

Super Awesome Car Rental

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Contents of This Template

- Team Leader: Tin Huynh - Design, Admin functions, and Parking Services
- Developer / QA: Sang Kim - development, ppt, uml diagram.
- Developer / QA: Isaiah Smith - Rental service
- Developer / QA: Jiawen Li - Index page design.
- Developer / QA: Hyunki Lee - Credit card functions, parking design, css design

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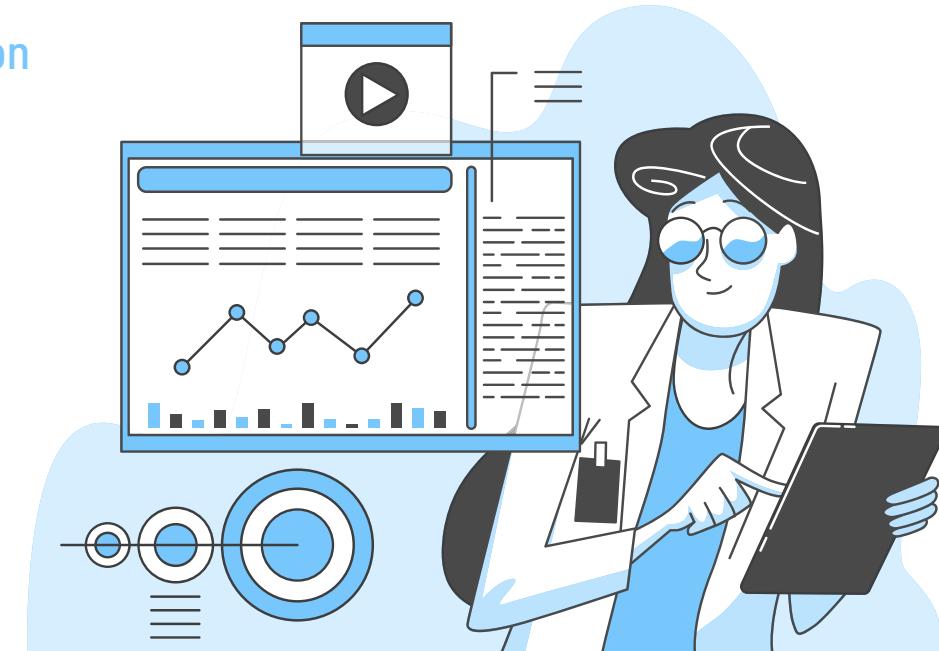
...



Demonstration

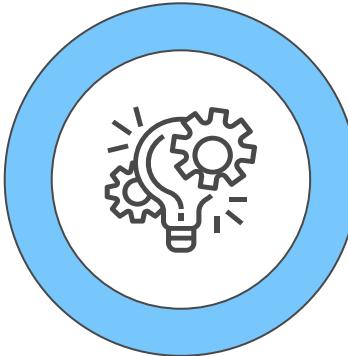
Project demo

...



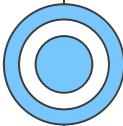
01

Overview



Car Rental and Parking Service

- Two main features are car rental and parking service.
- User can register and create their login and track their in their profile.
- Other features can be accessed through the navigation bar above. (details will be presented in demo)

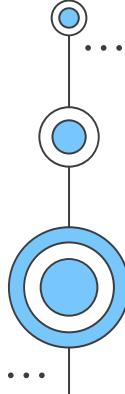


HOME LOGIN/SIGNUP LOGOUT PROFILE OUR TEAM CREDITS ADMIN LOGIN

ROUTE 66

Welcome to Super Cool Rental

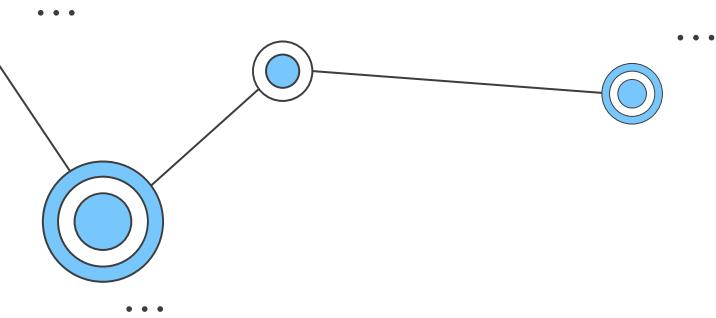
Where we offer super affordable rate for car rental and parking services



