University of Asia Pacific

Arduino Project on

Temperature data Logger

**Group Members :-**

Ashik E Elahi ID : 17201028

Section : A1

Batch : 42

Nime Molla Shuvo ID : 17201029

Section : A1

Batch : 42

**Submitted to :-**

Abdullah AL Omar

Lecturer, Department of CSE

University of Asia Pacific

**Date :** December 13 , 2020.

**Introduction**

Our project title is Arduino Temperature Data Logger. This project is all about how to build a temperature data logger using SD card , DS18B20 digital temperature sensor and DS3232 real time clock sensor. Arduino reads temperature from DS18B20 sensor and saves the data in SD card as text file along with the time data from DS3232 RTC Module.

**Reasons**

The objective of the project is to implement a low cost, reliable and scalable system that can be used for home automation and industrial applications , using a microcontroller to achieve hardware simplicity and low cost.

**Future plan**

Implementation of this project can be vastly improved. We can use this system into home appliances. Example :- can be used to monitor room temperature to turn on/off cooling systems automatically. Or we can use this in industrial applications. Like monitoring machine temperature. We are planning to add a user interface. So, we can access previously stored data more sufficiently.

**Budget**

|  |  |  |
| --- | --- | --- |
| Components | Quantity | Price |
| Arduino Uno | 1 | 400 |
| Temperature Sensor | 1 | 700 |
| Real Time Clock Module | 1 | 180 |
| Micro SD Card Module | 1 | 250 |
| 20x4 LCD Module | 1 | 300 |
| Micro SD Card | 1 | 1000 |
| Push Button | 2 | 20 |
| Resistor | 3 | 50 |
| Jumper Wire | 1 set | 150 |
| **Total Cost - 3050** | | |

**Circuit Design**

