parking control system using Arduino Uno

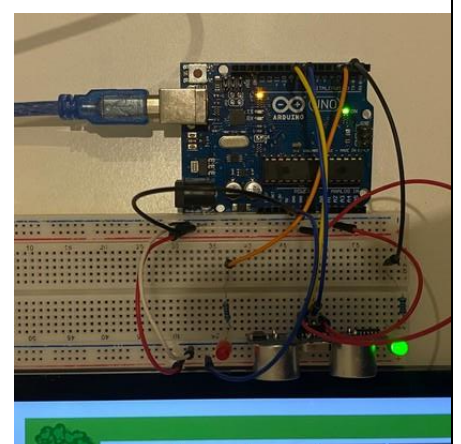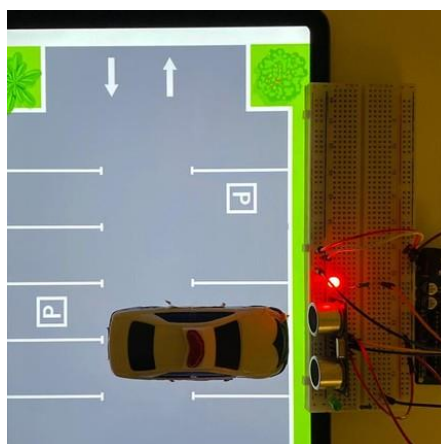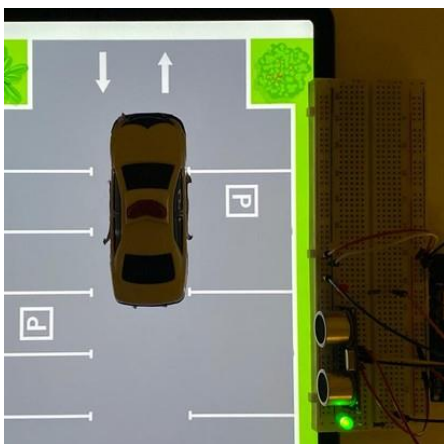**Develop an Arduino Uno project for a parking control system**

1. **review**

   The Parking Guidance e System offers a highly effective solution for managing parking within supervised areas. Our comprehensive ultrasonic parking guidance systems are specifically designed for stacked parking, corporate parks, and malls, and are customized to meet the unique requirements of each location. Our systems feature strategically spaced LEDs that enhance end-user convenience and streamline the parking process

2. **component**

   This project comprises of uncomplicated components. The necessary materials include
   - two LED lights.
   - Ultrasonic sensor.
   - Breadboard.
   - Wires.
   - Arduino UNO microcontroller.

the diagram

```
                    ┌─────────┐
                    │  start  │
                    └────┬────┘
                         │
                         ▼
              ┌──────────────────────┐
              │  Enter parking lot   │
              └──────────┬───────────┘
                         │
                         ▼
              ┌──────────────────────┐
              │ Sensor detector check│
              └──────────┬───────────┘
                         │
                         ▼
   ┌──────────────┐   ◇ distance <      No    ┌──────────────────────┐
   │  distance =  │──▶   200   ◇─────────────▶│ unavailable parking  │
   │(duration*.0343)/2;│                       │                      │
   └──────────────┘      │                     └──────────────────────┘
                       Yes
                         │
                         ▼
              ┌──────────────────────┐
              │   available parking  │
              └──────────┬───────────┘
                         │
                         ▼
                    ┌─────────┐
                    │   End   │
                    └─────────┘
```

distance = (duration*.0343)/2;

distance < 200

No — unavailable parking

Yes — available parking