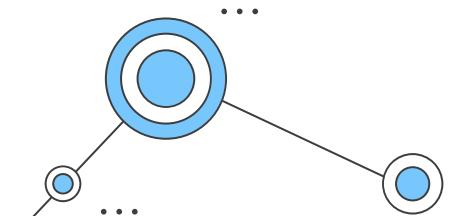
02

Process / Communication

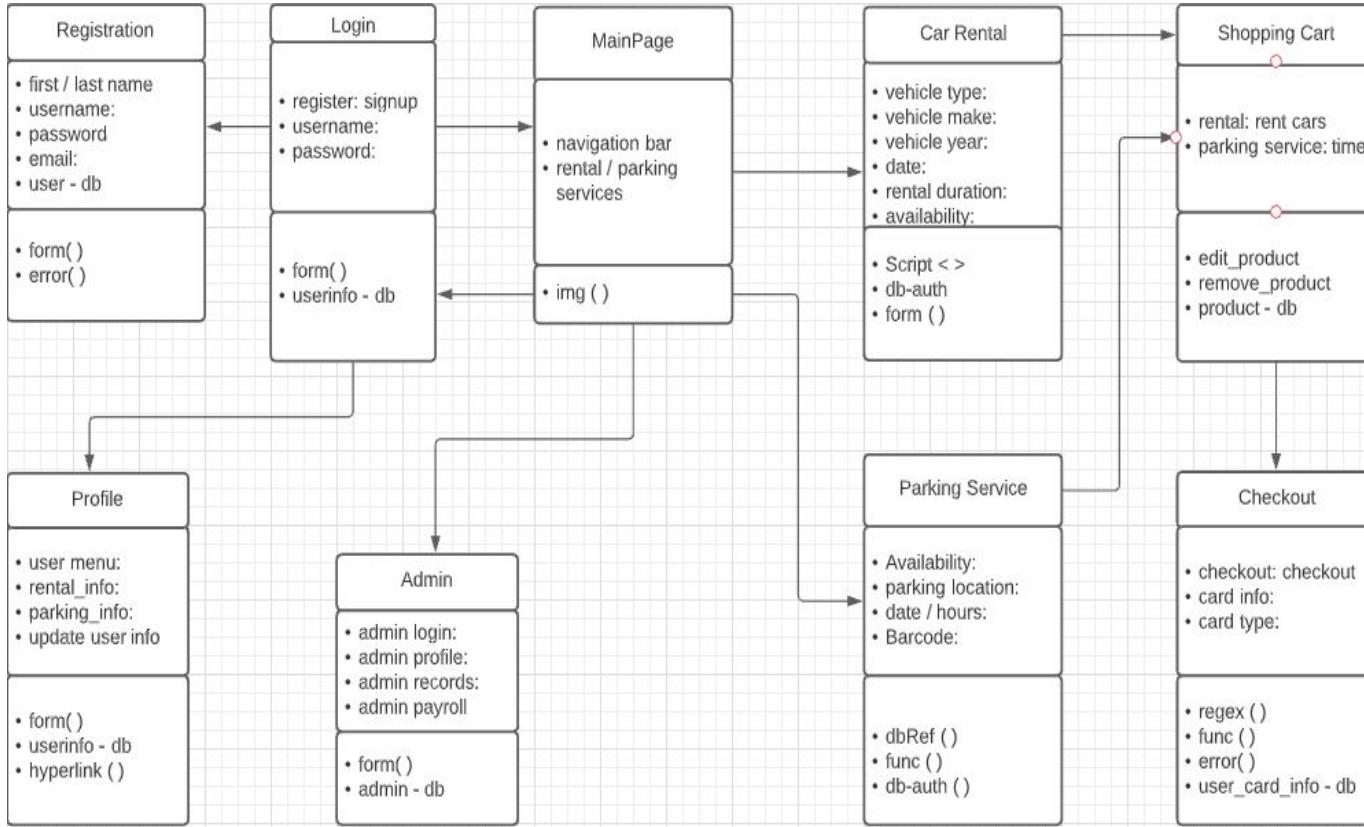


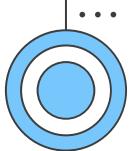


- Github: Files were uploaded and shared
- Discord: schedule / update notice
- Firebase: Database storing information
- Zenhub: Assigning tasks

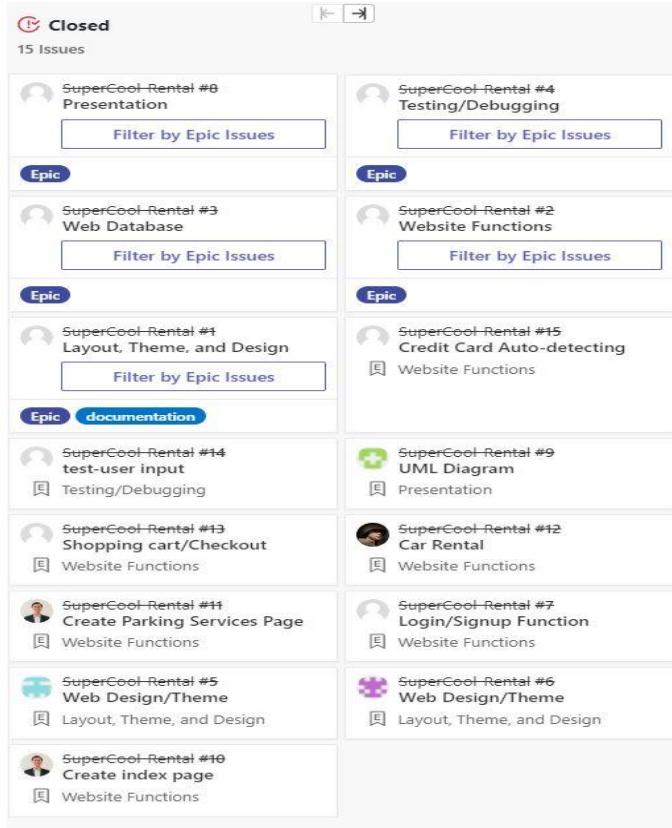


UML Diagram





Zenhub



03

DB / Code:

PHP: Main (index)

```
1 <?php include 'common/common-meta-header.php'; ?>
2
3 <div class="container">
4   <?php include 'common/navbar.php'; ?>
5
6   <div class="main_content">
7     <div class="intro">
8       <h1>Welcome to Super Cool Rental</h1>
9       <p>Where we offer super affordable rate for car rental and parking services</p>
10      </div>
11      <div class="services">
12        <div class="pic">
13          <a href = rental.php> <h3>Car Rental</h3>
14          
15        </a>
16        </div>
17        <div class="pic">
18          <h3>Parking Services</h3>
19          
20        </div>
21        </div>
22      </div>
23    </div>
24
25  <!-- shared page bottom HTML -->
26  <?php include 'common/common-footer.php'; ?>
27
```

PHP: Main (common)

```
9  <html lang="en-US">
10 <head>
11   <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
12   <meta name="viewport" content="width=device-width, initial-scale=1.0">
13   <link rel="stylesheet" href="style.css" type="text/css" />
14   <link rel="icon" type="image/png" href=".//images/web_icon.png"/>
15   <script src="https://www.gstatic.com/firebasejs/8.4.3.firebaseio.js"></script>
16   <script src="https://www.gstatic.com/firebasejs/8.4.3.firebaseio-database.js"></script>
17   <script src="https://www.gstatic.com/firebasejs/8.4.3.firebaseio-auth.js"></script>
18   <script src=".//scripts.firebaseio-key.js"></script>
19   <title>Super Cool Rental</title>
20 </head>
21 <body>
```

PHP: Main (navigation bar)

```
1  <div class="navibar">
2    
3    <nav>
4      <ul>
5        <li><a href="index.php">HOME</a></li>
6        <li><a href="login.php">LOGIN/SIGNUP</a></li>
7        <li><a href="logout.php">LOGOUT</a></li>
8        <li><a href="user_menu.php">PROFILE</a></li>
9        <li><a href="team.php">OUR TEAM</a></li>
10       <li><a href="credit.php">CREDITS</a></li>
11       <li><a href=".//admin/admin_login.php">ADMIN LOGIN</a></li>
12
13
14      </ul>
15    </nav>
16  </div>
17  |
```

