



TALLINNA
TEHNIKAÜLIKOOL

How to create a MPLABX project for Basys MX3

Hardi Selg

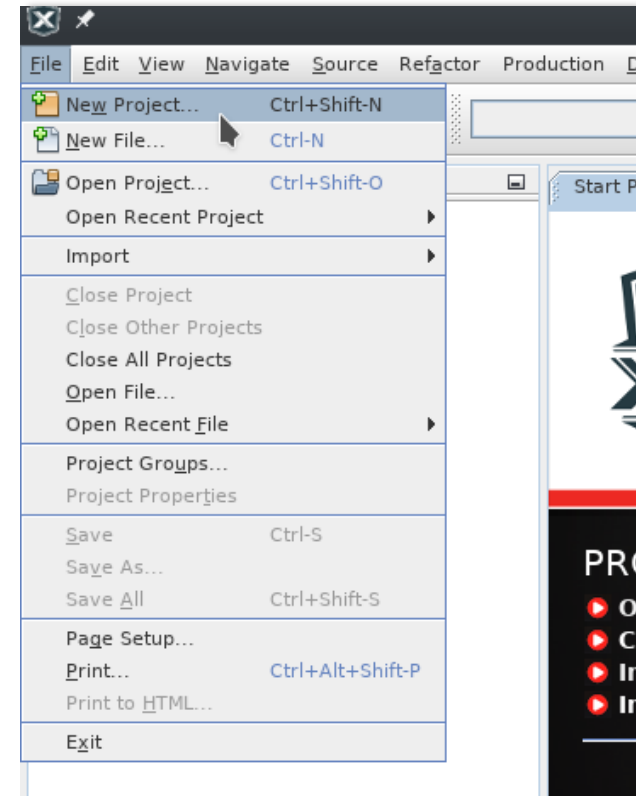
04.04.2022



1. Open MPLAB X from the program menu

