EXPERIMENT – 1.2

Interfacing an external led with nRF dev Board

What will you learn from this module:

Blink external led using nRF development kit.

Requirements:

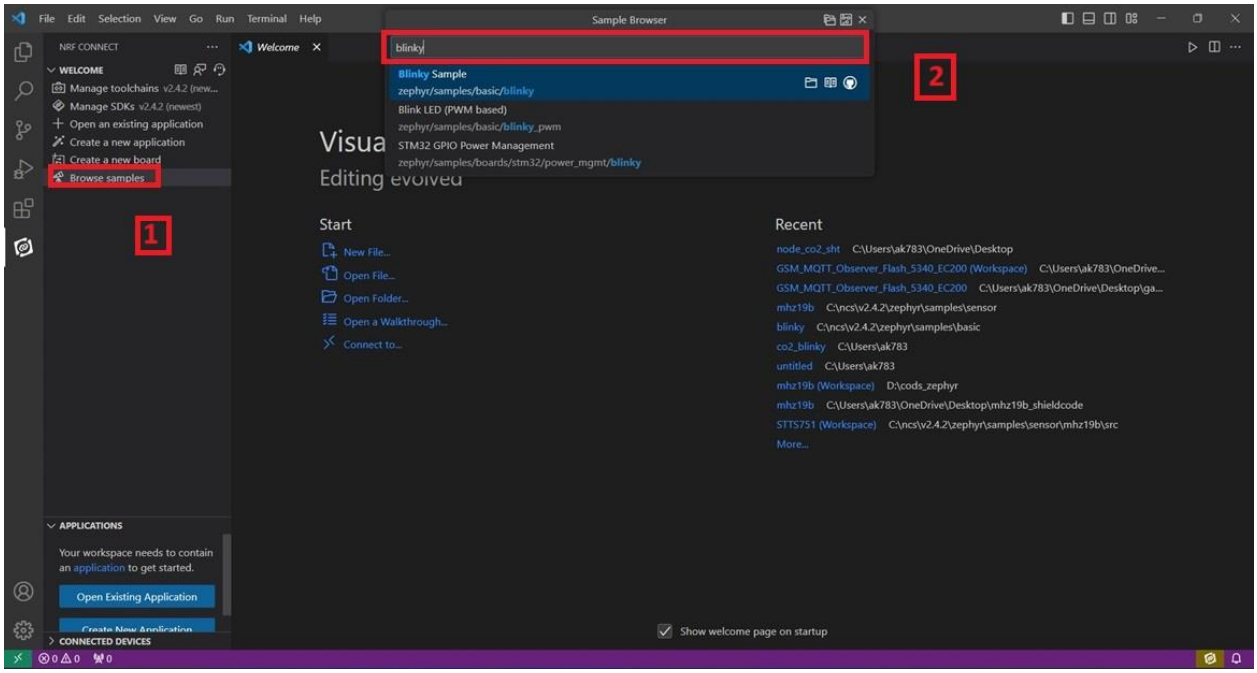
- nRF connect desktop software.
- nRF Command line tools.
- Visual studio code.
- USB cable.
- nRF 52832 board.
- LED's.

Prerequisites:

