

main class	
Function	Description
MX_I2C2_Init(void)	Initializes the I2C communication port, lines and respective pins. I2C Channel 2 used to communicate with the Ambient Light Sensor with port B, pin 11 as the SDA line & port B, pin 10 as the SCL line
MX_GPIO_Init(void)	Initializes the GPIO Configuration. GPIO port C, pin 15 set to output mode.
MX_ADC_Init(void)	Initializes the ADC Configuration. Port C, pin 15 configured to ADC input
SystemClock_Config(void)	Configuration of the system clock.
MX_TIM2_Init(void)	Initializes the Timer Configuration channels for PWM generation. Port A, pin 1 used to generate pwm signal.
MX_USART1_UART_Init(void)	Initializes the USART Configuration. Port A, pin 10 set to Rx line & port A, pin 9 set to Tx line.
debugPrintln(UART_HandleTypeDef *uart_handle, char _out[]) : void	This function is used to send text data to the USB-COM port of the computer via the debug adapter. It has the following attributes: a pointer to the UART instance to write data, the output string in the form of a char and also it terminates the string using newline and carriage return commands.
main(void)	Houses and allows for execution of other functions. Allows for modulation within the code structure, improving debugging capabilities.
Error_Handler(void)	This function is executed in case of error occurrence.
assert_failed(uint8_t *file, uint32_t line)	User can add his own implementation to report the file name and line number.