Victor Udeh  
Cs350 module 3  
3-2 Milestone Two Submission  
Sept 12, 2024.

1. How does the macro UART\_DATA\_BINARY impact the UART?

The UART\_DATA\_BINARY macro configures the UART to handle data in binary mode, which means no special character processing is performed on the data. Specifically, when UART\_DATA\_BINARY is set:

• Characters like newlines (\n) and carriage returns (\r) are not automatically translated or modified.

• This mode is typically used when sending raw data (binary data) over the UART, where special characters don’t need to be handled differently from other data.

2. How does the macro UART\_RETURN\_FULL impact the UART?

The UART\_RETURN\_FULL macro tells the UART driver to return data only after the entire requested buffer size has been filled. In blocking mode, the UART will wait until all bytes requested have been received before returning. It ensures that the application will not process partial data, making it useful when you expect a fixed number of bytes for a given communication.

3. What driver call would you use to write 10 characters out of the UART?

To write 10 characters out of the UART, you would use the UART\_write() function. For example:

UART\_write(uart, buffer, 10);

In this case, uart is the UART handle, buffer contains the data to be sent, and 10 specifies the number of characters to write.

4. What is the driver call to turn off LED 0?

To turn off LED 0 using the GPIO driver, you would use the following call:

GPIO\_write(CONFIG\_GPIO\_LED\_0, CONFIG\_GPIO\_LED\_OFF);

This command writes a logic low signal to the LED pin, turning off the LED. CONFIG\_GPIO\_LED\_0 is the LED pin configuration, and CONFIG\_GPIO\_LED\_OFF represents the logic low state.

5. What is the UART baud rate?

In the code provided, the UART baud rate is set to 115200. This is configured using:

uartParams.baudRate = 115200;

This means the UART is communicating at a speed of 115200 bits per second.