PHP: Login

```
1 <?php include 'common/common-meta-header.php'; ?>
2 <div class="container">
3     <?php include 'common/navbar.php'; ?>
4     <div class="main_content">
5         <div class="register_form">
6
7             <form>
8                 
9                 <h2>Log In</h2>
10
11                 <div class="error" id="emailErr"></div>
12                 <input id="email" class="input_box" type="text" size="16" placeholder="Email"><br/>
13                 <div class="error" id="passwordErr"></div>
14                 <input id="password" class="input_box" type="password" size="16" placeholder="Password"><br/>
15                 <input id="submit-btn" class="btn" type="button" onclick="login()" value="Login"><br/>
16                 <hr/>
17                 <p>Don't have an account? <a href="register.php">Sign up!</a></p>
18             </form>
19         </div>
20     </div>
21 </div>
22
23     <script src=".//scripts/signup_login.js"></script>
24     <?php include 'common/common-footer.php'; ?>
```

PHP: Registration

```
1  <?php include 'common/common-meta-header.php'; ?>
2
3  <div class="container">
4
5      <?php include 'common/navbar.php'; ?>
6
7      <div class="main_content">
8          <div class="register_form">
9              <form>
10                 
11                 <h2>Sign Up</h2>
12                 <div class="error" id="fnameErr"></div>
13                 <input id="first_name" class="input_box" type="text" size="16" placeholder="First Name"><br/>
14
15                 <div class="error" id="lnameErr"></div>
16                 <input id="last_name" class="input_box" type="text" size="16" placeholder="Last Name"><br/>
17
18                 <div class="error" id="usernameErr"></div>
19                 <input id="username" class="input_box" type="text" size="16" placeholder="Username"><br/>
20
21                 <div class="error" id="emailErr"></div>
22                 <input id="email" class="input_box" type="text" size="16" placeholder="Email"><br/>
23
24                 <div class="error" id="passwordErr"></div>
25                 <input id="password" class="input_box" type="password" size="16" placeholder="Password"><br/>
26
27                 <div class="error" id="confPasswordErr"></div>
28                 <input id="confirm_password" class="input_box" type="password" size="16" placeholder="Confirm Password"><br/>
29
30                 <input id="submit-btn" class="btn" type="button" onclick="signup()" value="Sign up!"><br/>
31
32                 <hr/>
33                 <p>already Registered? <a href="index.php">Login</a></p>
34             </form>
35         </div>
36     </div>
37 </div>
38
39     <script src=".//scripts/signup_login.js"></script>
40
41 <?php include 'common/common-footer.php'; ?>
```



Javascript: Signup / Login

```
1 //Initialize Firebase variable
2 var auth = firebase.auth();
3 var database = firebase.database();
4
5 // Defining a function to display error message
6 function printError(elemId, hintMsg) {
7     document.getElementById(elemId).innerHTML = hintMsg;
8 }
9
10 function signup() {
11
12     // Retrieving the values of form elements
13     var fname = document.getElementById("first_name").value;
14     var lname = document.getElementById("last_name").value;
15     var username = document.getElementById("username").value;
16     var email = document.getElementById("email").value;
17     var password = document.getElementById("password").value;
18     var confirm_password = document.getElementById("confirm_password").value;
19
20     // Defining error variables with a default value
21     var isErr = false;
22
23     // Validate first name
24     if (fname == "") {
25         printError("fnameErr", "Please enter your first name");
26         isErr = true;
27     } else {
28         printError("fnameErr", "");
29         isErr = false;
30     }
31 }
```



Javascript: Signup / Login

```
32  // Validate last name
33  if (lname == "") {
34      printError("lnameErr", "Please enter your last name");
35      isError = true;
36  } else {
37      printError("lnameErr", "");
38      isError = false;
39  }
40
41  // Validate username
42  if (username == "") {
43      printError("usernameErr", "Please enter your username");
44      isError = true;
45  } else {
46      printError("usernameErr", "");
47      isError = false;
48  }
49
50  // Validate email
51  if (email == "") {
52      printError("emailErr", "Please enter your email");
53      isError = true;
54  } else {
55      printError("emailErr", "");
56      isError = false;
57  }
58
59  // Validate password
60  if (password == "") {
61      printError("passwordErr", "Please enter your password");
62      isError = true;
63  } else {
64      printError("passwordErr", "");
65      isError = false;
66  }
67
68  // Validate password confirmation
69  if (confirm_password == "") {
70      printError("confPasswordErr", "Please confirm your password");
71      isError = true;
72  } else {
73      if (password.localeCompare(confirm_password) !== 0) {
74          printError("passwordErr", "Your password does not match");
75          printError("confPasswordErr", "Your password does not match");
76          isError = true;
77      } else {
78          printError("passwordErr", "");
79          printError("confPasswordErr", "");
80          isError = false;
81      }
82  }
83
84  //After checking, if there is error
85  //ask user to refill the form
86  if (isError) {
87      return;
88  }
89
90  //Create user object with the information from text field
91
92  var user_obj = {
93      first_name: fname,
94      last_name: lname,
95      user_name: username,
96      email_address: email
97  };
98
```

Javascript: Signup / Login

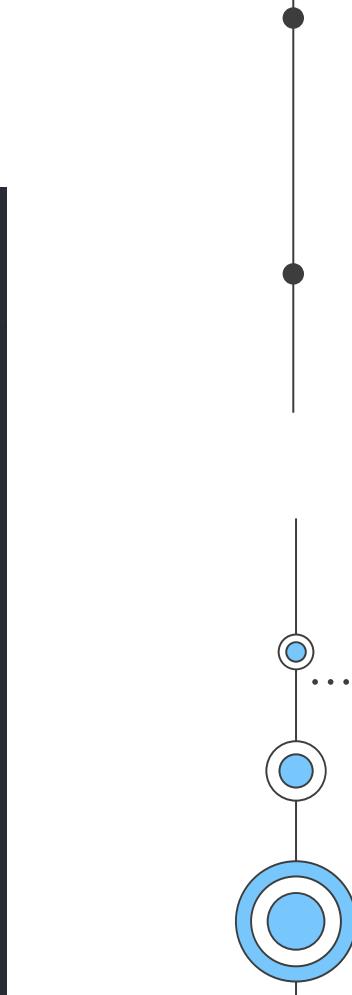
```
99 // [START auth_signin_password]
100 auth.createUserWithEmailAndPassword(email, password)
101     .then(function(user) {
102         var user = auth.currentUser;
103
104         database.ref('users/' + user.uid).set(user_obj, (error) => {
105             if (error) {
106                 // The write failed...
107                 alert("Failed upload data");
108             } else {
109                 // Data saved successfully!
110                 alert("Sign up successful. Thank you");
111
112                 //On success, take user back to index page
113                 //The difference between href and replace()
114                 //replace() removes the URL of the current document from
115                 //the document history, meaning that it is not possible to
116                 //use the "back" button to navigate back to the original document.
117                 window.location.replace("index.php");
118             }
119         });
120     });
121
122     .catch((error) => {
123         var errorCode = error.code;
124         var errorMessage = error.message;
125
126         //If email address is used, alert user
127         alert(errorMessage);
128         return;
129     });
130 // [END auth_signin_password]
```

```
133 ✕ function login() {
134
135     // Retrieving the values of form elements
136     var email = document.getElementById("email").value;
137     var password = document.getElementById("password").value;
138
139     // Defining error variables with a default value
140     var isErr = false;
141
142     // Validate email
143     if (email == "") {
144         printError("emailErr", "Please enter your email");
145         isErr = true;
146     } else {
147         printError("emailErr", "");
148         isErr = false;
149     }
150
151     // Validate password
152     if (password == "") {
153         printError("passwordErr", "Please enter your password");
154         isErr = true;
155     } else {
156         printError("passwordErr", "");
157         isErr = false;
158     }
159
160     //After checking, if there is error
161     //ask user to refill the form
162     if (isErr) {
163         return;
164     }
```



