To develop a device driver for the DS18B20 temperature sensor, you need to understand the 1-wire protocol used by the sensor. The 1-wire protocol is a communication protocol used by many sensors and other devices, which allows communication with a single data line and a ground line.

Here are the steps you can follow to develop the device driver:

1. Initialize the 1-wire interface: You will need to initialize the 1-wire interface, either in software or in hardware, on the microcontroller you are using. This will involve setting up the appropriate GPIO pin and configuring the timing and communication parameters for the 1-wire protocol.

2. Scan for the device: Once the 1-wire interface is initialized, you can scan for the DS18B20 sensor by sending a reset signal and reading the presence pulse. If the device is found, you can then proceed to the next step.

3. Read the temperature: To read the temperature from the DS18B20, you need to first write the command to start a temperature conversion, and then wait for the conversion to complete. After the conversion is complete, you can then read the temperature value from the sensor. The temperature value is stored as a 9-bit value in two bytes, which you will need to combine and convert to a meaningful temperature value.

4. Implement error handling: You should also implement error handling in your device driver, to detect and handle any errors that may occur during the communication with the sensor. This may involve checking the validity of the temperature value, and handling any communication errors that may occur.

5. Test the device driver: Finally, you should thoroughly test the device driver to ensure that it is working as expected. This may involve testing the device in various conditions, and checking the temperature readings for accuracy.

Note: The exact implementation details of the device driver will depend on the microcontroller you are using, and the programming language and environment you are working in.