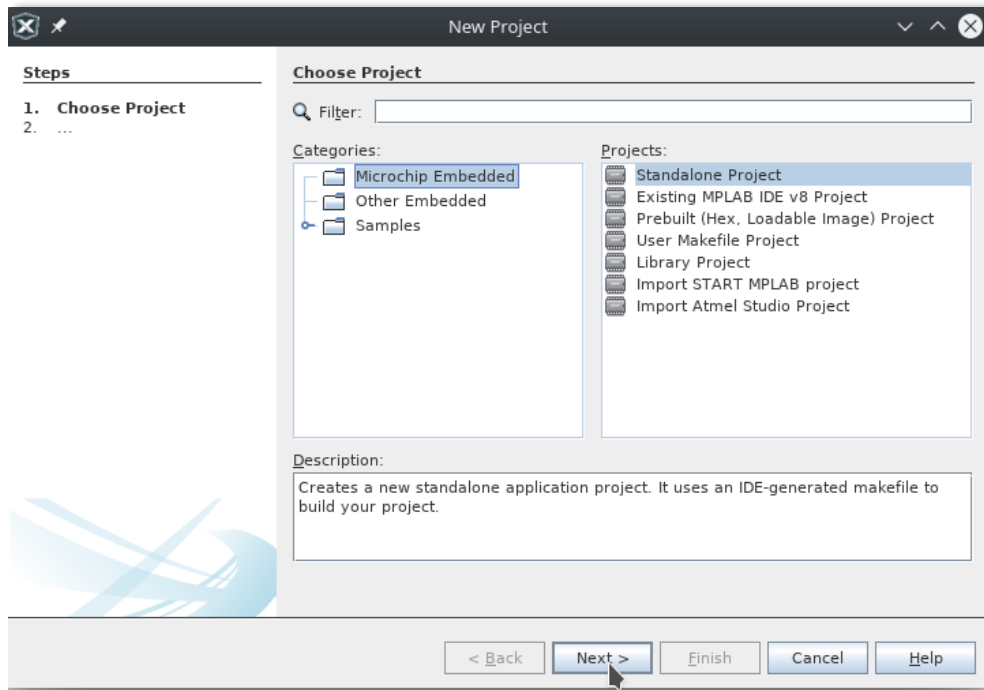


2. Create a new project



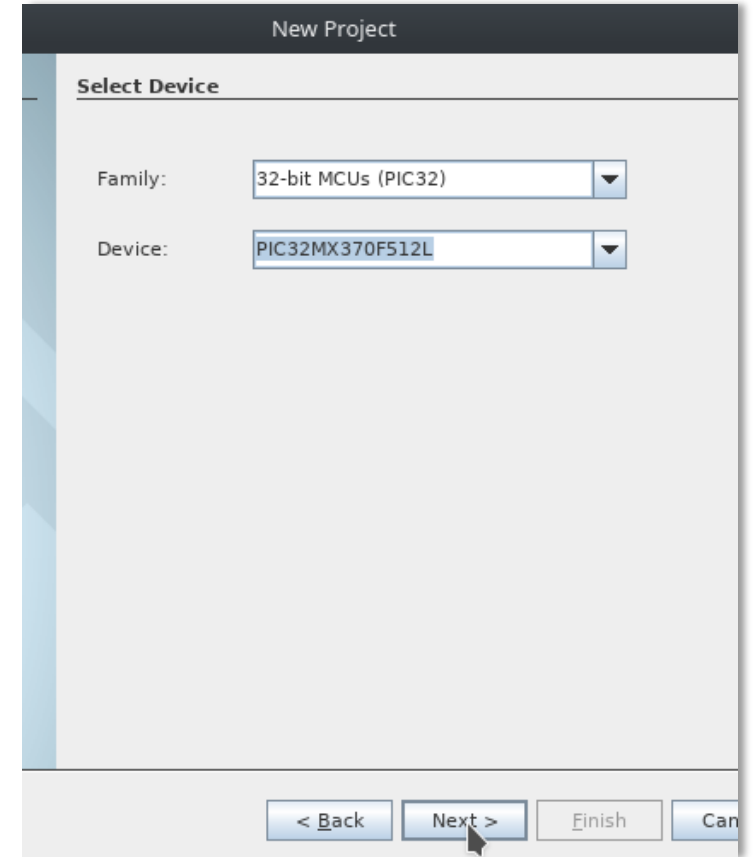


3. Select 'Standalone Project'

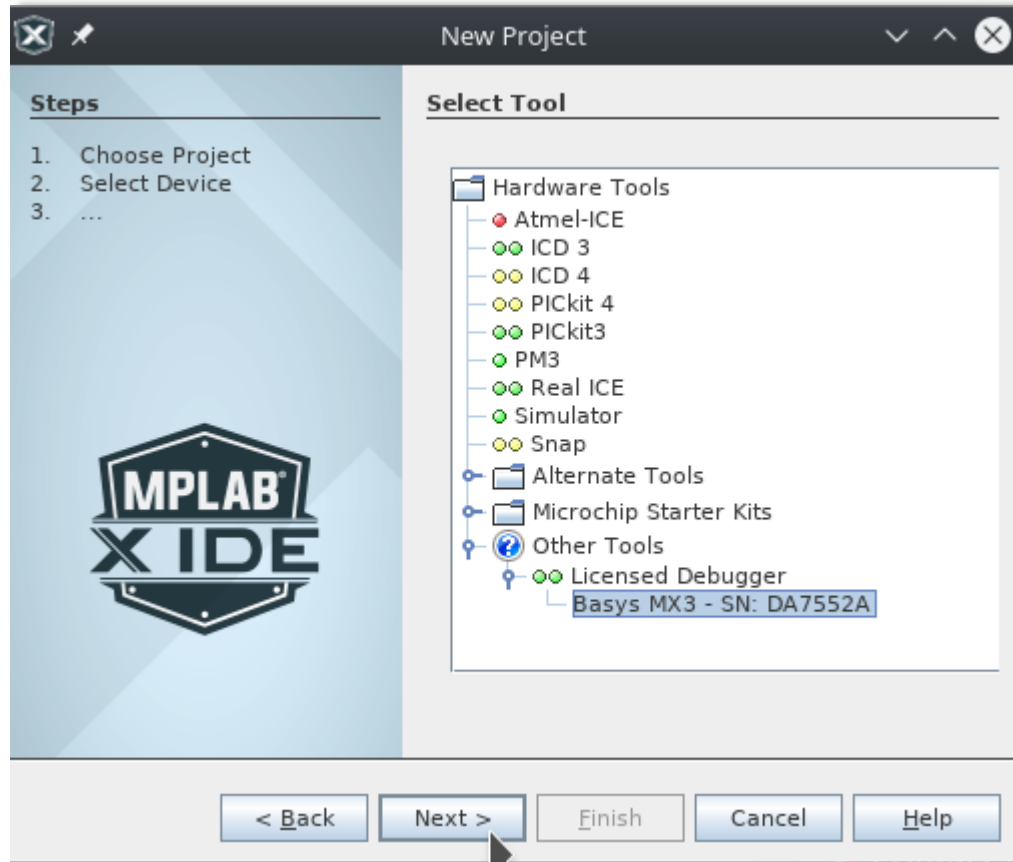


4. Select device:

