Course Code & Title	**:**	CSE216L (Microprocessor, Interfacing, and Assembly Language Lab)
Course Instructor	**:**	Noor-E-Sadman
Assignment No	**:**	02
Assignment Title	**:**	Complete resourcing of the system components after analyzing open-source materials.
Corresponding CO's	**:**	CO1

OBJECTIVES

1. **Find three different websites (Open source) related to your project.**
    a. Identify the project website with the simulation circuit.
    b. Identify the project website with Arduino IDE code.
    c. Identify the project website with a specific hardware component list.
2. **Find out the hardware components to develop your project.**
    a. Identify methodology and design requirements.
    b. Analyse the design parameters.
3. **Find out the local shop or provider of the required components.**
4. **Collect the components from the specific provider.**

LAB REPORT RUBRICS

Students Name	Farhan Tamzid Nahidul Islam Peyal Md. Jahidul Hossain Mekat Marufuz Jaman Shoron	**Students ID**	2120104 2220038 2221395 2221498
Course Title	Microprocessor, Interfacing, and Assembly Language Lab	**Code**	CSE216L
Term	◉ Spring ○ Summer ○ Autumn	**Year**	2023
Project Title	IoT based Wireless Water Quality Monitoring System with Web App and Database Integration.		
Task / Report Title	**Complete resourcing of the system components.**		

Task Justification/ Marking (Tick on the appropriate box)

Rubrics (weight)	Accomplished (5)	Intermediate (4)	Developing (3)	Intermediate (2)	Novice (1)
Find similar open-source projects (10%)	Identified three similar open-source projects.	Intermediate between developing & accomplished	Identified two similar open-source projects.	Intermediate between novice and developing.	Identified one similar open-source project.
	◉	○	○	○	○
Identify Simulation Design with Software (10%)	Identified the simulation design perfectly with the specific software used.	Intermediate between developing & accomplished	Identified the simulation design to some extent with the specific software used.	Intermediate between novice and developing.	Identified the simulation design poorly with the specific software used.
	◉	○	○	○	○
Identify Proper Code (10%)	Identified the Arduino IDE code perfectly matched with the project.	Intermediate between developing & accomplished	Identified the Arduino IDE code matched with the project.	Intermediate between novice and developing.	Identified the Arduino IDE code poorly matched with the project.
	◉	○	○	○	○
Hardware Components (10%)	Exhibited proper hardware component requirements to develop the system.	Intermediate between developing & accomplished	Exhibited good hardware component requirements to develop the system.	Intermediate between novice and developing.	Poorly exhibited the hardware component requirements to develop the system.
	◉	○	○	○	○

Resource the Hardware Components and Collect (10%)	Resourced all the required components and purchased.	Intermediate between developing & accomplished	Resourced most of the required components and purchased.	Intermediate between novice and developing.	Resourced some of the required components and purchased.
	◉	○	○	○	○
Sub Total					
Resourcing of the system components (100%)					

Faculty Name and Signature:

IoT based Wireless Water Quality Monitoring System with Web App and Database Integration.

ITEM #	ITEM NAME	ITEM DESCRIPTION	UNIT PRICE	NO. UNIT	TOTAL PRICE	Website Link
1	NodeMCU Mega WiFi R3 Atmega2560 ESP8266 32MB Memory Board	Arduino microcontroller development board with WiFi	৳1,890.00	1	৳1,890.00	https://store.roboticsbd.com/arduino-bangladesh/2138-nodemcu-mega-wifi-r3-atmega2560-esp8266-32mb-memory-board-robotics-bangladesh.html
2	DS18B20 Digital Thermal Probe or Sensor Waterproof	Waterproof temperature sensor.	৳300.00	1	৳300.00	https://store.roboticsbd.com/robotics-parts/414-waterproof-ds18b20-digital-thermal-probe-or-sensor-robotics-bangladesh.html
3	pH Sensor analog meter kit for Arduino	Analog pH sensor kit to be used with the arduino in order to get pH readings from water bodies.	৳2,499.00	1	৳2,499.00	https://store.roboticsbd.com/sensors/523-analog-ph-sensor-meter-kit-for-arduino-robotics-bangladesh.html
5	Turbidity sensor	Liquid suspended particles, turbidity sensor detection module kit.	৳820.00	1	৳820.00	https://store.roboticsbd.com/sensors/813-liquid-suspended-particles-turbidity-sensor-detection-module-kit-original-robotics-bangladesh.html
6	TDS Sensor	Total dissolved solids sensor kit for Arduino.	৳3,250.00	1	৳3,250.00	https://store.roboticsbd.com/sensors/1717-tds-meter-v10-module-water-quality-sensor-for-arduino-robotics-bangladesh.html
				Total:	৳8,759.00	