Javascript: Signup / Login

```
166  // Sign in users with the provided login credential
167  firebase.auth().setPersistence(firebase.auth.Auth.Persistence.LOCAL)
168  .then(() => {
169      // Existing and future Auth states are now persisted in the current
170      // session only. Closing the window would clear any existing state even
171      // if a user forgets to sign out.
172      // ...
173      // New sign-in will be persisted with session persistence.
174      return firebase.auth().signInWithEmailAndPassword(email, password)
175          .then((userCredential) => {
176              // Signed in
177              var user = userCredential.user;
178              alert("Login successful");
179              window.location.replace("index.php");
180              // ...
181          });
182      })
183      .catch((error) => {
184          // Handle Errors here.
185          var errorCode = error.code;
186          var errorMessage = error.message;
187
188          // If error occurred, alert user
189          alert(errorMessage);
190      });
191  }
192
```



Javascript: Signup / Login

```
193 function updateInfo() {  
194     // Retrieving the values of form elements  
195     var fname = document.getElementById("first_name").value;  
196     var lname = document.getElementById("last_name").value;  
197     var username = document.getElementById("username").value;  
198     var email = document.getElementById("email").value;  
199  
200     // Validate first name  
201     if (fname == "") {  
202         printError("fnameErr", "Please enter your first name");  
203         isErr = true;  
204     } else {  
205         printError("fnameErr", "");  
206         isErr = false;  
207     }  
208  
209     // Validate last name  
210     if (lname == "") {  
211         printError("lnameErr", "Please enter your last name");  
212         isErr = true;  
213     } else {  
214         printError("lnameErr", "");  
215         isErr = false;  
216     }  
217  
218     // Validate username  
219     if (username == "") {  
220         printError("usernameErr", "Please enter your username");  
221         isErr = true;  
222     } else {  
223         printError("usernameErr", "");  
224         isErr = false;  
225     }  
226 }
```

```
227     // Validate email  
228     if (email == "") {  
229         printError("emailErr", "Please enter your email");  
230         isErr = true;  
231     } else {  
232         printError("emailErr", "");  
233         isErr = false;  
234     }  
235  
236     var user_obj = {  
237         first_name: fname,  
238         last_name: lname,  
239         user_name: username,  
240         email_address: email  
241     };  
242  
243     firebase.auth().onAuthStateChanged(function(user) {  
244         if (user) {  
245             // User is signed in.  
246             var userId = user.uid;  
247             const dbRef = firebase.database().ref();  
248             dbRef.child("users").child(userId).set(user_obj, (error) => {  
249                 if (error) {  
250                     // The write failed...  
251                     alert("Failed update user info");  
252                 } else {  
253                     // Data saved successfully!  
254                     alert("Update successful");  
255                 }  
256             });  
257         } else {  
258             console.log("User is logged out");  
259         }  
260     });  
261 }  
262 }
```

PHP: Logout

```
1  <?php include 'common/common-meta-header.php'; ?>
2
3  <div class="container">
4
5      <?php include 'common/navbar.php'; ?>
6
7  <div class="main_content">
8
9      <div class="intro">
10         <h1>Thank you for using our services </h1> <br/>
11         <h2>You can now safely close the window.</h2>
12     </div>
13   </div>
14 </div>
15
16 <script>
17   (function logout() {
18       // [START auth_sign_out]
19       firebase.auth().signOut().then(() => {
20           // Sign-out successful.
21
22       //var Logout_button = document.getElementsByClassName("show")[0];
23       //var Login_button = document.getElementsByClassName("hide")[0];
25           //Logout_button.setAttribute("class", "hide");
26           //Login_button.setAttribute("class", "show");
27
28           alert("Logout successful");
29
30       }).catch((error) => {
31           // An error happened.
32           var errorCode = error.code;
33           var errorMessage = error.message;
34
35           //If error occured, alert user
36           alert(errorMessage);
37       });
38
39       // [END auth_sign_out]
40   })();
41 </script>
42 <script src="../scripts/signup_login.js"></script>
43 <?php include 'common/common-footer.php'; ?>
```

PHP / Javascript: Profile

```
1  <?php include 'common/common-meta-header.php'; ?>
2
3  <div class="container">
4      <?php include 'common/navbar.php'; ?>
5
6  <div class="main_content">
7      <div class="user_menu">
8          <h1>User Menu</h1><br/>
9          <ul>
10         <li><a href="user_profile.php">Profile</a></li>
11         <li><a href="rental.php">Rental</a></li>
12         <li><a href="parking_confirm.php">Parking</a></li>
13     </ul>
14
15    </div>
16    <div class="sub_content">
17        <div class="register_form">
18            <form>
19                
20                <h2>Update User Info</h2>
21                <div class="error" id="fnameErr"></div>
22                <input id="first_name" class="input_box" type="text" size="16" placeholder="First Name"><br/>
23
24                <div class="error" id="lnameErr"></div>
25                <input id="last_name" class="input_box" type="text" size="16" placeholder="Last Name"><br/>
26
27                <div class="error" id="usernameErr"></div>
28                <input id="username" class="input_box" type="text" size="16" placeholder="Username"><br/>
29
30                <div class="error" id="emailErr"></div>
31                <input id="email" class="input_box" type="text" size="16" placeholder="Email"><br/>
32
33                <input id="submit-btn" class="btn" type="button" onclick="updateInfo()" value="Update Info"><br/>
34            </form>
35        </div>
36    </div>
37  </div>
38 </div>
```



