**Course: Mini Project Course Code: 21ECMP67 Semester: VI**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Title:** **2WD Wifi RC car using ESP-NOW protocol** | | | | |
| **Brief background / Description:**   * This project involves creating a 2wd RC car that can be controlled wirelessly using the ESP-NOW protocol, which is specifically designed for low-power IOT devices. * The master ESP-32 device sends control commands to the slave ESP-32, which translates these commands into motor movements. Commands are sent wirelessly from a remote control unit (Joystick Module) using ESP-NOW protocol. Sensors like ultrasonic sensor, humidity sensors, cameras etc., can adjust the car’s movement accordingly to avoid collisions and enable the car to navigate autonomously.     **Objective:** Remote control and monitoring:   * Use of IOT sensors and a mobile app to remotely control and monitor the car. * Implementing sensors like cameras, ultrasonic sensor, and IR sensors coupled with IOT technology can enable the RC car to navigate autonomously. * This can be extended to create a miniature version of self-driving cars, where the car can detect obstacles, follow paths, and make decisions based on real-time data.     **Field of Applications:**   1. Data collection and analysis 2. Education and training 3. Learning and experimentation 4. Gaming and entertainment 5. Remote control and monitoring | | | | |
| **Batch No** | | | | |
| **Sl. No** | **USN** | **Name** | **Contact No** | **Signature** |
| **1** | 1KG21EC056 | Naveen kumar. K | 6363715644 |  |
| **2** | 1KG21EC079 | Sanjana P | 9113983372 |  |
| **3** | 1KG21EC085 | Shiju Lukose | 6360961724 |  |
| **4** |  |  |  |  |