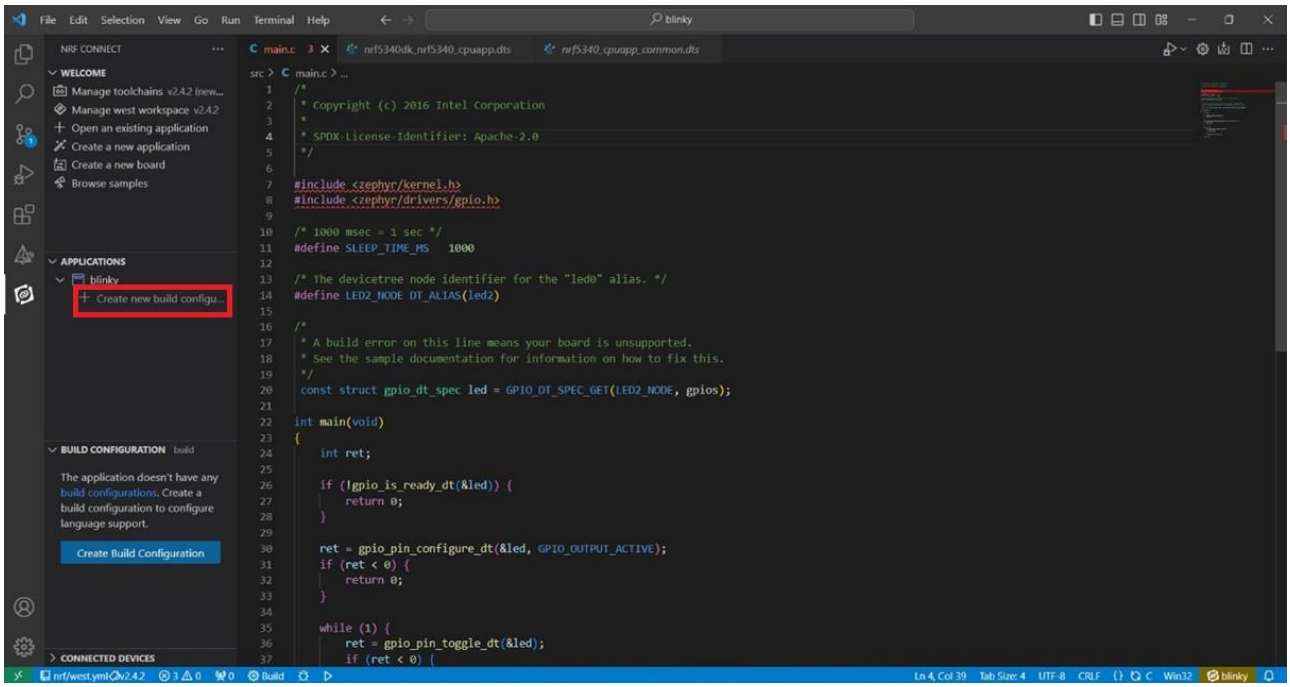
- Basic knowledge of C/C++
- Basic knowledge of communication protocol.
- Basic project setup.

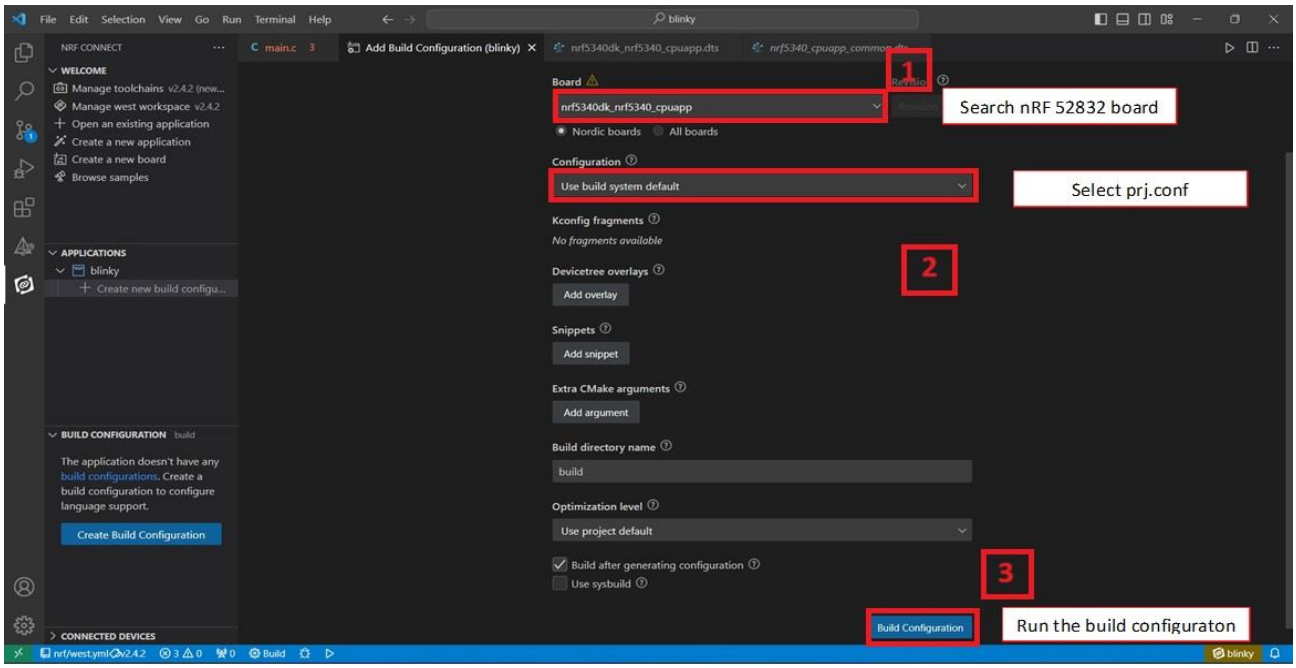
Setup and Configuration:

- Open VS Code and go to browse sample and search BLINKY.