PHP: Car Rental

```
1  <?php include 'common/common-meta-header.php'; ?>
2
3  <div class="container">
4    <?php include 'common/navbar.php'; ?>
5
6    <div class="main_content">
7      <div class="timepicker">
8        <form class="parkingbook" action="" method="POST">
9          <fieldset class="parkingbody">
10            <label><strong>Rental Car</strong></label>
11            <br/>
12            <br/>
13
14            <label>Choose Your Car</label>
15            <br/>
16            <br/>
17            <label>Type</label>
18            <select id="car_type" class="parkinglist">
19              <option></option>
20              <option value="compact">Compact</option>
21              <option value="midsized">Mid Size</option>
22              <option value="fullsize">Full Size</option>
23              <option value="intersuv">Intermediate SUV</option>
24              <option value="midpickup">Mid-Size Pickup</option>
25              <option value="fullpickup">Full Size Pickup</option>
26              <option value="elitesuv">Standard Elite SUV</option>
27              <option value="luxury">Luxury</option>
28              <option value="passengervan">15 Passenger Van</option>
29              <option value="premelitesuv">Premium Elite SUV</option>
30            </select>
31            <label>Make</label>
32            <select id="car_make" class="parkinglist">
33              <option></option>
34              <option value="Audi">Audi</option>
35              <option value="Bentley">Bentley</option>
36              <option value="BMW">BMW</option>
37              <option value="Maserati">Maserati</option>
38              <option value="Ferrari">Ferrari</option>
39              <option value="Lamborghini">Lamborghini</option>
40            </select>
```

```
41
42            <label>Year</label>
43            <select id="car_year" class="parkinglist">
44              <option></option>
45              <option value="2021">2021</option>
46              <option value="2020">2020</option>
47              <option value="2019">2019</option>
48              <option value="2018">2018</option>
49              <option value="2017">2017</option>
50              <option value="2016">2016</option>
51              <option value="2015">2015</option>
52            </select>
53
54            <br/>
55          </fieldset>
56        </form>
57      </div>
58      <div class="timepicker">
59        <form class="parkingbook" >
60          <fieldset class="parkingbody">
61            <label><strong>Date</strong></label>
62            <br/>
63            <label>Choose Location</label>
64            <select id="location" class="parkinglist">
65              <option></option>
66              <option value="ATLAir">Atlanta Airport</option>
67              <option value="ATLCity">Atlanta City</option>
68              <option value="ATLSandy">Sandy Springs</option>
69              <option value="ATLMarie">Marietta</option>
70              <option value="ATLDun">Dunwoody</option>
71            </select>
72            <br/>
```





PHP: Car Rental

```
74     <label>Choose Date</label>
75     <br/>
76     <br/>
77     <label>Month</label>
78 >     <select id="month" class="parkinglist">=
92     <label>Date</label>
93 >     <select id="date" class="parkinglist">=
126
127     <label>Year</label>
128     <select id="year" class="parkinglist">
129         <option value="2021">2021</option>
130         <option value="2022">2022</option>
131         <option value="2023">2023</option>
132         <option value="2024">2024</option>
133     </select>
134
135     <label>Hour</label>
136 >     <select id="hour" class="parkinglist">=
162
163     <br/><br/>
164     <br/>
165     <label> *Rate: $200.99/hr </label>
166     <br/>
167     <br/>
168     <input type="button" onclick="checkout()" class="parkingsub" value="Reserve">
169     </fieldset>
170     </form>
171   </div>
172 </div>
173 </div>
174
175 <script src=". /scripts/rental.js"></script>
176 <!-- shared page bottom HTML -->
177 <?php include 'common/common-footer.php'; ?>
```

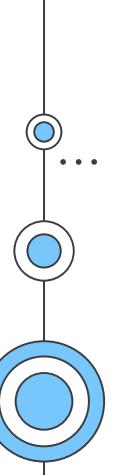


Line 78, 93, 136 contains option tag with each corresponding values.

month : jann - dec

Hour: 1-24 hrs

Years: xxxx year





```
1 <?php include 'common/common-meta-header.php'; ?>
2
3 <div class="container">
4   <?php include 'common/navbar.php'; ?>
5
6   <div class="main_content">
7     <div class="parkingtablediv">
8       <p>Checkout Cart</p>
9       <table class="parkingtable">
10      <tr>
11        <th>Date</th>
12        <th>Location</th>
13        <th>Duration</th>
14        <th>Total</th>
15
16      </tr>
17      <tr>
18        <td id="checkout_date"></td>
19        <td id="checkout_location"></td>
20        <td id="checkout_duration"></td>
21        <td id="checkout_total"></td>
22      </tr>
23    </table>
24  </div>
25  <div class="credit_container">
26    <div class="card_info">
27      <h2>Credit Card</h2>
28      <br/>
29    </div>
30    <div class="flip_container">
31      <div class="flip" onclick="this.classList.toggle('flipped')">
32        <div class="front" id="front">
33          <div class="bank">Card Example</div>
34          <br/>
35          <div class="chip"></div>
36          <div class="card_number" id="cardnumber">***** ***** ***** *****</div>
37          <div class="card_name" id="cardname">CardHolder</div>
38          <div class="good_thru">Good Thru</div>
39          <div class="exp_date">
40            <div id="expmonth">MM</div>
41            <div id="expslash">/</div>
42            <div id="expyear">YY</div>
43          </div>
44        </div>
45      </div>
```

```
47      <div class="back" id="back">
48        <div class="back_style"></div>
49        <div class="info_style"></div>
50        <div class="cvc" id="securitycode">CVC</div>
51        <img src="" id="logo-img">
52      </div>
53    </div>
54  </div>
55
56  <input id="card_num" type="tel" name="cardnumberInput" placeholder="Card Number" onkeyup="cardType(this.value)" maxlength="19">
57
58  <input id="card_name" type="text" name="nameInput" placeholder="Card Holder" onkeyup="cardName()">
59
60  <div id="exp_date">
61    <select id="exp_month" name="expmonthInput" onchange="cardMonth()">
62      <option selected disabled id="exp-month">MM</option>
63      <option value="01">01</option>
64      <option value="02">02</option>
65      <option value="03">03</option>
66      <option value="04">04</option>
67      <option value="05">05</option>
68      <option value="06">06</option>
69      <option value="07">07</option>
70      <option value="08">08</option>
71      <option value="09">09</option>
72      <option value="10">10</option>
73      <option value="11">11</option>
74      <option value="12">12</option>
75    </select>
76
77  <label id="exp_slash">/</label>
78  <select id="exp_year" name="expyearInput" onchange="cardYear()">
79    <option selected disabled id="exp-year">YY</option>
80    <option value="21">21</option>
81    <option value="22">22</option>
82    <option value="23">23</option>
83    <option value="24">24</option>
84    <option value="25">25</option>
85    <option value="26">26</option>
86    <option value="27">27</option>
87    <option value="28">28</option>
88  </select>
89</div>
```

