Documentation of the dack containing RFID scanner Keypad and Display.

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Components and Modules used in the project:
1. RFID scanner
2. SD card Reader
3. Keypad
4. Arduino Mega 2560
5. Bluetooth Module
6. LCD display 20x4
7. ESP8266

Connections with Arduino Mega 2560:

1. **RFID scanner:**
   3.3V -> 3.3v
   GND -> gnd
   RST   -> 8
   MISO -> 50
   MOSI -> 51
   SCK -> 52
   SDA -> 9

2. **SD card Reader:**
   (Read ICSP Headers in Anti-clock pattern)
   GND -> ICSP 4
   VCC -> ICSP 6
   MISO -> connected with 330 ohms -> ICSP 1
   MOSI -> ICSP 5
   SCK -> ICSP 2
   CS -> 4

3. **Keypad**
   (Read KeyPad pinouts from left to Right)
   KP1 -> A0
   KP2 ->A1
   KP3 ->A2
   KP4 ->A3
   KP5 ->A4

KP6 ->A5
KP7 ->A6
KP8 ->A7

4. **Bluetooth Module:**
   VCC -> 3.3V to 6V
   GND -> GND
   RX -> 1
   TX ->0

5. **LCD Display 20x04:**
   SCL ->SCL
   SDK->SDK
   VCC->VCC
   GND->GND

6. **ESP8266:**
   Dxx ->10
   Dxx ->11
   * Dxx - the port needs to be configured and ESP8266 need to be programmed.

NOTE :
   ● Ports mentioned to the right side of the " -> " belongs to the Arduino Mega 2560
   ● Ports Mentioned to the left side of the " -> " belongs to the pin-outs of the module heading mentioned above in this document.
   ● Read ICSP Headers in Anti-clock pattern.
   ● Read KeyPad pinouts from left to Right.

Instructions to be followed while debugging code or using backup .ino files :
   ● Re-declare the ports for row and columns as follows:
     byte rPins[Rows]= {A0,A1,A2,A3};
     byte cPins[Cols]= {A4,A5,A6,A7};