

# How to create a MPLABX project for Basys MX3

Hardi Selg

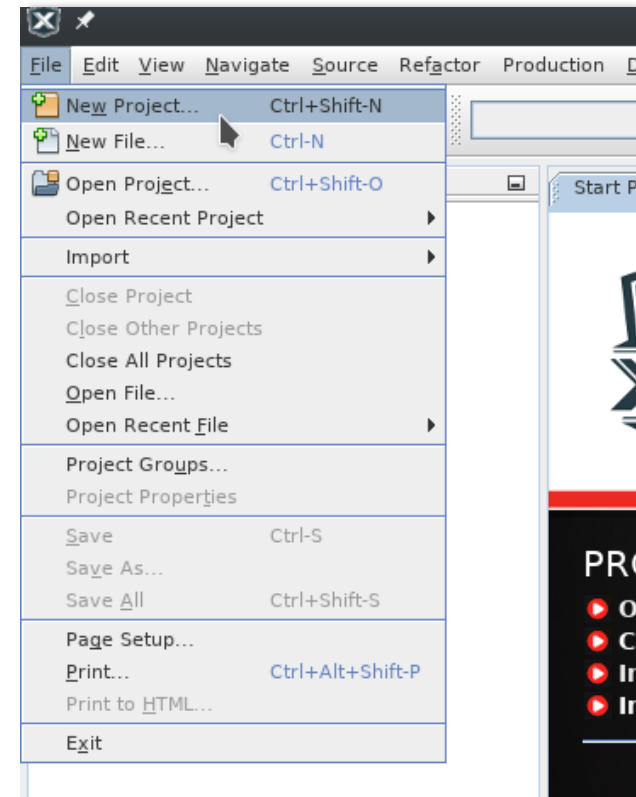
22.11.2018



1. Open MPLAB X from the program menu

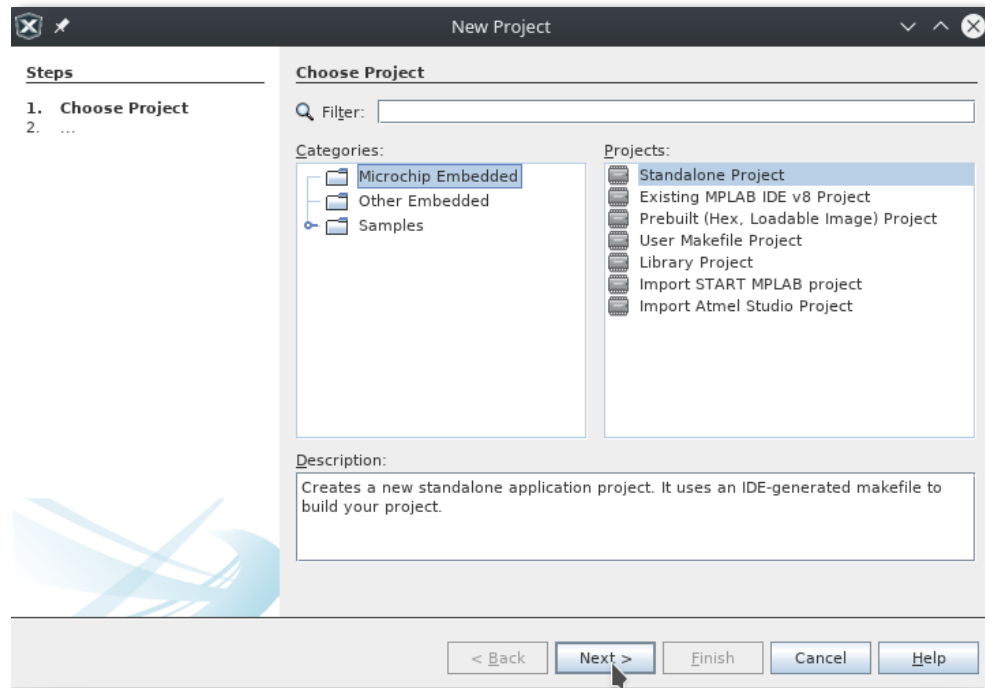


