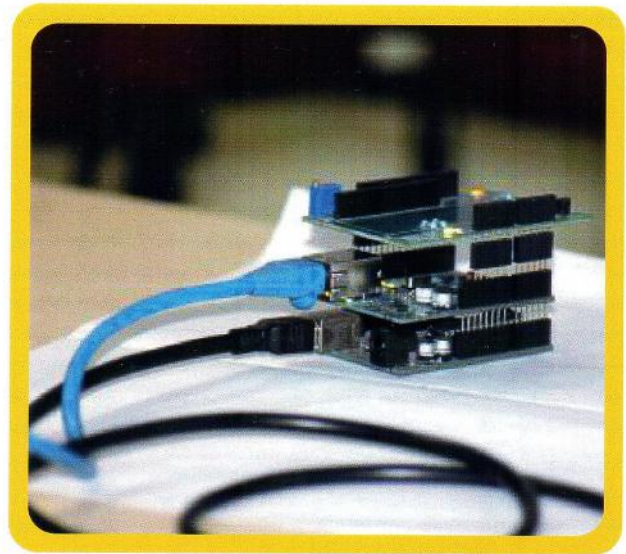


Embedded Web Server using Arduino

Features

- ▲ HTTP web server implemented on the Arduino embedded hardware platform
- ▲ Any Internet browser running on a PC on the same network acts as the HTTP client
- ▲ On a request from the client, the server serves up a HTML page containing the current temperature and ambient light reading read by Arduino from the sensor shield



Hardware

- ▲ Arduino UNO board based on the 8-bit ATmega328 microcontroller working at 16 MHZ
- ▲ Ethernet capability is added by using Sparkfun's Ethernet shield
- ▲ Ethernet chip with TCP/IP stack on the shield is WIZ5100
- ▲ GRIET's Sensor shield with temperature and ambient light sensors

Firmware

- ▲ Based on the Arduino programming language
- ▲ Uses the Ethernet library which provides functions for setting IP address, MAC address and port address, providing Ethernet server/client classes, knowing client connection status and reading client sent by client
- ▲ The Ethernet library uses the SPI library of Arduino- SPI.h