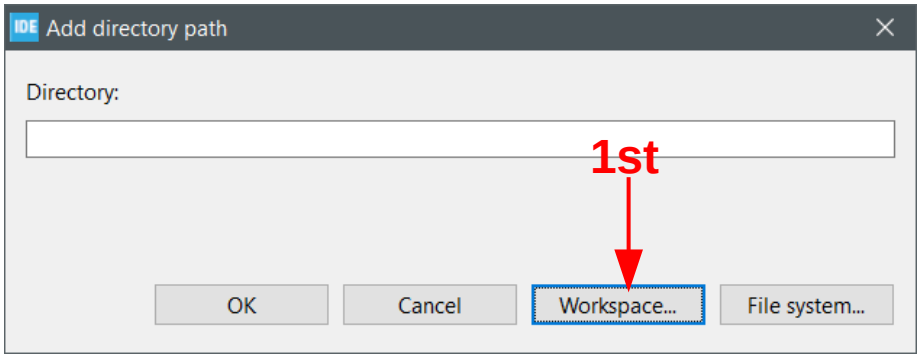
- In the **Properties** window, follow the picture:

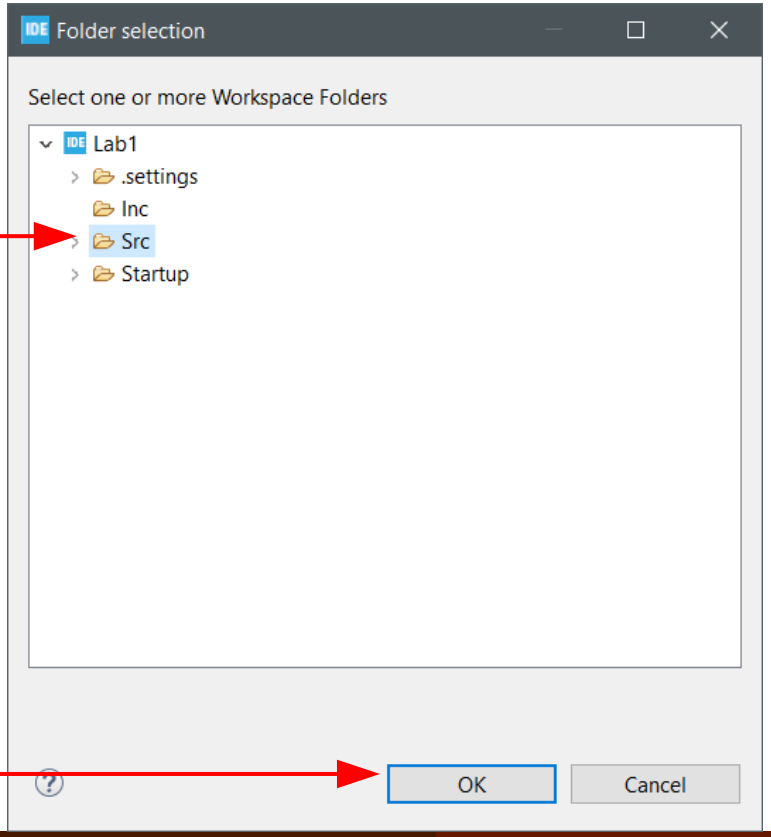


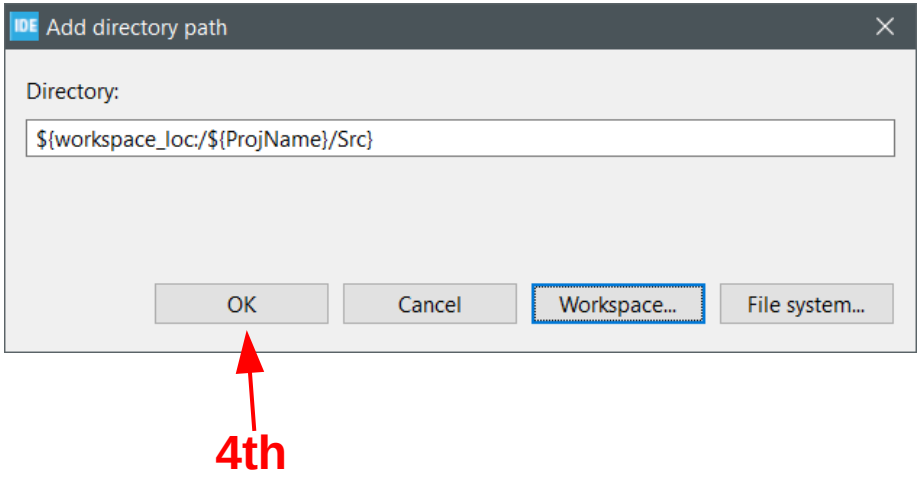
After the 4th step, a new window will open.

