

## MAJOR / MINOR PROJECT ABSTRACT [Form - 1] (YEAR - 2023)

NAME OF LAB COORDINATOR: Ms. Sanju Choudhary

TITLE OF PROJECT: Smart led Bulb Camera

PROJECT TRACK: (Tick the appropriate one / ones)

|                        |   |  |   |   |
|------------------------|---|--|---|---|
| 1. R&D<br>(Innovation) | 2. CONSULTANCY<br>(Fetched from Industry) | 3. STARTUP<br>(Self-Business Initiative) | 4. PROJECT POOL<br>(From IBM / INFOSYS) | 5. HARDWARE<br>/ EMBEDDED <input checked="" type="checkbox"/> |
|------------------------|---|--|---|---|

### BRIEF INTRODUCTION OF PROJECT:

This is a smart led bulb which can be used as smart camera. This is a spy camera developed using the microcontroller.

### TOOLS / TECHNOLOGIES TO BE USED:

| NAME OF TOOL / TECHNOLOGY  | VERSION | SOFTWARE /<br>HARDWARE | PURPOSE OF USE                              |
|----------------------------|---------|------------------------|---|
| Arduino IDE                | 1.8.13  | software               | For coding ESP32                            |
| ESP32 board                |         | hardware               | For getting video feed                      |
| Google cloud platform(GCP) |         | software               | For making the video stream remotely on any |

### PROPOSED PROJECT MODULES:

| NAME OF MODULE          | PROPOSED FUNCTIONALITY IN PROJECT            |
|-------------------------|--|
| ESP32 CAM module        | For Programming ESP32 cam module             |
| Arduino VNO             | For Programming ESP32                        |
| AC to DC converter(PWM) | For convert AC electricity to DC electricity |
| Camera Interface App    | For watching the video feed                  |
| Login Interface         | App authentication & user authentication     |

### TEAM MEMBER DETAILS:

| STUDENT NAME    | CLASS & GROUP | MOBILE No. | EXPERTISE AREA | ROLE IN PROJECT      |
|-----------------|---------------|------------|----------------|----------------------|
| Shreyansh Jain  | 8 IT-B-G2     | 9468626881 | IOT            | Hardware development |
| Samyak Pagarija | 8 IT-B-G2     | 9460197051 | Software       | Software development |
|                 |               |            |                |                      |

**NOTE:** 1. This form is to be submitted by a team of maximum 4 students in the starting of semester to lab coordinator.  
2. Students must keep a Xerox copy of this form as reference for project work and attach it to final report.