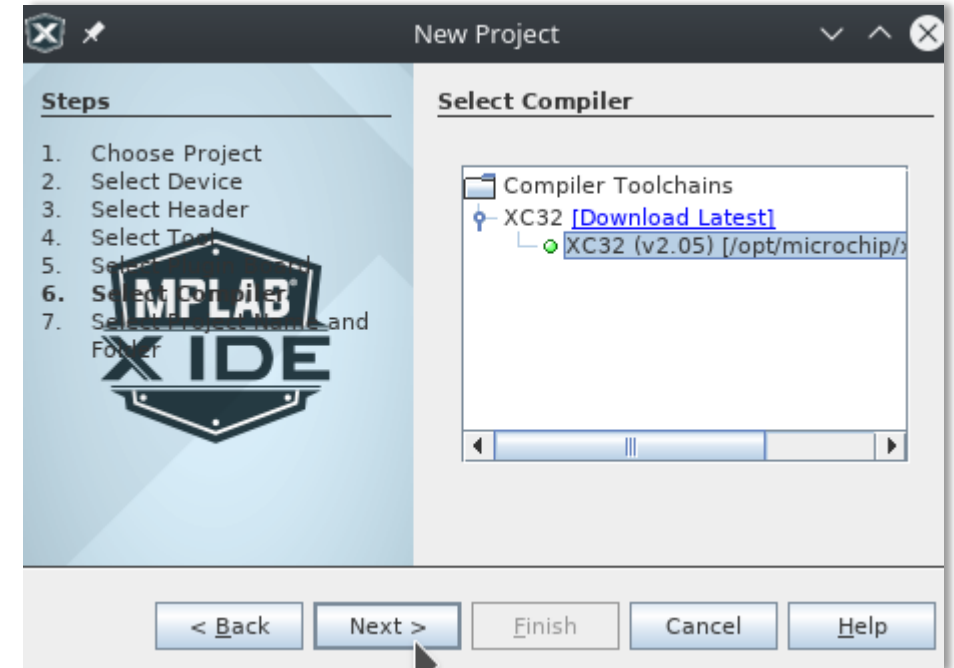
PIC32MX370F512L



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



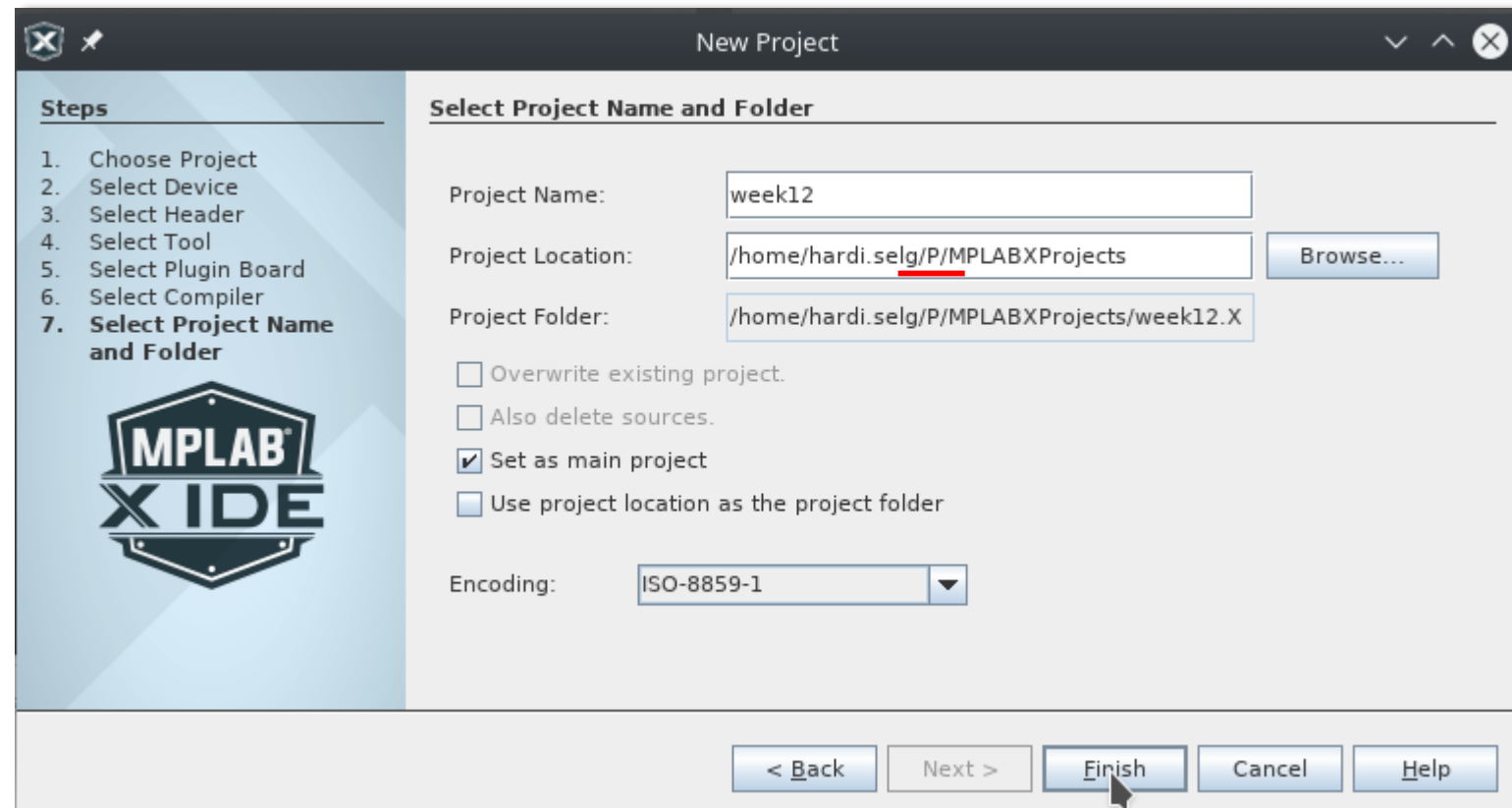
6. Select the compiler **XC32**

