

# Front end development

## html

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

  <meta name="viewport" content="width=device-width, initial-scale=1.0">

  <link rel="stylesheet" href="style.css">

  <title>Car parking</title>

</head>

<body>

  <!--home top back ground-->

  <div class="back-black" id="bbcontainer" style="display: flex; flex-direction: row; justify-content: center;">

    <p class="CP" style="font-size: 40px; margin-right: 25vw;" title="company name">🚗 Car Parking</p>

    <div class="hpac" style="margin-left: 90px; margin-top: 63px; font-size: 20px;">

      <p class="carparkhome" style="display: inline; margin: 10px;" >Home</p>

      <p class="carparkhome" onclick="parkk()" style="display: inline; margin: 10px; cursor: pointer;">Park</p>

      <p class="carparkhome" style="display: inline; margin: 10px; cursor: pointer;">About</p>

      <p class="carparkhome" style="display: inline; margin: 10px; cursor: pointer;">Contact</p>

    </div>

    <div style="margin-top: 60px; margin-left: 60px;">

      <button class="login" style="margin: 5px;" type="button" onclick="login()">Login</button>

    </div>

  </div>

</body>

</html>
```

```
        <button class="register" style="margin: 5px;" type="button"
onclick="reg()">Register</button>
```

```
    </div>
```

```
</div>
```

```
<!--park image-->
```

```
<div class="img" id="imgcontainer">
```

```
</div>
```

```
<!--Login page-->
```

```
<div class="b" id="loginSection" style="display: none;">
```

```
    <div class="container">
```

```
        <h2>Login</h2>
```

```
        <input type="text" style="padding: 2px 5px 2px 6px; border-radius: 5px;" id="username"
placeholder="Username" required><br><br>
```

```
        <input type="password" style="padding: 2px 5px 2px 6px; border-radius: 5px;"
id="password" placeholder="Password" required><br><br>
```

```
        <button onclick="log()">Login</button><br><br>
```

```
        <button onclick="reg()">Register</button>
```

```
        <p id="error-message" style="color: red;"></p>
```

```
    </div>
```

```
</div>
```

```
<!--Reg page-->
```

```
<div class="c" id="regsection" style="display: none; ">
```

```
    <div class="container">
```

```
        <h2>Register</h2>
```

<input type="text" style="padding: 2px 5px 2px 6px; border-radius: 5px;" id="username" placeholder="Username" required><br><br>

<input type="email" style="padding: 2px 5px 2px 6px; border-radius: 5px;" id="email" placeholder="Email ID" required><br><br>

<input type="password" style="padding: 2px 5px 2px 6px; border-radius: 5px;" id="passwordd" placeholder="Password" required><br><br>

<input type="password" style="padding: 2px 5px 2px 6px; border-radius: 5px;" id="conpassword" placeholder="conform Password" required><br><br>

<button onclick="register()" >Register</button><br><br>

<button onclick="login()">Login</button><br><br>

<p id="register-message" style="color: red;"></p>

</div>

</div>

<!--Parking page-->

<div class="p" id="parksection" style="display: none; ">

<div class="container">

<h2>PARK</h2>

<input type="text" style="padding: 3px 7px 3px 6px; border-radius: 5px;" id="username" placeholder="Username" required><br><br>

<input type="text" style="padding: 3px 7px 3px 6px; border-radius: 5px;" id="anusername" placeholder="Another Username" required><br><br>

<input type="email" style="padding: 3px 7px 3px 6px; border-radius: 5px;" id="email" placeholder="Email ID" required><br><br>

<input type="text" style="padding: 3px 7px 3px 6px; border-radius: 5px;" id="car" placeholder="Vehicle Name" required><br><br>

<input type="text" style="padding: 3px 7px 3px 6px; border-radius: 5px;" id="model" placeholder="Vehile Model" required><br><br>

<input type="text" style="padding: 3px 7px 3px 6px; border-radius: 5px;" id="park" placeholder="Vehicle Number" maxlength="10" required><br><br>

```

        <button style="background-color: green; cursor: pointer;"
onclick="carsize()">Conform</button><br><br>

    </div>

</div>

<div class="imge" id="carsize" style="display:none;">

    <div class="parking">

        

        

        

        <p style=" margin-left: 30.5%; display: inline-block; color: black; ">SMALL CAR</p>

        <p style=" margin-left: 10%; display: inline-block; color: black;" >MEDIUM CAR</p>

        <p style=" margin-left: 10.5%; display: inline-block; color: black; ">LARGE CAR</p>

    </div>

</div>

</body>

</html>

```

## javascript

```

// Function to show the Login section

function login() {

    document.getElementById("loginSection").style.display = "block";

    document.getElementById("regsection").style.display = "none";

    document.getElementById("parksection").style.display = "none";

```

```
document.getElementById("bbcontainer").style.display = "none";  
document.getElementById("imgecontainer").style.display = "none";  
document.getElementById("About").style.display = "none";  
document.getElementById("contentt").style.display = "none";  
  