Creating a New Project on **STM32CubeIDE**

- In this window, follow the picture:

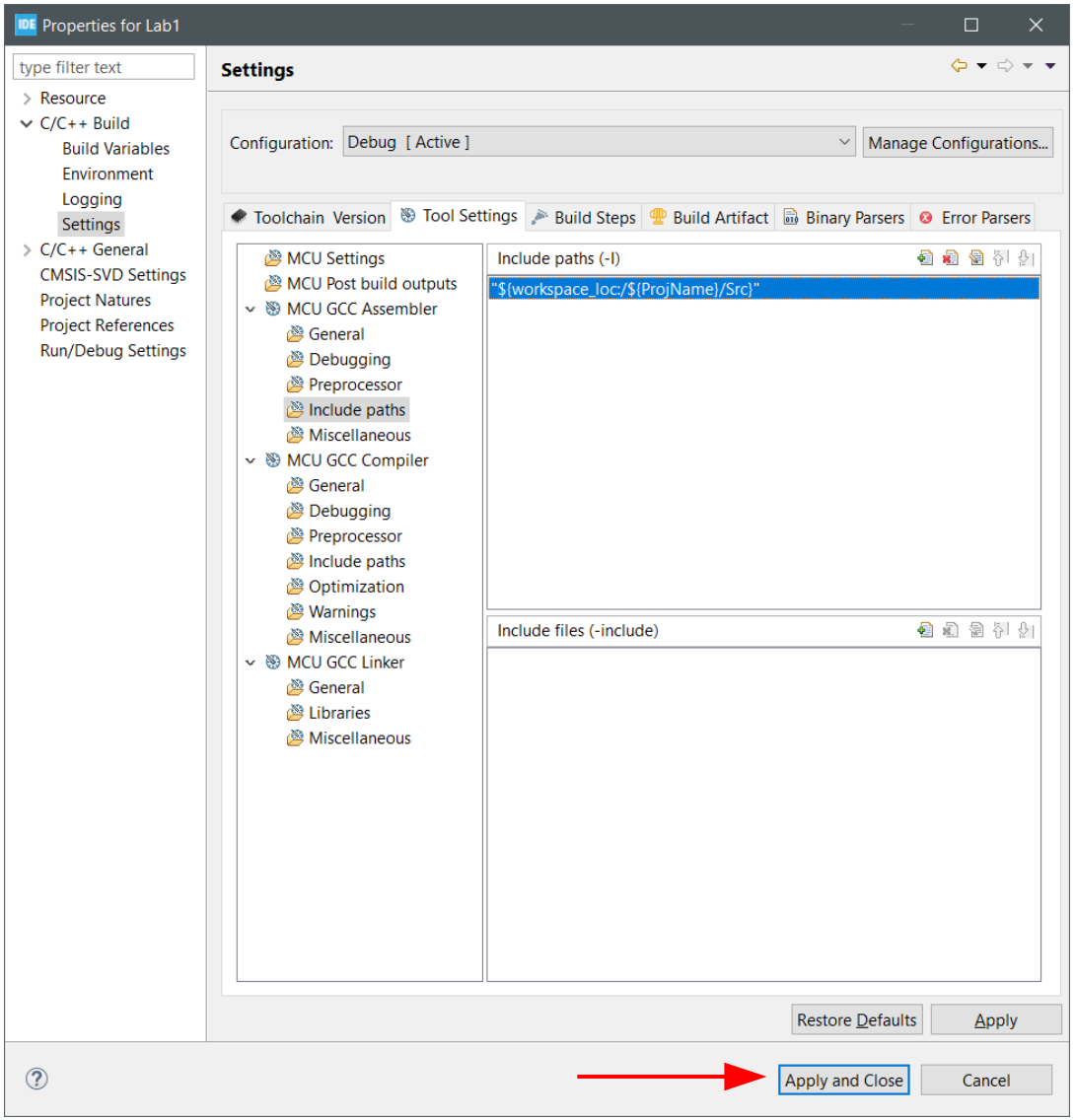






Creating a New Project on **STM32CubeIDE**

- Back in the **Properties** window, you just need to click on **Apply and Close**:

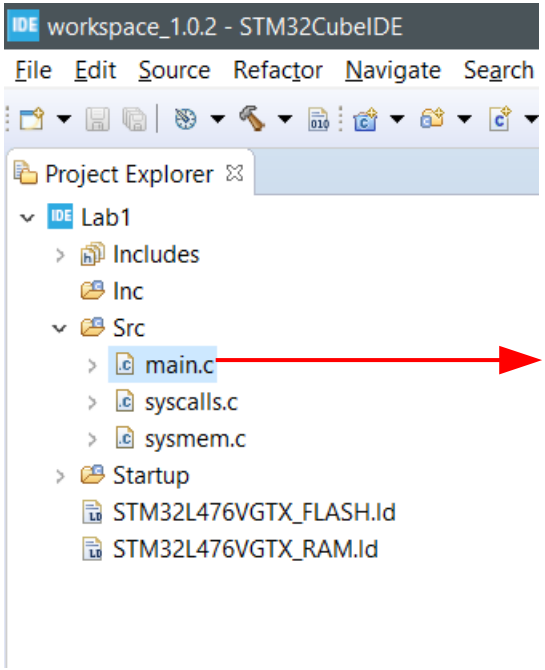


A new window will ask you if you want to reload the project.

Click on **Yes**, and you will be back to the IDE.

Creating a New Project on **STM32CubeIDE**

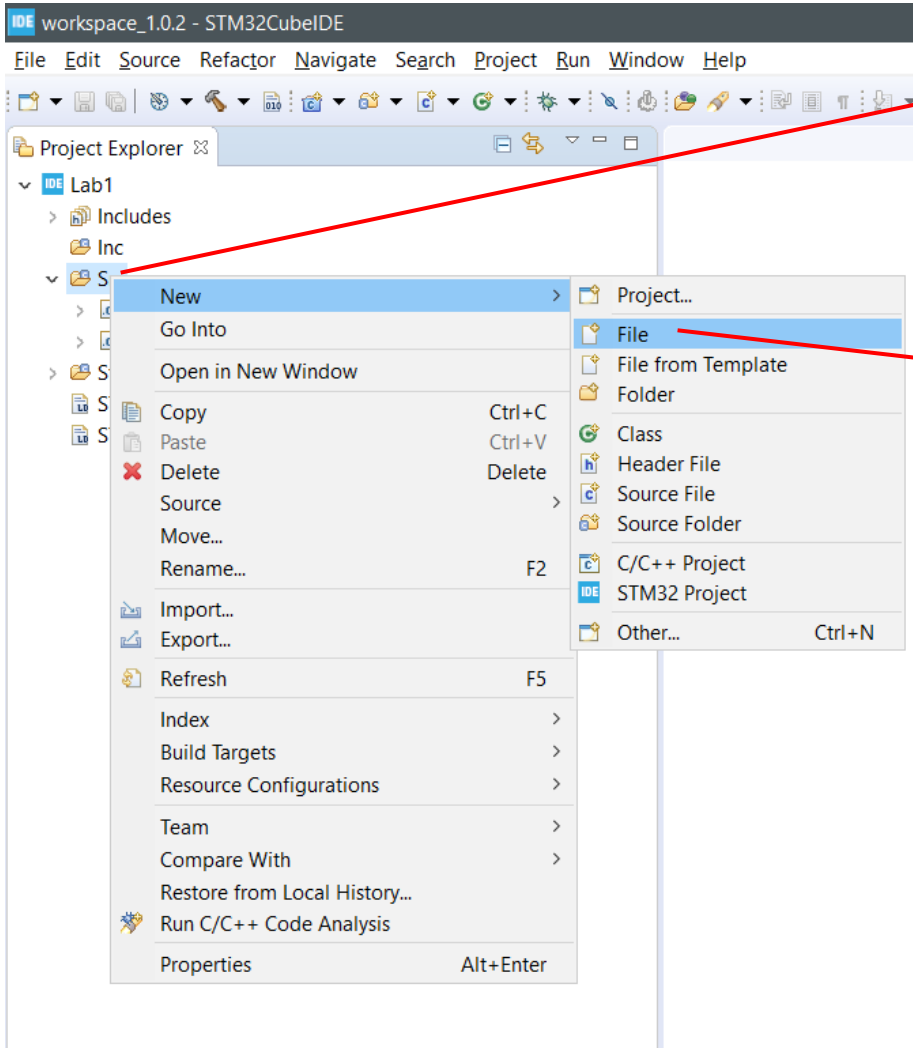
- With the basic project created, you need to delete the **main.c** file located in the **Src** folder.