2. Create a new project



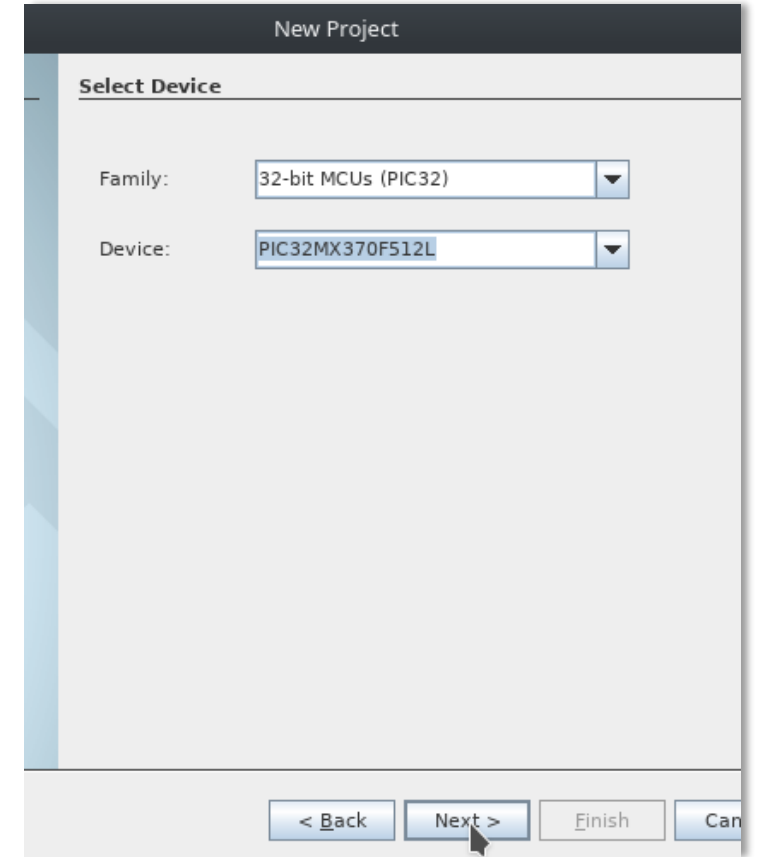


### 3. Select 'Standalone Project'

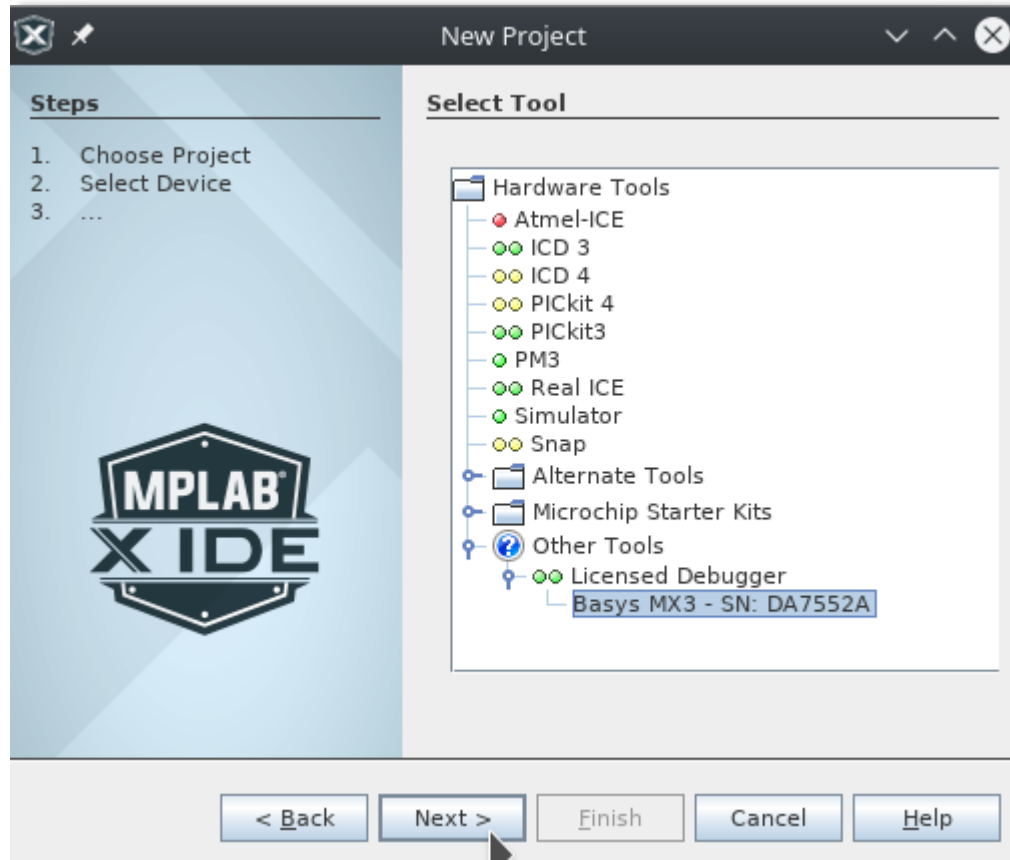


### 4. Select device:

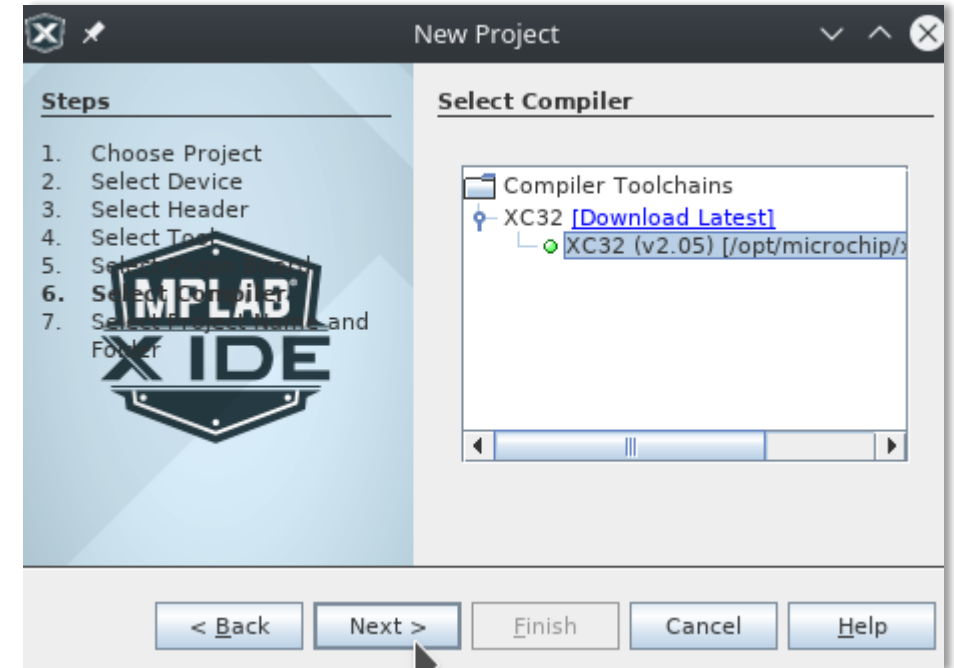