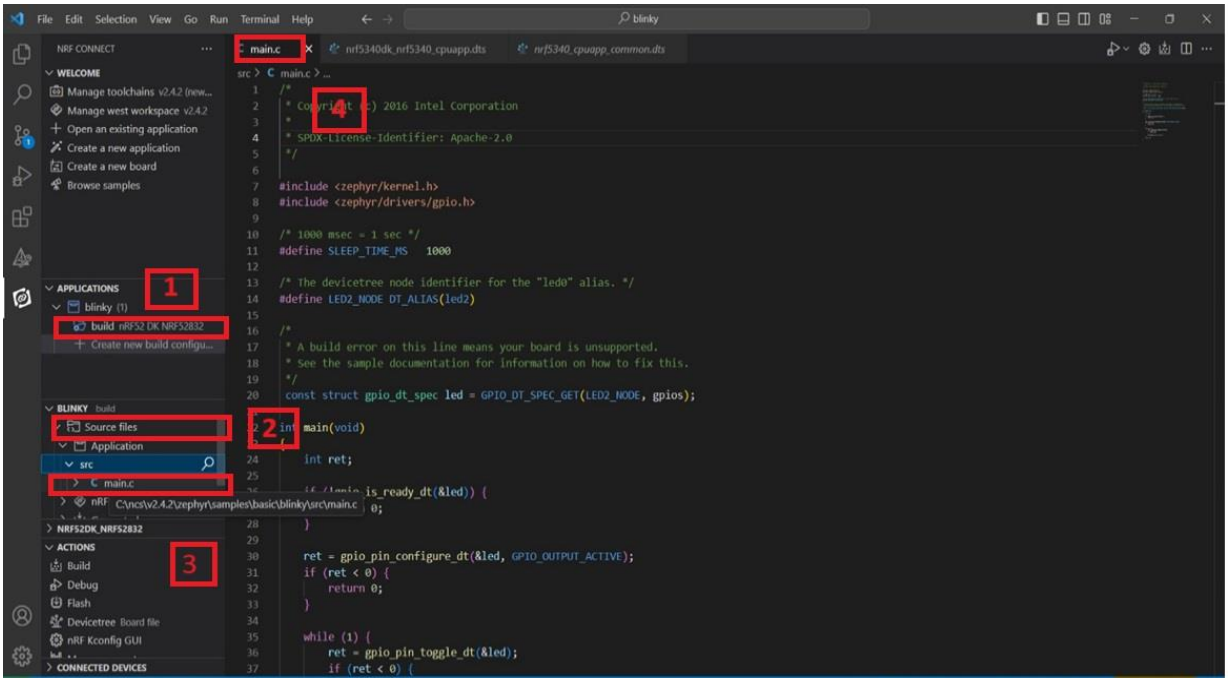


- Click on create new build configuration here you can change the board version, if you are using nRF 52832 then you can change from there for another version like nRF52833 etc.

