

Eclipse Program Example

Last updated 11/28/22

These slides walk through the steps to run a program in Eclipse

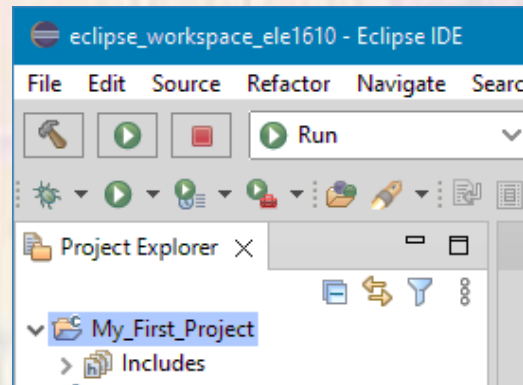
Eclipse Program Example

Absolutely no understanding of the code is expected
in these slides

This is the **process** you will use

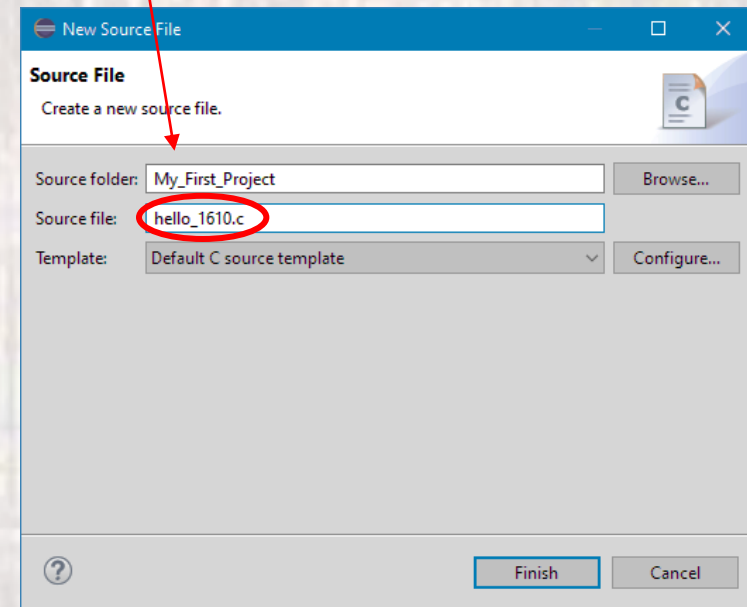
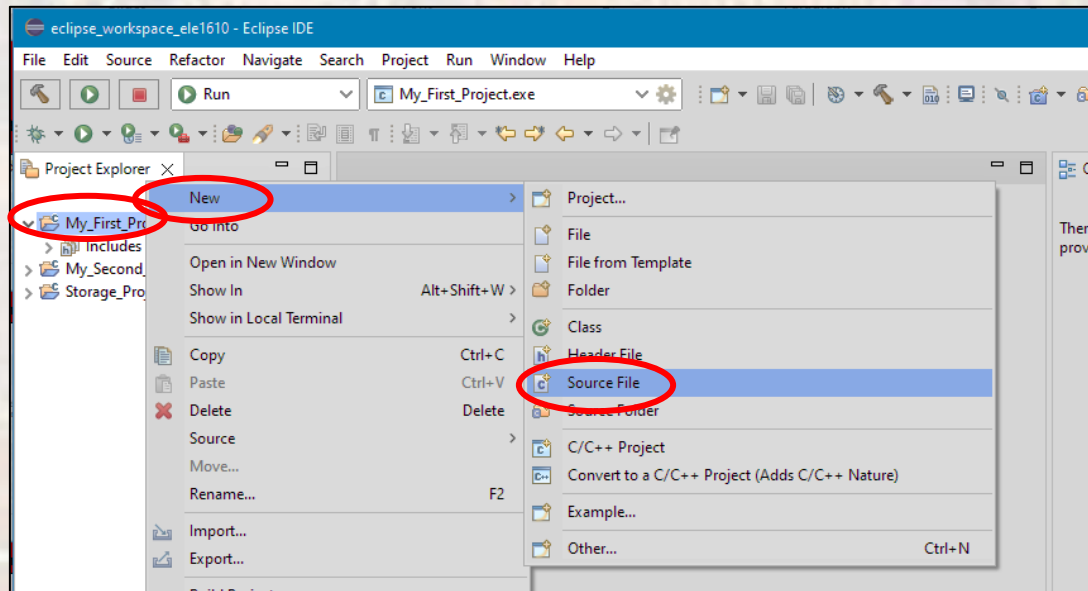
Eclipse Program Example

- Pre-requisites
 - Eclipse properly setup
 - [Eclipse Installation](#) slides, [Eclipse Setup](#) slides
 - An eclipse project created
 - [Eclipse Project Setup](#) slides