**PIC32MX370F512L**



5. Select **Basys MX3**  
**OR** if not available  
Select 'Licenced Debugger'



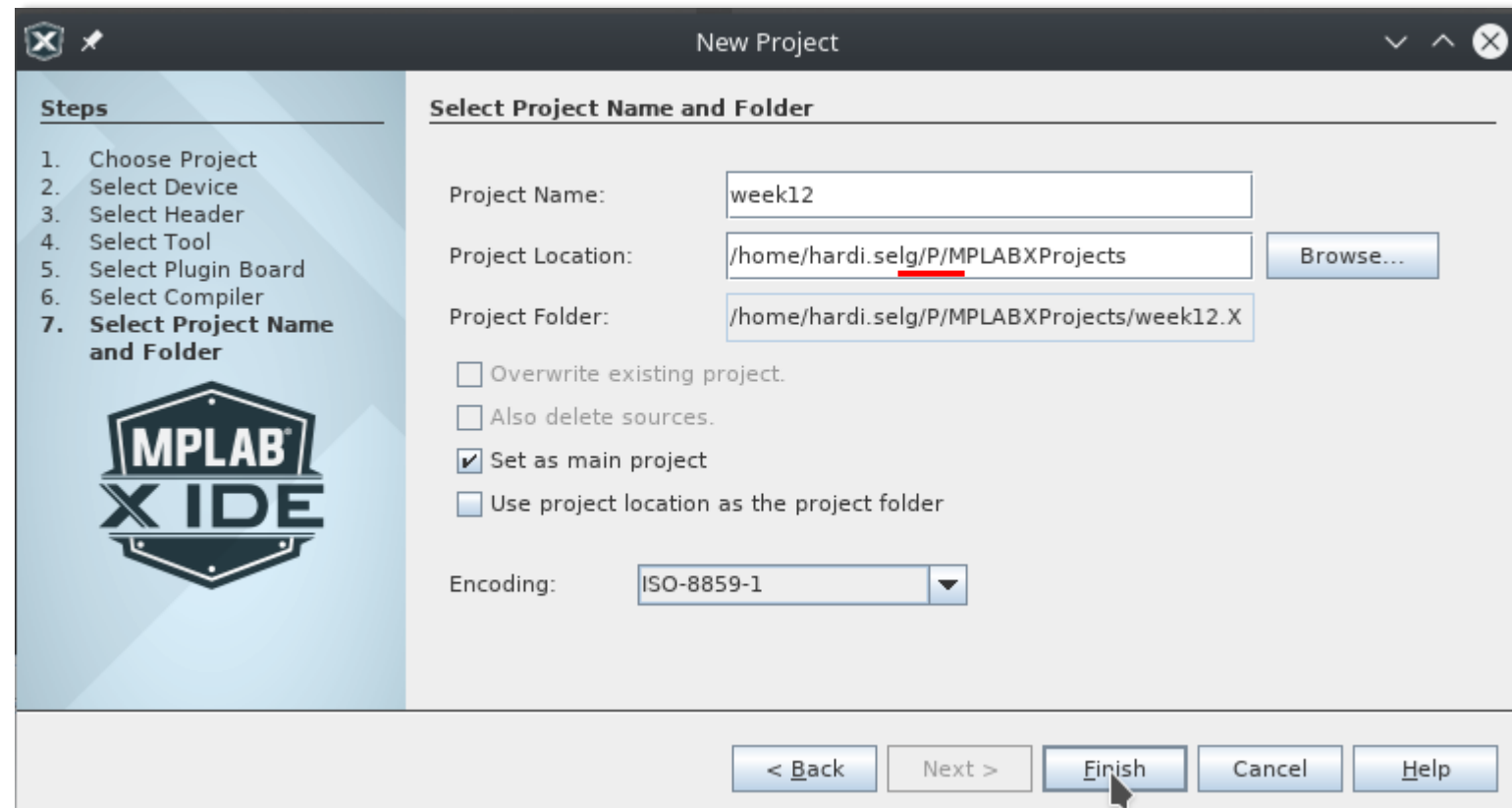
6. Select the compiler **XC32**

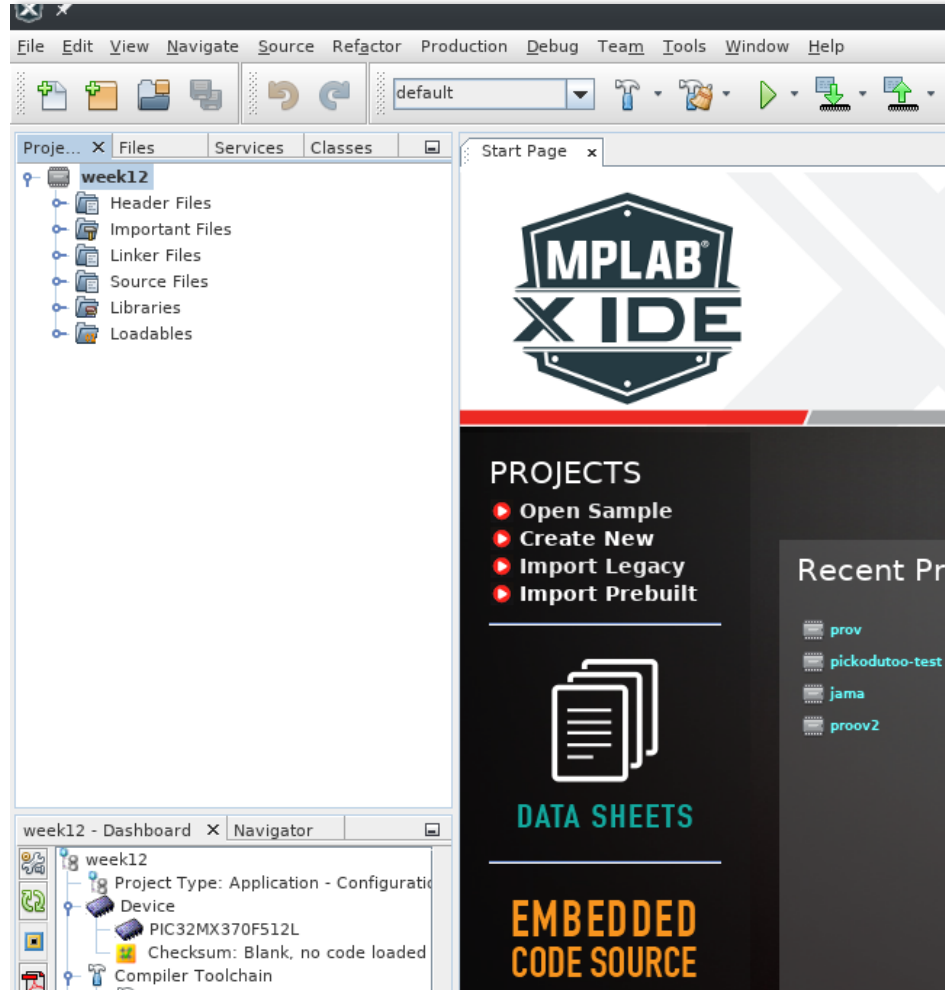




7. Change the project location to your „P“ folder

8. Give the project a **name**





- After pushing „Finish“ a project should appear to the left side of the main window
- Now the next step is to download default files for the project
- They can be found on this link:

<http://ati.ttu.ee/~hartz/basys-mx3/ENG/ProgI/>



## Downloading default files

(<http://ati.ttu.ee/~hartz/basys-mx3/ENG/ProgI/>)

