

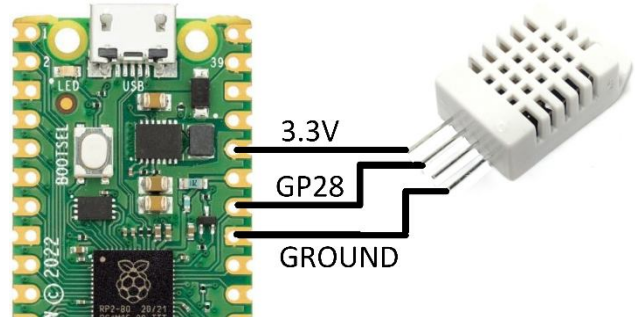
## Demonstration of a Web Server using the WebMite

This is a demo of a simple Web Server. It uses a DHT22 humidity/temperature sensor to monitor the conditions in a fictional greenhouse.

The program is only 17 lines long and the Web page is just 3 lines. It does not get much simpler than that.

Connect the DHT22 as shown on the right.

If you don't have one of these don't worry, MMBasic will return the value of 1000 for both the temperature and humidity if the sensor is not connected. The program will work the same except the web page will display 1000 instead of real values.



To set up the Web Server follow these steps:

1. Load the WebMite firmware onto the Raspberry Pi Pico W as described on page 5 of the User Manual and connect to the console.
2. At the command prompt setup the WebMite to connect to your WiFi network as described on page 24 of the User Manual. For example, if the SSID of your network is *MyNetwork* and the network password is *secret* you would enter the following at the command prompt:  
`OPTION WIFI "MyNetwork", "secret"`
3. The WebMite will reboot and you will have to reconnect your terminal emulator over USB. You can then find the IP address of the WebMite with the following at the command prompt:  
`PRINT MM.INFO(IP ADDRESS)`
4. Start the Web Server by entering the following at the command prompt:  
`OPTION TCP SERVER PORT 80`  
This will also cause the WebMite to reboot so you will have to reconnect your terminal emulator.
5. Copy the file *index.html* to the WebMite's internal filesystem (drive A:). This can be done using TFTP as described on page 25 of the User Manual. For example, if your WebMite's IP address is 192.168.1.83 you would use the command:  
`TFTP -i 192.168.1.83 PUT index.html`
6. Copy the file *demo.bas* to the WebMite. For example:  
`TFTP -i 192.168.1.83 PUT demo.bas`
7. Run the program using the command:  
`RUN "demo.bas"`
8. Use a browser to navigate to the WebMite's IP address and you should see something like this. When you reload the page the values will update.