PHP: Car Rental (Checkout)

```
91     <input id="cvc" type="text" name="cvcInput" placeholder="CVC" onkeyup="cvc()" maxlength="3">
92
93     <div id="card_type">
94         <div id="visa" style="display: none">Visa</div>
95         <div id="master" style="display: none"><span>Master</span>Card</div>
96         <div id="amex" style="display: none">American Express</div>
97         <div id="discover" style="display: none">Discover</div>
98     </div>
99
100    <input id="submit-btn" class="btn" type="button" onclick="place_order()" value="Place Your Order"><br/>
101
102    </div>
103
104 </div>
105
106 <script src=".//scripts/credit_card.js"></script>
107 <script src=".//scripts/parking_checkout.js"></script>
108 <!-- shared page bottom HTML -->
109 <?php include 'common/common-footer.php'; ?>
```



PHP: Car Rental (Confirmation)

```
1  <?php include 'common/common-meta-header.php'; ?>
2
3  <div class="container">
4      <?php include 'common/navbar.php'; ?>
5
6      <div class="main_content">
7          <div class="parking_info">
8              <h1>Your Rental Information</h1>
9
10             <p>Date: <span id="date"></span></p>
11                 <p>Location: <span id="location"></span></p>
12                 <p>Duration: <span id="duration"></span></p>
13                 <p>Type: <span id="type"></span></p>
14                 <p>Make: <span id="make"></span></p>
15                 <p>Year: <span id="year"></span></p>
16                 <p>Total Paid: <span id="total"></span></p>
17                 <p>Confirmation: <img alt="Barcode graphic" id="barcode" /></p>
18         </div>
19     </div>
20 </div>
21
```





PHP: Car Rental (Confirmation)

```
23 <script src=". /scripts/JsBarcode.all.min.js"></script>
24 <script>
25     var confirmation;
26     firebase.auth().onAuthStateChanged(function(user) {
27         if (user) {
28             // User is signed in.
29             var userId = user.uid;
30             const dbRef = firebase.database().ref();
31             dbRef.child("users").child(userId).child("rental_paid")
32                 .get().then((snapshot) => {
33                     if (snapshot.exists()) {
34                         var rental_obj = snapshot.val();
35
36                         document.getElementById("type").innerHTML = rental_obj["car_type"];
37                         document.getElementById("make").innerHTML = rental_obj["car_make"];
38                         document.getElementById("year").innerHTML = rental_obj["car_year"];
39
40                         document.getElementById("date").innerHTML = rental_obj["date"];
41                         document.getElementById("location").innerHTML = rental_obj["location"];
42                         document.getElementById("duration").innerHTML = rental_obj["duration"]+" hr";
43                         document.getElementById("total").innerHTML = "$"+rental_obj["total_paid"];
44                         confirmation = rental_obj["confirmation"];
45
46                         //print barcode to page
47                         JsBarcode("#barcode", confirmation);
48                     } else {
49                         console.log("No data available");
50                     }
51                 }).catch((error) => {
52                     console.error(error);
53                 });
54             } else {
55                 alert("Please sign in to check out");
56                 window.location.href = "login.php";
57                 console.log("User is logged out");
58             });
59
60 </script>
61 <!-- shared page bottom HTML -->
62 <?php include 'common/common-footer.php'; ?>
```



Javascript: Parking Service

```
1  var count = 0;
2
3  firebase.database().ref('parking_spots').on('value', function(snapshot) {
4      var snap = snapshot.val();
5      for (i in snap) {
6          count++;
7          //console.log(i + "\n");
8
9          var spot = {
10              status: ""
11          };
12
13          for (n in snap[i]) {
14              //console.log(n + "; " + snap[i][n]);
15              spot["status"] = snap[i][n];
16
17              if (spot["status"] == "unavailable") {
18                  document.getElementById(i).className = "disable";
19                  document.getElementById("location").options[count].disabled = true;
20              }
21          }
22      }
23  });

```

```
244  function checkout() {
245
246      // Retrieving the values of form elements
247      var spot = document.getElementById("location").value;
248      var month = document.getElementById("month").value;
249      var date = document.getElementById("date").value;
250      var year = document.getElementById("year").value;
251      var hour = document.getElementById("hour").value;
252
253      var total = parseInt(hour) * 5;
254
255      var barcode = barcodeGenerator(15);
256
257      if (spot == "") {
258          alert("Please choose a parking spot");
259          return;
260      }
261
262      //Create object with the information from text field
263      var parking_checkout = {
264          spot: spot,
265          date: month + "/" + date + "/" + year,
266          duration: hour,
267          total: total,
268          barcode: barcode
269      };
270

```

Javascript: Parking Service

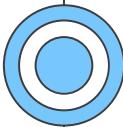
```
271     firebase.auth().onAuthStateChanged(function(user) {
272         if (user) {
273             // User is signed in.
274             firebase.database().ref('users/' + user.uid + "/parking_checkout").set(parking_checkout, (error) => {
275                 if (error) {
276                     // The write failed...
277                     alert("Please try again");
278                 } else {
279                     // Data saved successfully!
280
281                     window.location.href = "parking_checkout.php";
282                 }
283             });
284         } else {
285             alert("Please sign in to check out");
286             window.location.href = "login.php";
287             console.log("User is logged out");
288         }
289     });
290 }
291
292 function barcodeGenerator(length) {
293     const characters = 'ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789';
294     var result = "";
295     const charactersLength = characters.length;
296     for (let i = 0; i < length; i++) {
297         result += characters.charAt(Math.floor(Math.random() * charactersLength));
298     }
299
300     return result;
301 }
```