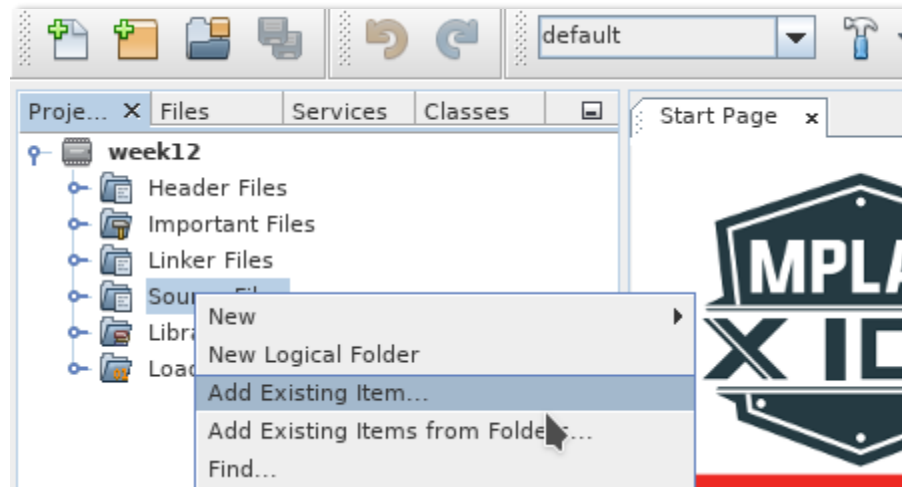
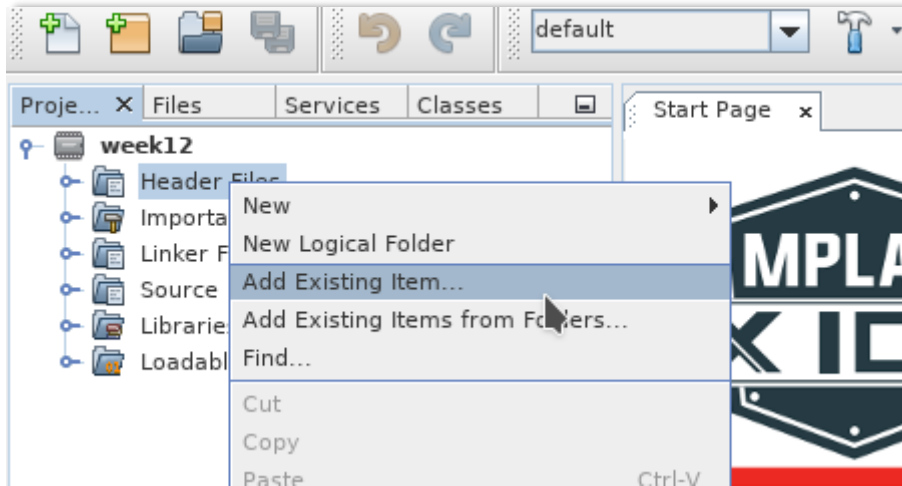
- Save them to your previously defined project location

The screenshot shows a dialog box with the following fields and options:

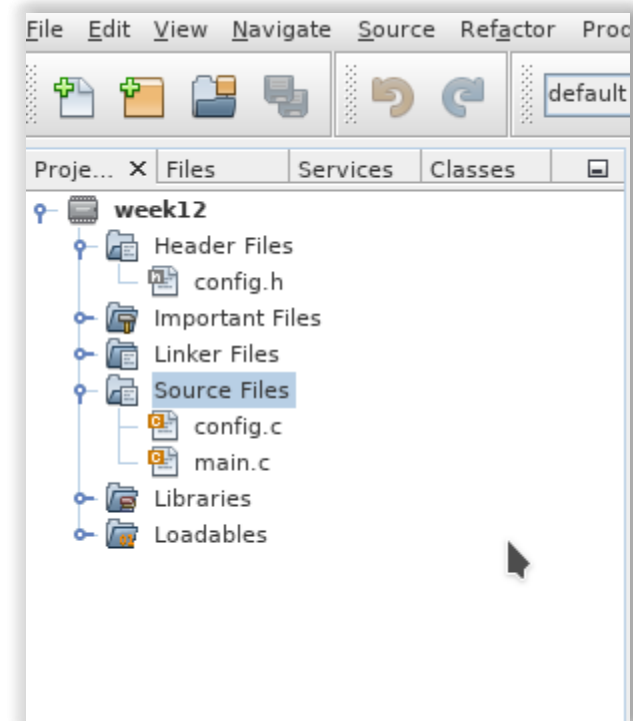
- Project Location:** /home/hardi.seig/P/MPLABXProjects
- Project Folder:** /home/hardi.seig/P/MPLABXProjects/week12.X (This field is highlighted with a red border in the original image)
- Overwrite existing project.