Delete this file!
You can hit the **delete** key or you can right-click with your mouse and select **delete.**

Creating a New Project on **STM32CubeIDE**

- Now, create a new file called **main.s** inside the **Src** folder, which you will put all your assembly code.

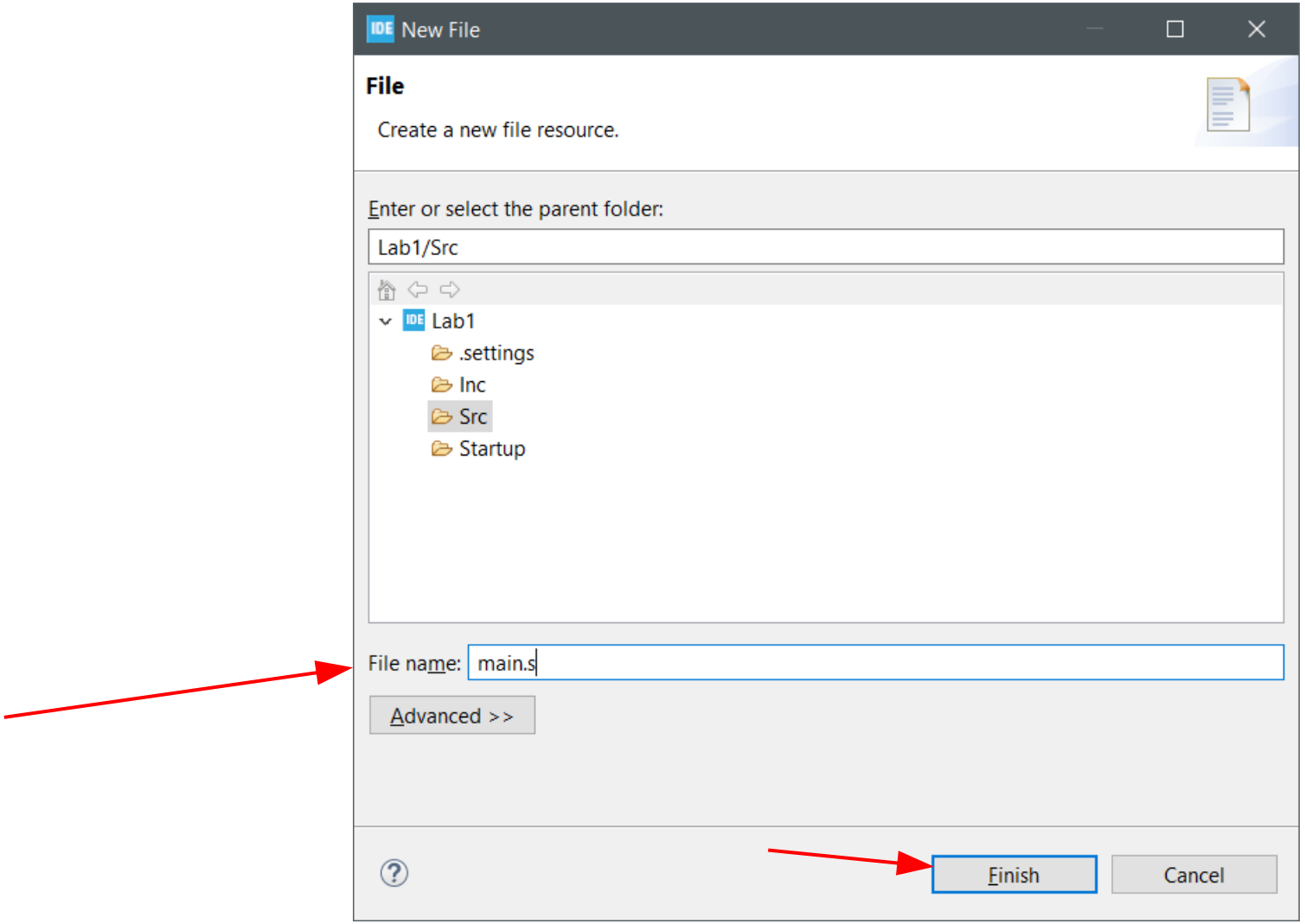


Right-click the **Src** folder

Select **New --> File** in the menu

Creating a New Project on **STM32CubeIDE**

- Now, create a new file called **main.s** inside the **Src** folder, which you will put all your assembly code.



Creating a New Project on **STM32CubeIDE**

- The newly created **main.s** file will open up in the IDE, and, now, you can start typing your assembly code.

- The code will depend on the lab you are working one, and the **T.A.** will post some boilerplate code to help the students.

- **In the next tutorial, you will learn how to compile and deploy your code to the development board itself.**