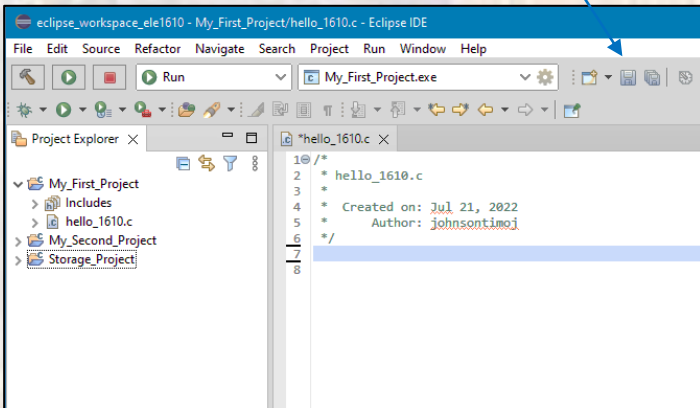
Eclipse Program Example

- Create the code file
 - **Rt-click** on your **project**
New → C Source File
 - Check to see if the project folder name is correct
 - Provide a program file name
(DO NOT FORGET THE .c EXTENTION)



Eclipse Program Example

- Type in your program
 - Be very careful – every character matters
 - Save your file
 - **Rt-click** in the file and select **save**
- or
 - Select the **save** icon

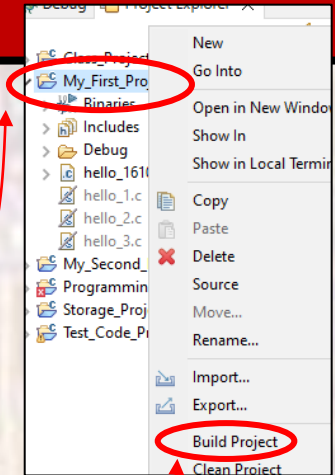


```
*hello_1610.c X
1 1 /*
2 2  * hello_1610.c
3 3  *
4 4  *   Created on: Jul 21, 2022
5 5  *     Author: johnsontimoi
6 6  */
7 7 ////////////////////////////////////////////////////////////////////
8 8 //
9 9 // Hello code to Eclipse Program Example
10 10 //
11 11 // inputs - none
12 12 // outputs - print statements
13 13 //
14 14 ////////////////////////////////////////////////////////////////////
15 15 #include <stdio.h>
16 16
17 17 int main(void){
18 18     setbuf(stdout, NULL); // fix for Eclipse/Windows printing
19 19
20 20     // simple program to print a greeting
21 21     // Use your name
22 22     printf("Hello ELE1610 from tj\n");
23 23
24 24     return 0;
25 25 }// end main
26 26
```

* indicates unsaved

Eclipse Program Example

- Compile (build) your program
 - Checks for errors
 - Creates an executable version of your code
 - System dependent



- **Rt-click** on your **project** or your **code file** → **Build Project**

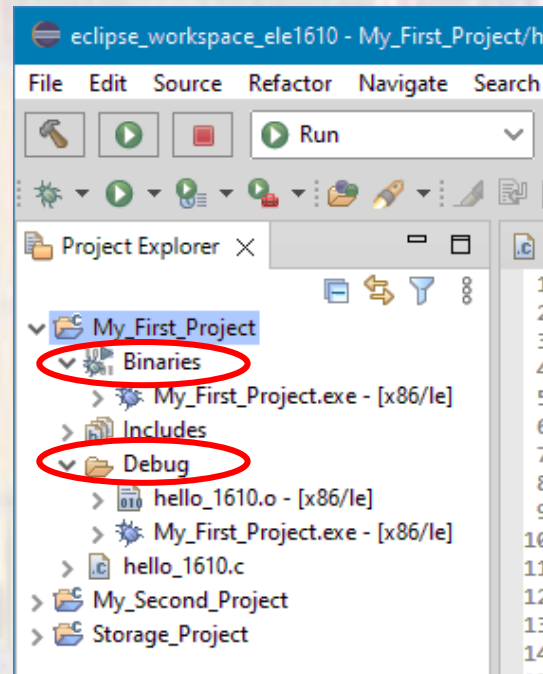
```
Problems Tasks Console X Properties
CDT Build Console [My_First_Project]
17:57:24 **** Rebuild of configuration Debug for project My_First_Project ****
Info: Internal Builder is used for build
gcc -O0 -g3 -Wall -c -fmessage-length=0 -o hello_1610.o "..\hello_1610.c"
..\hello_1610.c: In function 'main':
..\hello_1610.c:24:2: error: expected ';' before 'return'
return 0;
^~~~~~
17:57:24 Build Failed. 1 errors, 0 warnings. (took 218ms)
```

- **Clean up** any errors, and **Build Project** again

```
Problems Tasks Console X Properties
CDT Build Console [My_First_Project]
17:59:02 **** Incremental Build of configuration Debug for project My_First_Project ****
Info: Internal Builder is used for build
gcc -O0 -g3 -Wall -c -fmessage-length=0 -o hello_1610.o "..\hello_1610.c"
gcc -o My_First_Project.exe hello_1610.o
17:59:02 Build Finished 0 errors, 0 warnings. (took 513ms)
```

Eclipse Program Example

- Compile (build) your program
 - Note: you now have two new directories in your project
 - More on them later



Eclipse Program Example

- Run (execute) your program
 - Runs on your laptop, prototype board, ...
 - **Rt-click** on your **project** or your **code file**
 - **Run As** → **Local C/C++ Application**

