

A short instruction on the process of setting up the Blinky app:

In Milestone 1, our objective is to create a basic Blinky application for the STM32F4 board. To facilitate this, we leverage the STM32CubeIDE as our Integrated Development Environment (IDE) of choice for software development.

In STM32CubeIDE, we initiate a new project and specifically designate the NUCLEO-L476RG board using the board selector. Subsequently, we proceed to configure the pinout. Utilizing the provided pinout interface, we ensure that the LED designated for blinking, located on the PA5 pin, is properly configured as a GPIO\_Output. Following this pinout configuration, a code template is automatically generated.

The 'while' loop is shown below:

```
while(1)
{
    HAL_GPIO_Write(GPIOA, GPIO_PIN_5, 1);
    HAL_Delay(1000);
    HAL_GPIO_Write(GPIOA, GPIO_PIN_5, 0);
    HAL_Delay(1000);
}
```

Breaking down the loop, In the first line, the GPIO\_PIN\_5 which is the LED we used is written to 1, it will be turned on. Next, proceed with a 1000ms delay. The GPIO\_PIN\_5 is written to 0, it will be turned off, and with 1000ms delay. This process will be repeated infinitely until the power is off.

In summary, a simple blinky application is developed in the STM32F4 board with the HAL library.