PHP: Parking Service (checkout)



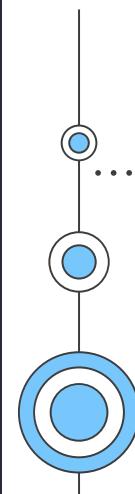
```
1  <?php include 'common/common-meta-header.php'; ?>
2
3  <div class="container">
4      <?php include 'common/navbar.php'; ?>
5
6  <div class="main_content">
7      <div class="parkingtablediv">
8          <p>Checkout Cart</p>
9          <table class="parkingtable">
10         <tr>
11             <th>Date</th>
12             <th>Location</th>
13             <th>Duration</th>
14             <th>Total</th>
15
16         </tr>
17         <tr>
18             <td id="checkout_date"></td>
19             <td id="checkout_location"></td>
20             <td id="checkout_duration"></td>
21             <td id="checkout_total"></td>
22         </tr>
23     </table>
24 </div>
```



PHP: Parking Service (checkout)

```
1  <?php include 'common/common-meta-header.php'; ?>
2
3  <div class="container">
4    <?php include 'common/navbar.php'; ?>
5
6    <div class="main_content">
7      <div class="rental_info">
8        <h1>Checkout Cart</h1>
9
10       <p>Date: <span id="checkout_date"></span></p>
11      <p>Location: <span id="checkout_location"></span></p>
12      <p>Duration: <span id="checkout_duration"></span></p>
13      <p>Type: <span id="checkout_type"></span></p>
14      <p>Make: <span id="checkout_make"></span></p>
15      <p>Year: <span id="checkout_year"></span></p>
16      <p>Total: <span id="checkout_total"></span></p>
17    </div>
18
19    <div>
20      <div class="credit_container">
21        <div class="card_info">
22          <h2>Credit Card</h2>
23          <br/>
24        </div>
25        <div class="flip_container">
26          <div class="flip" onclick="this.classList.toggle('flipped')">
27            <div class="front" id="front">
28              <div class="bank">Card Example</div>
29              <br/>
30              <div class="chip"></div>
31              <div class="card_number" id="cardnumber">***** ***** ***** *****</div>
32              <div class="card_name" id="cardname">CardHolder</div>
33              <div class="good_thru">Good Thru</div>
34              <div class="exp_date">
35                <div id="expmonth">MM</div>
36                <div id="expslash"/>
37                <div id="expyear">YY</div>
38              </div>
39            </div>
40          </div>
41        </div>
42      </div>
43    </div>
44
```

```
45      <div class="back" id="back">
46        <div class="back_style"></div>
47        <div class="info_style"></div>
48        <div class="cvc" id="securitycode">CVC</div>
49        
50      </div>
51    </div>
52  </div>
53
54  <input id="card_num" type="tel" name="cardnumberInput" placeholder="Card Number" onkeyup="cardType(this.value)" maxlength="19">
55
56  <input id="card_name" type="text" name="nameInput" placeholder="Card Holder" onkeyup="cardName()">
57
58  <div id="exp_date">
59    <select id="exp_month" name="expmonthInput" onchange="cardMonth()">
60      <option selected disabled id="exp-month">MM</option>
61      <option value="01">01</option>
62      <option value="02">02</option>
63      <option value="03">03</option>
64      <option value="04">04</option>
65      <option value="05">05</option>
66      <option value="06">06</option>
67      <option value="07">07</option>
68      <option value="08">08</option>
69      <option value="09">09</option>
70      <option value="10">10</option>
71      <option value="11">11</option>
72      <option value="12">12</option>
73    </select>
74
75    <label id="exp_slash">/</label>
76    <select id="exp_year" name="expyearInput" onchange="cardYear()">
77      <option selected disabled id="exp-year">YY</option>
78      <option value="21">21</option>
79      <option value="22">22</option>
80      <option value="23">23</option>
81      <option value="24">24</option>
82      <option value="25">25</option>
83      <option value="26">26</option>
84      <option value="27">27</option>
85      <option value="28">28</option>
86    </select>
87  </div>
88
```

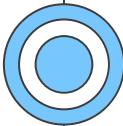




PHP: Parking Service (checkout)

```
85      <input id="cvc" type="text" name="cvcInput" placeholder="CVC" onkeyup="cvc()" maxlength="3">
86
87      <div id="card_type">
88          <div id="visa" style="display: none">Visa</div>
89          <div id="master" style="display: none"><span>Master</span>Card</div>
90          <div id="amex" style="display: none">American Express</div>
91          <div id="discover" style="display: none">Discover</div>
92      </div>
93
94      <input id="submit-btn" class="btn" type="button" onclick="place_order()" value="Place Your Order"><br/>
95      </div>
96  </div>
97 </div>
98 </div>
99
100 <script src=".//scripts/credit_card.js"></script>
101 <script src=".//scripts/rental_checkout.js"></script>
102 <!-- shared page bottom HTML -->
103 <?php include 'common/common-footer.php'; ?>
```

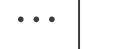
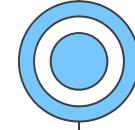
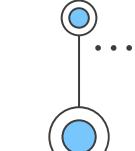




Javascript: Parking Service (checkout)

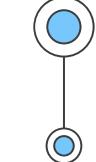
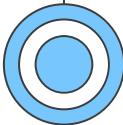
```
35  function place_order() {  
36  
37      // Retrieving the values of form elements  
38      var cname = document.getElementById("cname").value;  
39      var cnum = document.getElementById("cnum").value;  
40      var expmonth = document.getElementById("expmonth").value;  
41      var expyear = document.getElementById("expyear").value;  
42      var cvv = document.getElementById("cvv").value;  
43  
44      // Defining error variables with a default value  
45      var isError = false;  
46  
47  
48      // Validate first name  
49      if (cname == "") {  
50          isError = true;  
51      }  
52  
53      if (cnum == "") {  
54          isError = true;  
55      }  
56  
57      if (expmonth == "") {  
58          isError = true;  
59      }  
60  
61      if (expyear == "") {  
62          isError = true;  
63      }  
64  
65      if (cvv == "") {  
66          isError = true;  
67      }  
68
```

```
69      //After checking, if there is error  
70      //ask user to refill the form  
71      if (isErr) {  
72          alert("Please fill out payment form completely");  
73          return;  
74      }  
75  
76      var parking_paid = {  
77          barcode: parking_obj["barcode"],  
78          date: parking_obj["date"],  
79          duration: parking_obj["duration"],  
80          spot: parking_obj["spot"],  
81          total_paid: parking_obj["total"],  
82          name_on_card: cname,  
83          card_number: cnum,  
84          expmonth: expmonth,  
85          expyear: expyear  
86      };  
87
```