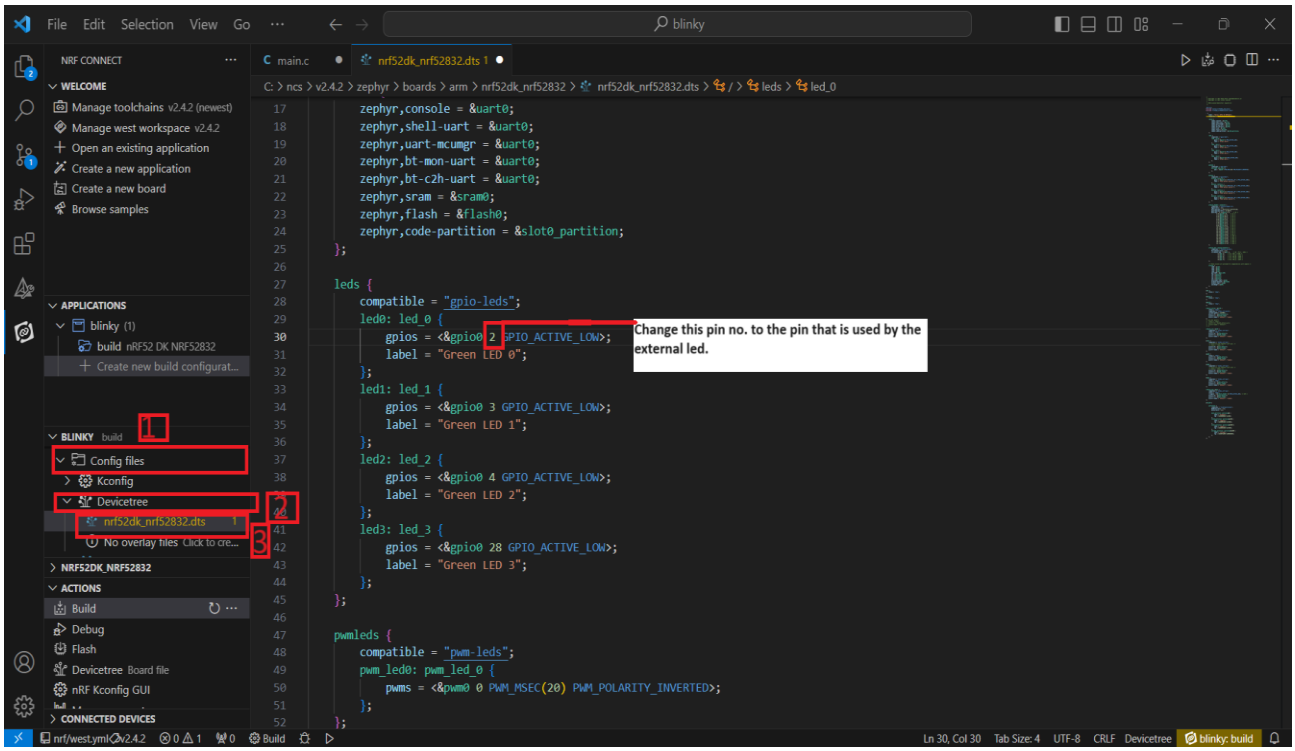




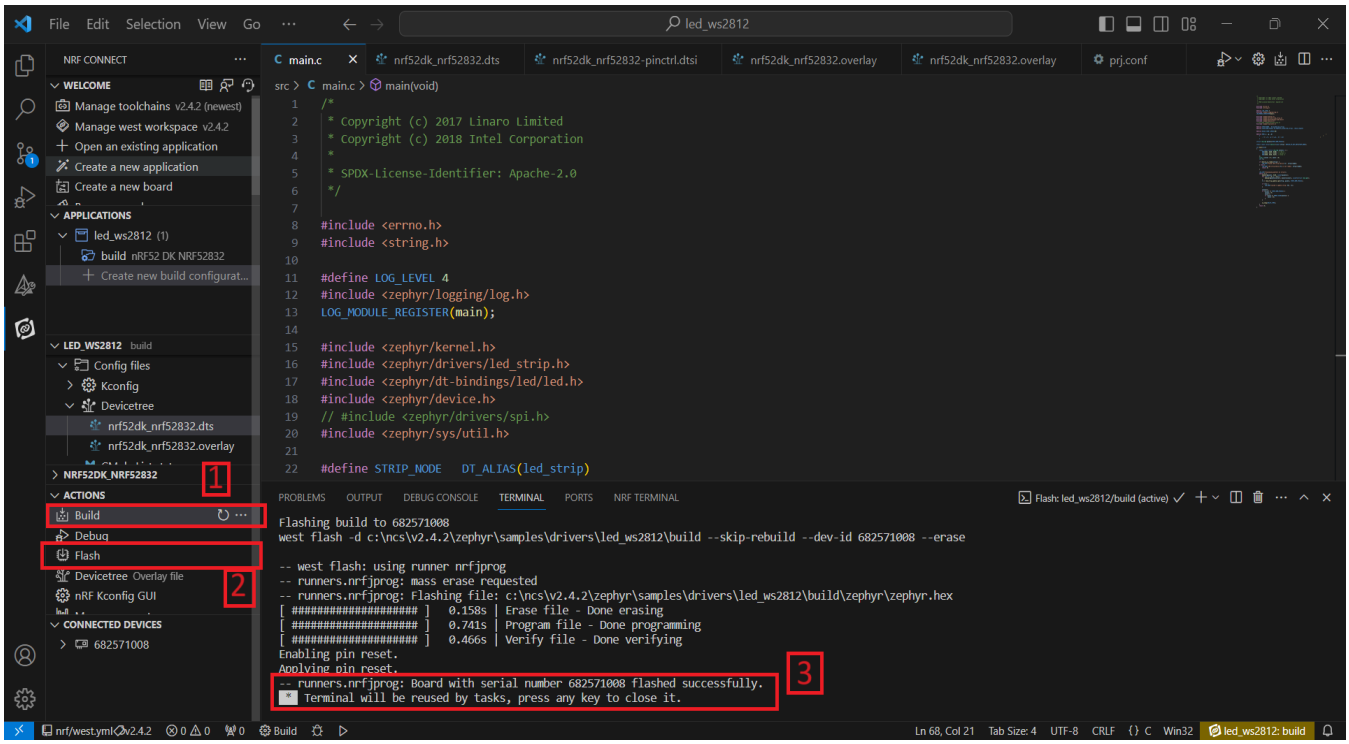
- Go to source file, inside source file > Application > src > main.c .
- click on main.c file and you will see the code will appear on your vs code.



