Title : **Real Time Clock based Appliance Control using IOT**

Document : **Requirement Specifications**

Functional Requirements

- Local display of:
    - Current Time display in HH:MM:SS format
    - On Time Slot of Appliance (Start and End Times) in HH:MM format
    - Appliance Status: ON/OFF
    - Display of the above parameters in mobile app also
- Facility for setting On Time Slot Start and End Times in mobile app
- Clock should run even when unit is powered off
- Minimum update rate of parameters: 2 seconds
- Power supply: 5V (USB powered)
- Update on cloud database should be accessible to user for debugging purposes

Non-functional requirements

- Should have compact custom PCB
- Display and RTC (Real Time Clock) modules to be connected using polarized cables
- Should have low power consumption. Should be capable of being USB powered for program upload and debugging from a laptop