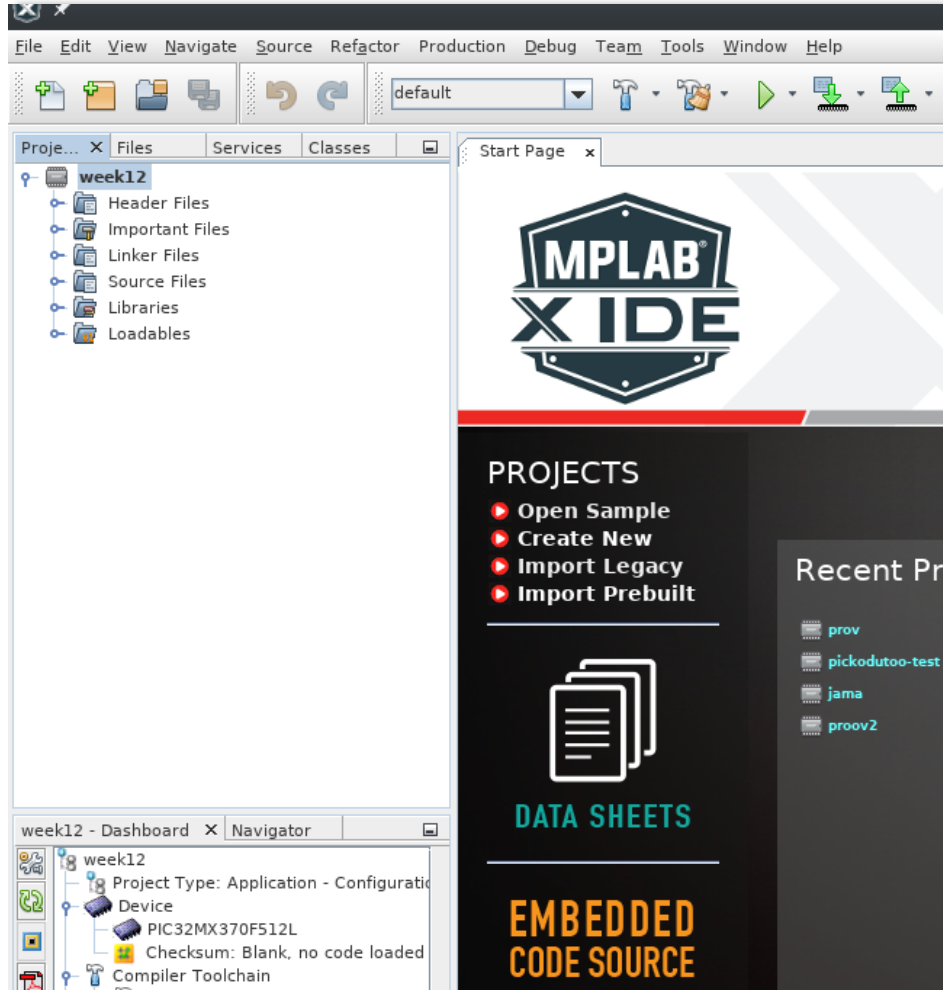




7. Change the project location to your „P“ folder

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/>










Downloading default files

