

## EXPERIMENT 28: ROBOT USING MOBILE ARROWS

**Objective:** The objective of this experiment is to control the Chelonia Bot using the "Arduino Bluetooth Connector" mobile app. Use the HC-05 Bluetooth module to control the robot to move forward, backward, left, and right wirelessly from a smartphone app using arrow keys

### **Mobile Application Setup:**

Follow the link for the Mobile application setup the [Robot using the Mobile arrows](#).

- **Bluetooth Connectivity:**
  - Enable Bluetooth on your mobile device.
  - Pair your mobile device with the Chelonia's Bluetooth module.
- **Hardware Setup:** Connect the hardware as follows to ensure proper functionality.
- **Motor Control Pins:**
  - Connect Motor 1:
    - Direction input 1 (IN1): Connect to pin 8
    - Direction input 2 (IN2): Connect to pin 9
  - Connect Motor 2:
    - Direction input 1 (IN3): Connect to pin 10
    - Direction input 2 (IN4): Connect to pin 11
- Ensure the Bluetooth module (HC-05) is properly connected to the Arduino (VCC and GND). Connect its RX to TX and TX to RX. For detailed guidance on connecting the HC-05 Bluetooth module to your Arduino, please refer to the following link: [HC-05 and Arduino Connection](#).

### **Code Example:** [Chelonia control using mobile](#)

- **F:** Move forward
- **B:** Move backward
- **L:** Turn left
- **R:** Turn right
- **S:** Stop

**Note:** Connect the RX and TX pins of HC-05 to the TX and RX pins of Arduino after uploading the code.