**ESP8266-based IOT Workshop** **Technical Requirements**

**Software Requirements**:

1. Install the Arduino software, desktop edition, version 1.8.X using the following link: <https://www.arduino.cc/en/Main/Software>  
Notes:

* 1. Do **not** install the ARDUINO WEB EDITOR development environment
  2. Under Windows operating systems, use the **Windows Installer** rather than any of the other options

1. Install the CH340 USB-to-UART driver, using the following links:  
   <https://sparks.gogo.co.nz/ch340.html>
2. Install the board manager plugin for the ESP8266 dev board:
   1. Start the Arduino program you have installed
   2. Open File -> Preferences
   3. Under “Additional Board Manager URLs” field, copy and paste the following URL:  
      *http://arduino.esp8266.com/stable/package\_esp8266com\_index.json*
   4. Click Ok
   5. Open Tools -> Board -> Boards Manager
   6. Under search field, write esp8266
   7. Search result “esp8266 by ESP8266 Community” should appear. Click “Install”
   8. Click Close when installation complete

4. 1) In Arduino software go to

Sketch- Include library- Manage library

1. Search for "json" and install "ArduinoJson by Benoit Blanchon" Select version as 5.13.2
2. Search for “Blynk” and install “Blynk by volodymyr Shymanskyy” Select version 0.6.1
3. Go to this link and download the zip file -> <https://github.com/FirebaseExtended/firebase-arduino>
4. In Arduino software go to

Sketch- Include library- Add .Zip library – browse for the downloaded zip file, select it and click on open.