**BUS STOP WITH A BRAIN**

The aim of this project is to design a smart bus stop architecture using Arduino. To build the project, our required components are,

* Arduino UNO
* Servo motor
* RTC module
* 16x2 LCD
* Rain sensor
* LDR

**Introduction:**

Bus stops are, in some locations, clustered together into transport hubs allowing interchange between routes from nearby stops and with other public transport modes to maximise convenience. People wait at a bus stop for their buses, then make eye contact with the driver so he stops, then get on the bus and pay. The bus will only stop at designated bus stop locations.

Typically, the smart bus stops have provided as a sitting area that can be used while awaiting transportation, as well as shelter from the natural elements like sun, wind and rain. Provide real time transit data like date and time.

**Working:**

This bus stop is completely smart. Time, date and day will be displayed on the lcd screen for the people. To manage a good amount of air flow, the roof of the bus stop will be open in normal weather conditions. If there is rain or heavy sunlight, the bus stop detects the weather change and closes the roof automatically. In other words, this bus stop is more concerned about the comfort of the people who use it!!