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

- Save them to your previously defined project location

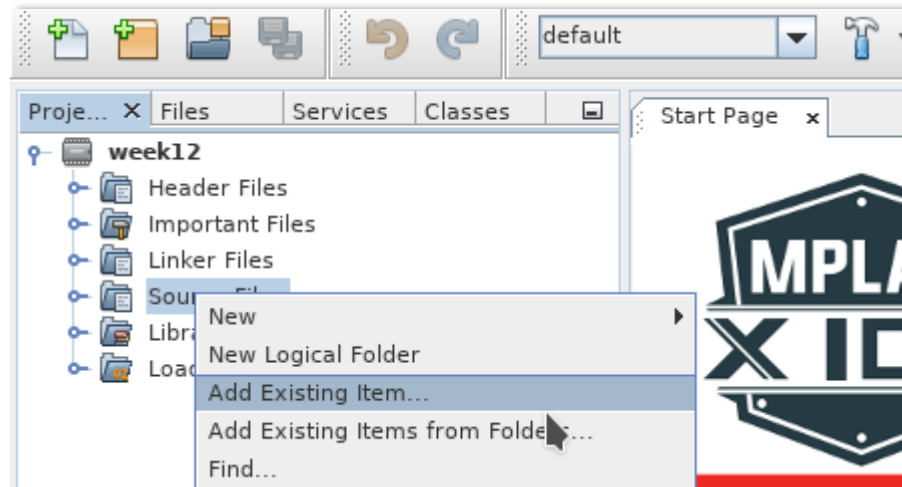
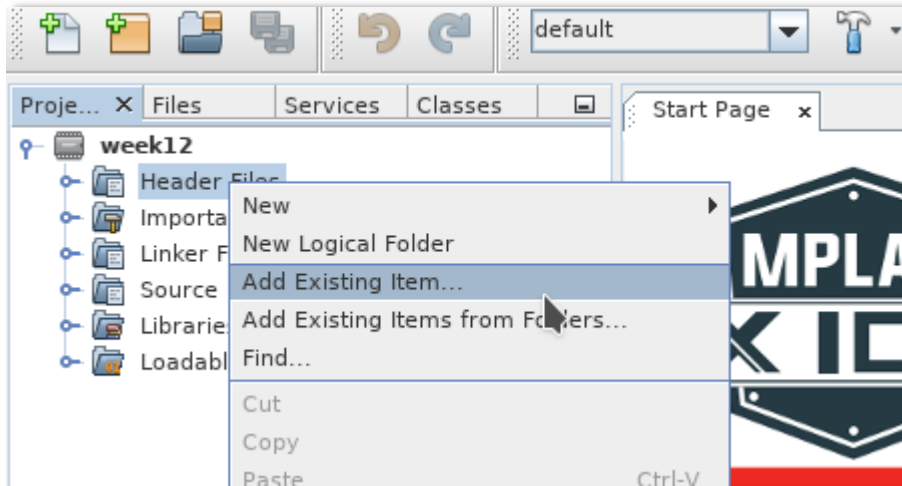
ati.ttu.ee/~hartz/basys-mx3/

