

**Princess Sumaya University for Technology**

**King Abdullah II School of Engineering**

**Computer Engineering Department**

**Microprocessors & Embedded Systems**

**Project Proposal**

**Joystick-Controlled Bluetooth Car Using PIC16F877A Microcontroller**

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**Introduction:**

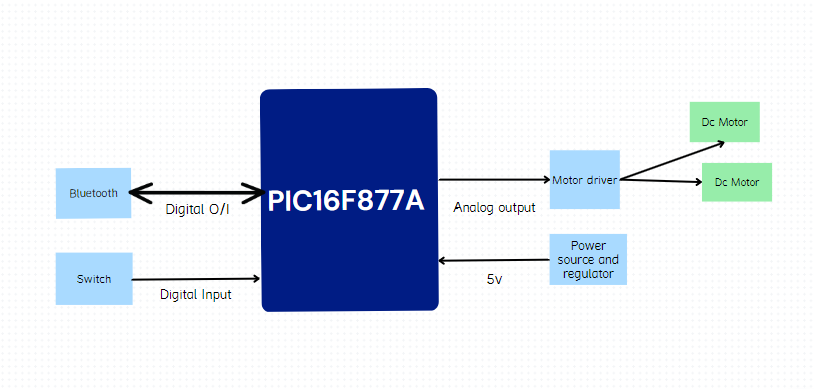
The joystick-controlled car operates using Bluetooth technology, which establishes wireless communication between the joystick and the car, enabling the car to move forward and backward. This feature allows the car to be controlled from a distance, without the need for a physical connection. The car is equipped with sensors and controls that can interpret joystick inputs, and through Bluetooth connectivity, it utilizes Pulse Width Modulation (PWM) to regulate speed. A PIC16F877A microcontroller processes commands from the joystick and sends motor instructions to the car.

**Components:**

* PIC16F877A microcontroller - 1
* Motor Driver– 1
* Motors - 4
* Wheels – 4
* Bluetooth module- 2
* Switch - 1
* Voltage Regulator - 1
* Lithium-Ion Battery - 2
* Breadboard - 2
* Chassis – 1
* A two-axis joystick -1

**Cost:** Around 65-80jd

**Block Diagram:**

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