# Adding files to project

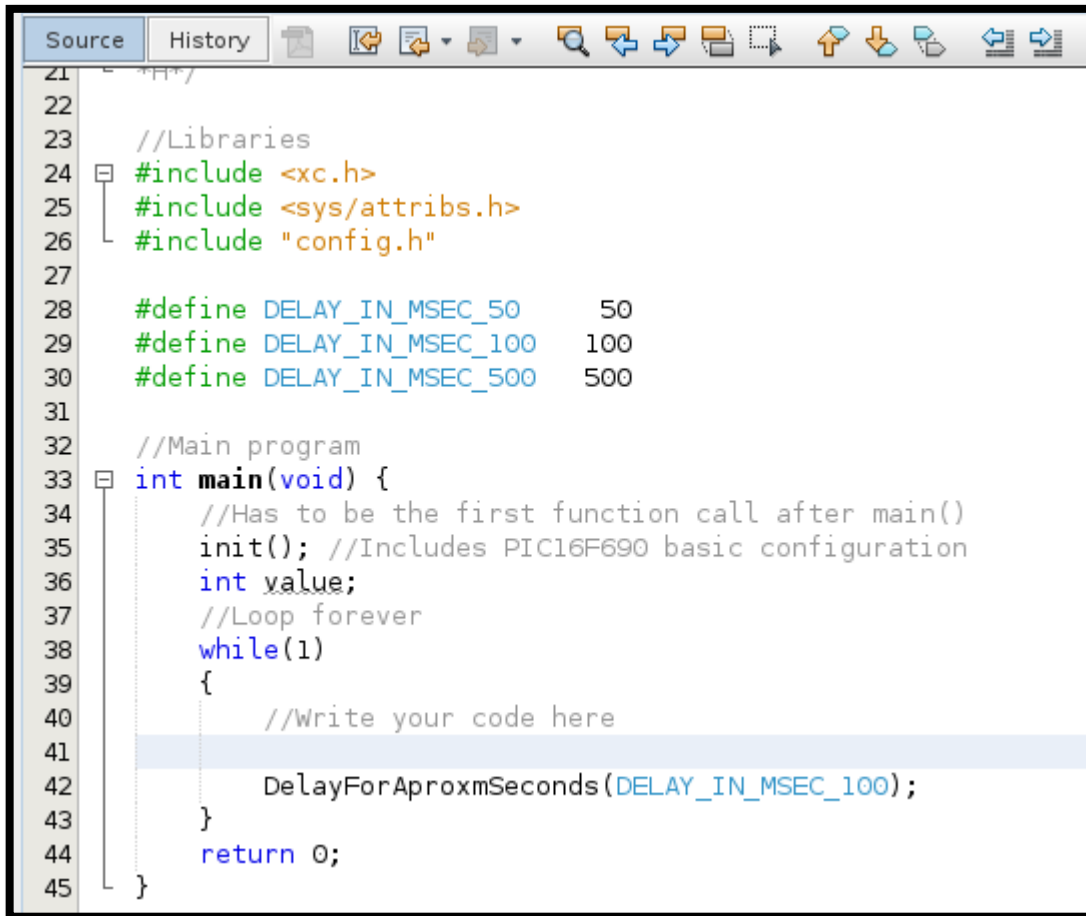


- To add files make a right click on the Header/Source Files name and select „Add Existing Item”
- From there you should see your downloaded files and add them accordingly





# Now you can start writing your code!



```
21 //
22
23 //Libraries
24 #include <xc.h>
25 #include <sys/attribs.h>
26 #include "config.h"
27
28 #define DELAY_IN_MSEC_50    50
29 #define DELAY_IN_MSEC_100  100
30 #define DELAY_IN_MSEC_500  500
31
32 //Main program
33 int main(void) {
34     //Has to be the first function call after main()
35     init(); //Includes PIC16F690 basic configuration
36     int value;
37     //Loop forever
38     while(1)
39     {
40         //Write your code here
41
42         DelayForAproxmSeconds(DELAY_IN_MSEC_100);
43     }
44     return 0;
45 }
```

- All your code goes to the `while(1)` loop in main file.
- Variables, of course, should be in the beginning of the main function



TALLINNA  
TEHNIKAÜLIKOO