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CS-350

Module 3 Milestone

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

* The UART\_DATA\_BINARY macro configures UART communication to operate in binary data mode, which means that data is transmitted in raw binary values as opposed to text-based format. When transferring non-text data, such binary data or machine-to-machine communication, this mode is frequently utilized because the data needs to be sent precisely as-is, without any interpretation or translation.

1. How does the macro UART\_RETURN\_FULL impact the UART?
   * By setting the UART to return the complete number of characters requested when receiving data, the macro UART\_RETURN\_FULL has an effect on the UART. It is configured as the UART configuration's readReturnMode parameter in the code. The UART read action will only return when it has received the designated amount of characters when UART\_RETURN\_FULL is used. This makes sure that the requested data size is received in its whole before the caller is notified.
2. What driver call would you use to write 10 characters out of the UART?
   * To write characters to the UART, use the UART\_write function. Calling UART\_write(uart, data, 10); with uart as the UART handle and data as a pointer to the character data to be sent will write ten characters.
3. What is the driver call to turn off LED 0?
   * You can use the GPIO\_write function to turn off LED 0. It is used as follows in the code: GPIO write (CONFIG\_GPIO\_LED\_0, CONFIG\_GPIO\_LED\_OFF); is used. This function sets the given state—in this case, off—for the selected GPIO pin, which is LED 0.
4. What is the UART baud rate?
   * The code has the UART baud rate set to 115200. uartParams is used to configure this value.baudRate argument when uartParams is initialized for the UART.115200; is the baud rate. The pace at which data is transmitted via the UART communication channel is determined by the baud rate, which in this instance is 115200 bits per second.