Root

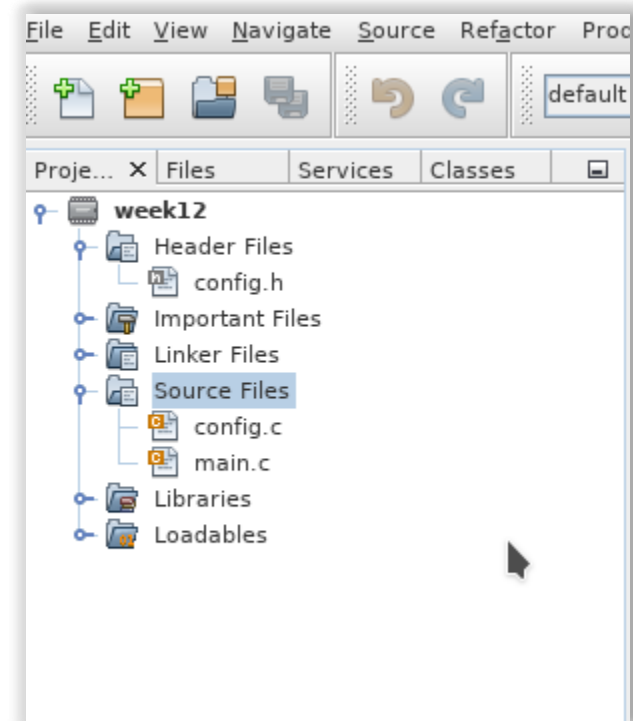
File name ▾	Size ▲	Last changed ▾
 ..		
 main.c	795 B	23.11.18 02:54:13
 config.h	6.12 KB	23.11.18 00:34:07
 config.c	8.74 KB	23.11.18 01:28:16
 uKontroller_ENG.pdf	265.62 KB	03.12.18 09:31:02
 MPLABX_Basys_MX3.pdf	626.34 KB	03.12.18 09:31:14
 Basys3 TASKs.pdf	647.44 KB	03.12.18 09:17:42

Mobile view | Page loaded in 4.30 ms | Encode Explorer

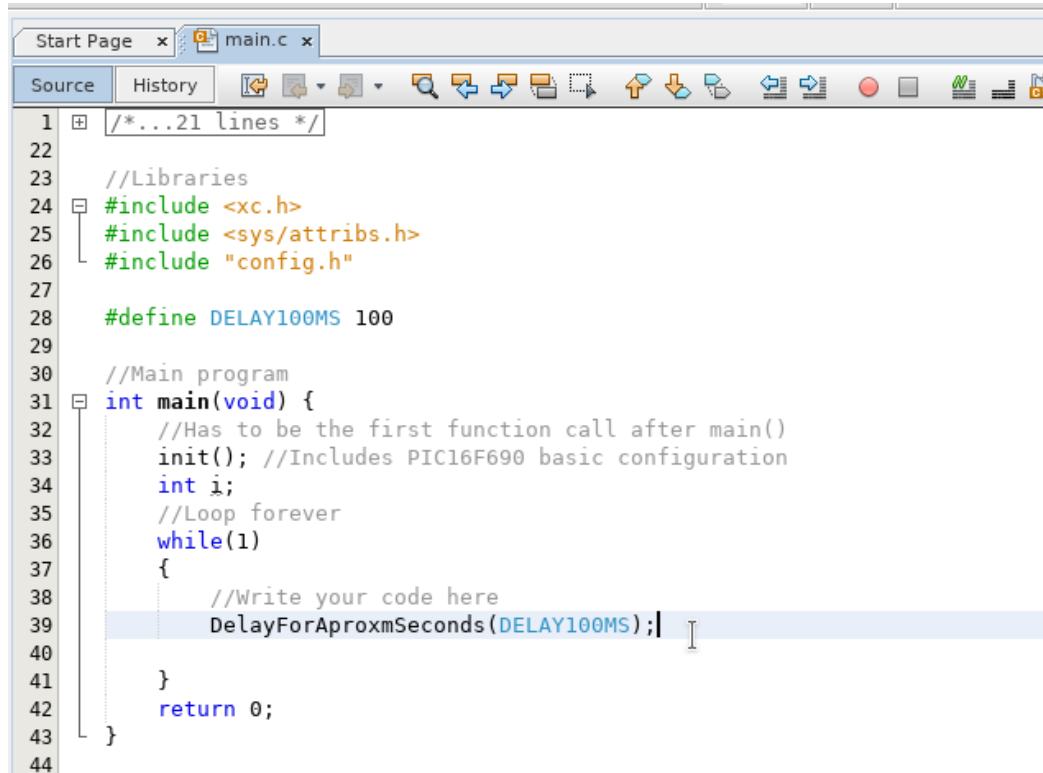
Adding files to project



- 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!



```
1  /*...21 lines */
22
23 //Libraries
24 #include <xc.h>
25 #include <sys/attribs.h>
26 #include "config.h"
27
28 #define DELAY100MS 100
29
30 //Main program
31 int main(void) {
32     //Has to be the first function call after main()
33     init(); //Includes PIC16F690 basic configuration
34     int i;
35     //Loop forever
36     while(1)
37     {
38         //Write your code here
39         DelayForAproxmSeconds(DELAY100MS);|
40
41     }
42     return 0;
43 }
44
```

- 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
TEHNIKAÜLIKOOL

Thank you for listening!