}
```

// Function to show the Register section

```
function reg() {  
    document.getElementById("regsection").style.display = "block";  
    document.getElementById("loginSection").style.display = "none";  
    document.getElementById("parksection").style.display = "none";  
    document.getElementById("bbcontainer").style.display = "none";  
    document.getElementById("imgecontainer").style.display = "none";  
    document.getElementById("About").style.display = "none";  
    document.getElementById("contentt").style.display = "none";  
}
```

function register()

```
{  
    let username = document.getElementById("usernamee").value;  
    let email = document.getElementById("email").value;  
    let password = document.getElementById("passwordd").value;  
    let conpassword = document.getElementById("conpassword").value;  
    if (username && email && password && conpassword) {  
        alert("Registration Successful");  
        park();  
    }  
}
```

```
    } else {  
        document.getElementById("register-message").innerText = "All fields are required";  
    }  
}
```

// Function to show the Park section

```
function park() {  
    document.getElementById("parksection").style.display = "block";  
    document.getElementById("loginSection").style.display = "none";  
    document.getElementById("regsection").style.display = "none";  
    document.getElementById("bbcontainer").style.display = "none";  
    document.getElementById("imgecontainer").style.display = "none";  
}
```

// Function to handle login logic

```
function log()  
{  
    let username = document.getElementById("username").value;  
    let password = document.getElementById("password").value;  
  
    if (username === "balaji" && password === "1234") {  
        alert("Login successful!");  
        park();  
    } else {  
        document.getElementById("error-message").innerText = "Invalid username or password!";  
    }  
}
```

```
function carsize()
{
    document.getElementById("carsize").style.display = "block";
    document.getElementById("parksection").style.display = "none";
}
```

## **CSS**

body

```
{
    margin: 0%;
    padding: 0%;
}
```

.back-black

```
{
    background-color: black;
    color: white;
    height: 150px;
    width: 100%;
}
```

.image

```
{
    background-image: url('park.jpg');
    color: white;
    background-size: cover;
```

```
    height: 97vh;

    width: 100%;

}

.login, .register

{

    padding-left: 15px;

    padding-right: 15px;

    padding-top: 5px;

    padding-bottom: 5px;

    border-radius: 20px;

    border-color: white;

}


```

```
.hpac

{

    color: white;

    margin-top: 20px;

}


```

```
.b,.c,.p

{

    align-content: center;


```

```
background-image: url('park.jpg');

color: black;

background-size: cover;
```



```
    height: 607px;

    width: 100%;
}

.container
{
    text-align: center;

    display: block;

    border-radius: 5%;

    border-color: black ;

    border-style: solid;

    margin: 0% 35% 0% 35%;

    opacity: 0.5;

    background-color:white;
}

.a
{
    background-color: white;

    width: 100%;

    height: 550px;
}

.con
{
    background-color: grey;

    width: 100%;

    height: 200px;
}

.parking
```

```
{  
    padding-top: 20%;  
}
```

## Backend

Install Flask and SQLite:

```
pip install flask sqlite3
```

app.py (Backend Server):

```
python from flask import Flask, request, jsonify, render_template  
  
import sqlite3 app = Flask( name )  
  
def init_db():  
  
    conn = sqlite3.connect('parking.db')  
  
    cursor = conn.cursor()  
  
    cursor.execute(" CREATE TABLE IF NOT EXISTS slots ( id INTEGER PRIMARY KEY, slot_number  
    TEXT NOT NULL, is_reserved INTEGER DEFAULT 0) ")  
  
    conn.commit ()  
  
    conn.close()  
  
    app.route('/')  
  
    def index():  
  
        return render_template('index.html')  
  
    app.route('/slots', methods=['GET'])  
  
    def get_slots():  
  
        conn = sqlite3.connect('parking.db')  
  
        cursor = conn.cursor() cursor.execute('SELECT * FROM slots')
```

```

slots = cursor.fetchall()

conn.close()

return jsonify(slots)

app.route('/reserve', methods=['POST'])

def reserve_slot():

slot_id = request.form['slot_id']

conn = sqlite3.connect('parking.db')

cursor = conn.cursor()

cursor.execute('UPDATE slots SET is_reserved = 1 WHERE id = ?', (slot_id,))

conn.commit()

conn.close()

return 'Reservation successful', 200 app.route('/cancel', methods=['POST'])

def cancel_reservation():

slot_id = request.form['slot_id']

conn = sqlite3.connect('parking.db')

cursor = conn.cursor()

cursor.execute('UPDATE slots SET is_reserved = 0 WHERE id = ?', (slot_id,))

conn.commit()

conn.close()

return 'Reservation cancelled', 200 if

name == ' main ':

init_db() app.run(debug=True)

```