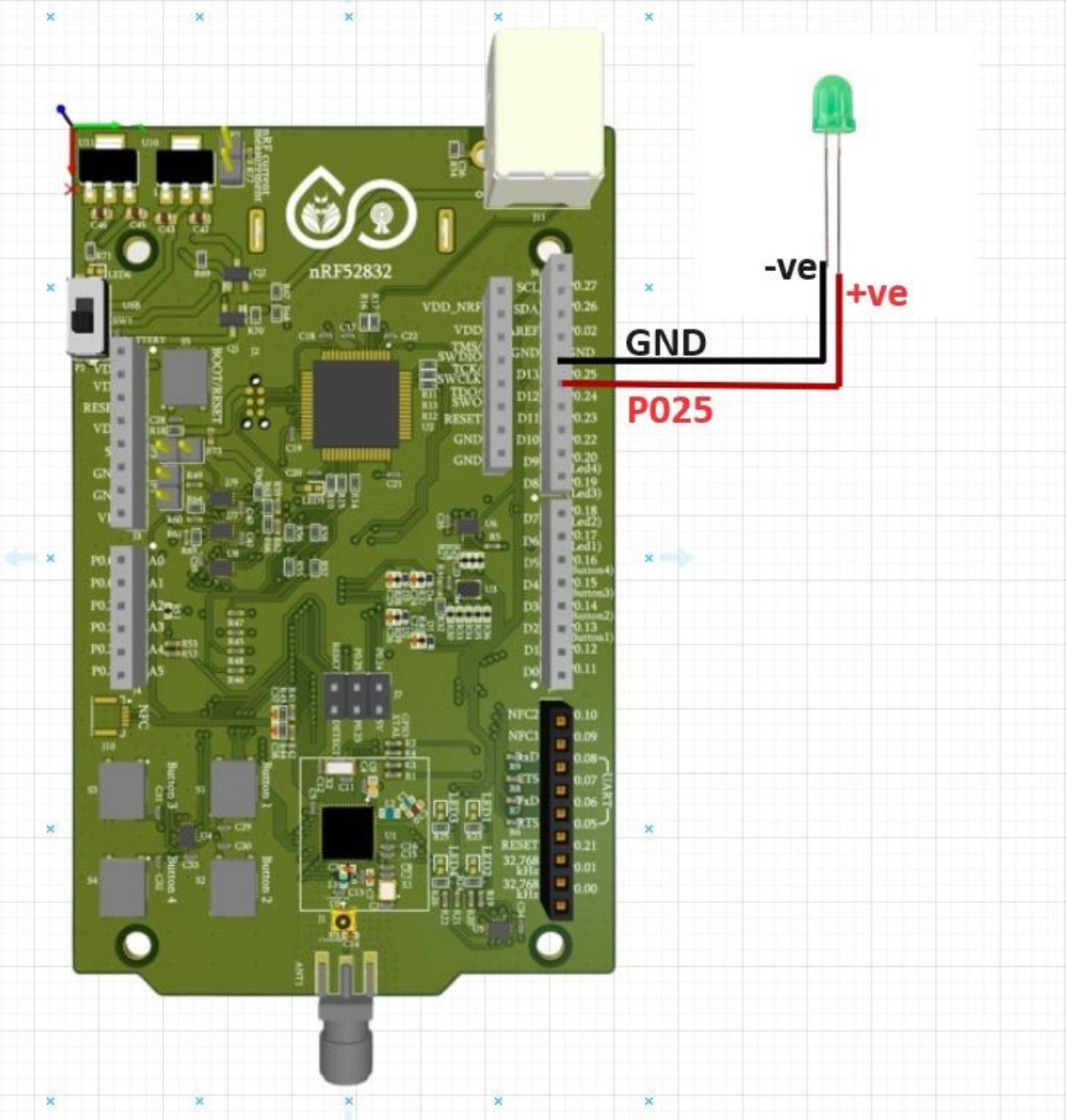
- Go to Config > Devicetree > .dts file.
- After that change the gpio pin no. with the pin that is used by the external led on the nRF board. (for example, led +ve is connected to P025 & -ve to GND, then change the gpio pin no. to 25 in the dts as shown in the figure.



- Run the build configuration again.
- Then flash the code in nRF dev kit.



❖ PIN CONFIGURATION OF WS2812 LED WITH THE BOARD



GND -> -ve

P025 -> +ve

❖ OUTPUT