

# Smart Parking System

This project is a **Smart Parking System** web application that demonstrates the use of modern browser Web APIs to solve a real-life problem. It provides location-based parking availability and network status information using the following APIs:

## Web APIs Used

- **Geolocation API** – to get the user's current latitude and longitude.
- **Network Information API** – to show the user's current network type and speed.
- **Canvas API** – to visually simulate available and occupied parking slots.

## Features

- Displays the user's real-time geographic location.
- Shows the network type (like 4G, WiFi) and downlink speed.
- Renders a simple canvas graphic to represent parking slots with availability.
- Responsive and colorful UI with modern styling.

## How to Run the Project

1. Place all project files (HTML, CSS, JS) in a folder.
2. Open the folder in a terminal or command prompt.
3. If you have Python installed, run:

```
python -m http.server 8080
```

4. Open your browser and go to: `http://localhost:8080`

**Note:** The Geolocation API requires HTTPS or `localhost` to function. The Network Information API may not be supported in all browsers.

## Demo Screenshot

*(Insert a screenshot here if needed)*

## License

This is a basic educational project and can be modified or extended freely.