

# **Basic Details of the Team and Problem Statement**

Ministry/Organization Name/Student Innovation: MINISTRY

**INNOVATION** 

PS Code: SIH1300

Problem Statement Title: AUTOMATED PUBLIC LIGHTING

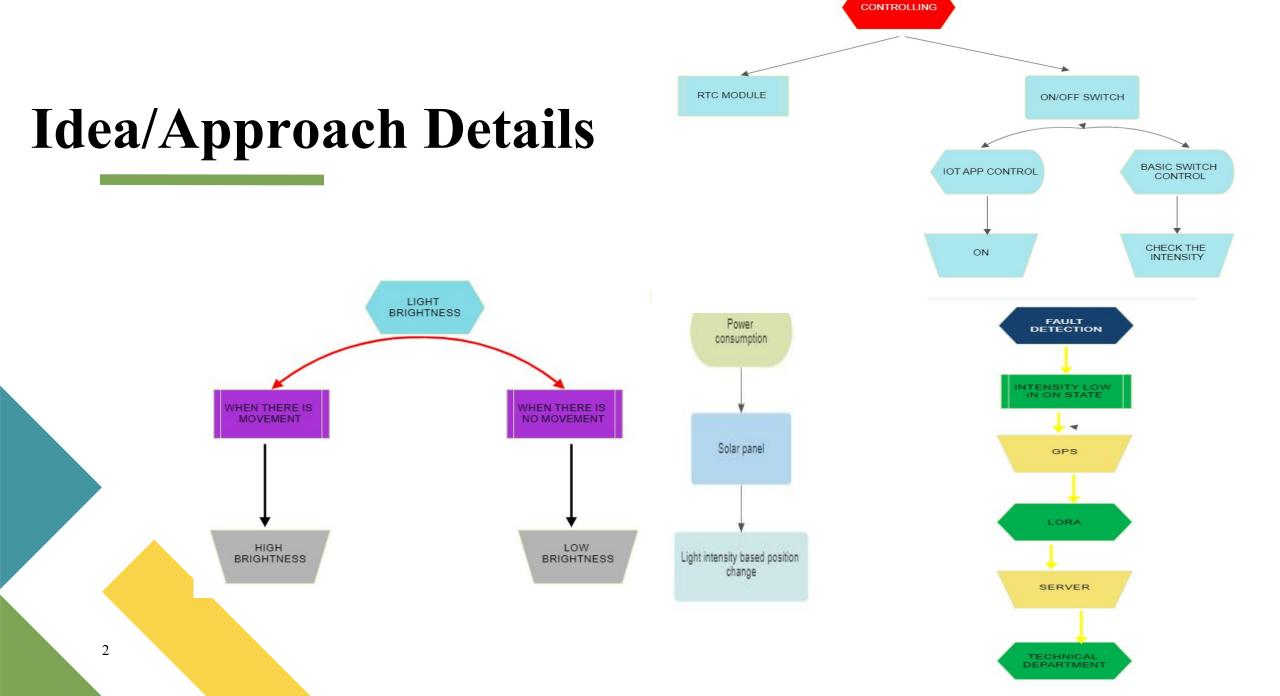
Team Name: POWER SNATCHERS

Team Leader Name: KAVI PRASHAAD.L

Institute Code (AISHE):

Institute Name: KONGU ENGINEERING COLLEGE

Theme Name: SMART AUTOMATION



## Idea/Approach Details

#### SOLUTION FOR OUR PROBLEM;

- ☐ Solution for the above problem statement starts with real time clock module(RTC)
- ☐ Using RTC, ON/OFF conditions of the light is automized from 6PM to 6AM
- ☐ When we are in need of light before **6PM**,it can be operated using **IOT** and manual switching
- ☐ **IOT** is used for **controlling the light** using smart applications
- ☐ To reduce further more power consumptions The concepts of solar panel is introduced here
- ☐ The solar panel gets adjusted automatically in accordance with high intensity of a sunlight
- ☐ The energy produced by the solar panel is stored in lithium ion battery

#### KEY POINTS FOR PROBLEM STATEMENT

- From the lithium ion battery 20% of the battery voltage is used initially to turn on the light.(it is applicable only during summer season)
- If it is rainy or monsoon season, initial **20% of the power consumption** from lithium ion battery is terminated
- ☐ Later on, the street light works by the power which is supplied externally
- ☐ When the external power supply is interrupted the light will use the lithium ion battery as a backup for power supply
- During summer season time range of **5AM** to **6AM**, if the battery voltage is greater than **50%**, then the battery voltage till **50%** is utilized to with hold the light in on state
- Here by using human detector sensor, the intensity of the light can be adjusted accordingly
- By applying all these ideas, the power consumption & man power is reduced which is a solution for the automated lighting

### **Team Member Details**

Team Leader Name: L.KAVI PRASHAAD

Branch (B.E): Stream (ECE): Year (II):

**Team Member 1 Name: S.S.NAVIN UDAYA** 

Branch (B.E): Stream (ECE): Year (II):

Team Member 2 Name: V.INDHUNATH

Branch (B.E): Stream (ECE): Year (II):

**Team Member 3 Name: K.KISHORE** 

Branch (B.E): Stream (ECE): Year (II):

**Team Member 4 Name: S.RITHIKA** 

Branch (B.E): Stream (ECE): Year (II):

Team Member 5 Name: P.B.PON KAVIYA

Branch (B.E): Stream (ECE): Year (II):

Team Mentor 1 Name: Type Your Name Here

Category (Academic) Expertise (AI/ML/Blockchain etc): Domain Experience (in years):

**Team Mentor 2 Name: Type Your Name Here** 

Category (Industry): Expertise (AI/ML/Blockchain etc): Domain Experience (in years):

### **Important Pointers**

#### Please ensure below pointers are met while

- ☐ Kindly keep the maximum slides limit to 4 pages
- ☐ All the topics should be utilized for description of your idea
- ☐ Try to avoid paragraphs and post your idea in points
- ☐ Keep your explanation precisely and easy to understand
- Idea should be unique and novel. If it has a business potential more weightage will be given.
- Apart from this PPT abstract of your idea will be asked separately while submitting
- I You need to save the file in PDF and upload the same on portal. No PPT, Word Doc or any other format will be supported
- You can delete this slide (Important Pointers) when you upload the details of your idea on SIH portal.