Javascript: Parking Service (checkout)

```
1  var parking_obj;
2
3  firebase.auth().onAuthStateChanged(function(user) {
4      if (user) {
5          // User is signed in.
6          var userId = user.uid;
7          const dbRef = firebase.database().ref();
8          dbRef.child("users").child(userId).child("parking_checkout")
9              .get().then((snapshot) => {
10                  if (snapshot.exists()) {
11                      parking_obj = snapshot.val();
12
13                      document.getElementById("checkout_date").innerHTML = parking_obj["date"];
14                      document.getElementById("checkout_location").innerHTML = parking_obj["spot"];
15                      document.getElementById("checkout_duration").innerHTML = parking_obj["duration"] + " hr";
16                      document.getElementById("checkout_total").innerHTML = "$" + parking_obj["total"];
17                  } else {
18                      console.log("No data available");
19                  }
20              }).catch((error) => {
21                  console.error(error);
22              });
23      } else {
24          alert("Please sign in to check out");
25          window.location.href = "login.php";
26          console.log("User is logged out");
27      }
28  });
29
30 // Defining a function to display error message
31 function printError(elemId, hintMsg) {
32     document.getElementById(elemId).innerHTML = hintMsg;
33 }
```

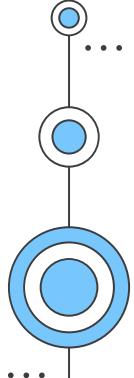


...



Javascript: Parking Service (checkout)

```
88     firebase.auth().onAuthStateChanged(function(user) {
89         if (user) {
90             // User is signed in.
91             var userId = user.uid;
92             firebase.database().ref('users/' + user.uid + "/parking_paid").set(parking_paid, (error) => {
93                 if (error) {
94                     // The write failed...
95                     alert("Please try again");
96                 } else {
97                     // Data saved successfully!
98                     alert("Checkout successfully! Thank you");
99                     window.location.href = "parking_confirm.php";
100                }
101            });
102        } else {
103            alert("Please sign in to check out");
104            window.location.href = "login.php";
105            console.log("User is logged out");
106        }
107    });
108
109
110    var unavailable_parking = {
111        status: "unavailable"
112    };
113
114    //set the parking spot unavailable
115    firebase.database().ref('parking_spots/' + parking_obj["spot"]).set(unavailable_parking, (error) => {
116        if (error) {
117            // The write failed...
118            alert("Please try again");
119        }
120    });
121
122 }
```



...



...



Javascript: Credit Card



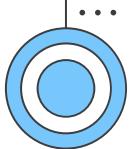
```
1 v function space(num) {
2     return num.toString().replace(/\B(?=(\d{4})+(?!\d))/g, " ");
3 }
4
5 v function cardType(num) {
6     document.getElementById('cardnumber').innerHTML = num;
7     space(num);
8     var regex;
9     var regexv;
10    var regexm;
11    var regexa;
12
13    regex = new RegExp("^$");
14    if (num.match(regex) != null) {
15        document.getElementById("visa").style.display = 'none';
16        document.getElementById("master").style.display = 'none';
17        document.getElementById("amex").style.display = 'none';
18        document.getElementById("discover").style.display = 'none';
19        document.getElementById('card_number').innerHTML = "..... .... .... ....";
20        document.getElementById('card_name').innerHTML = "Card Holder";
21    }
22
23    // For Amex Start with 3 and the second number should be 4 or 7
24    regexa = new RegExp("^3[47]");
25    if (num.match(regexa) != null) {
26        document.getElementById("visa").style.display = 'none';
27        document.getElementById("master").style.display = 'none';
28        document.getElementById("amex").style.display = 'inline';
29        document.getElementById("discover").style.display = 'none';
30        document.getElementById("card_num").maxLength = "18";
31        document.getElementById("cvc").maxLength = "4";
32    }
33}
```



Javascript: Credit Card



```
34     // For MasterCard start with 5 and the second number should be between 1 to 5
35     regexm = new RegExp("5[1-5]");
36     if (num.match(regexm) != null) {
37         document.getElementById("visa").style.display = 'none';
38         document.getElementById("master").style.display = 'inline';
39         document.getElementById("amex").style.display = 'none';
40         document.getElementById("discover").style.display = 'none';
41         document.getElementById("card_num").maxLength = "19";
42         document.getElementById("cvc").maxLength = "3";
43     }
44
45     // For the Discover start with 6011 or between 622126 to 622925 or between 644 to 649 or 65
46     regex = new RegExp("(^6011|622(12[6-9]|1[3-9][0-9]|2[8][0-9]{2}|9[0-1][0-9]|92[0-5]|64[4-9])|65)");
47     if (num.match(regex) != null) {
48         document.getElementById("visa").style.display = 'none';
49         document.getElementById("master").style.display = 'none';
50         document.getElementById("amex").style.display = 'none';
51         document.getElementById("discover").style.display = 'inline';
52         document.getElementById("card_num").maxLength = "19";
53         document.getElementById("cvc").maxLength = "3";
54     }
55
56     // For VISA start with 4
57     regexv = new RegExp("^4");
58     if (num.match(regexv) != null) {
59         document.getElementById("visa").style.display = 'inline';
60         document.getElementById("master").style.display = 'none';
61         document.getElementById("amex").style.display = 'none';
62         document.getElementById("discover").style.display = 'none';
63         document.getElementById("card_num").maxLength = "19";
64         document.getElementById("cvc").maxLength = "3";
65     }
66 }
67 }
```



Javascript: Credit Card

```
function cardName() {
    var inputName = document.getElementById('card_name');
    document.getElementById('cardname').innerHTML = inputName.value;
}
function cardMonth() {
    var month = document.getElementById('exp_month');
    var selectedm = month.options[month.selectedIndex].value;
    document.getElementById('expmonth').innerHTML = selectedm;
    document.getElementById('exp_month').style.color = "#000000";
}
function cardYear() {
    var year = document.getElementById('exp_year');
    var selectedy = year.options[year.selectedIndex].value;
    document.getElementById('expyear').innerHTML = selectedy;
    document.getElementById('exp_year').style.color = "#000000";
}
function cvc() {
    var inputCVC = document.getElementById('cvc');
    document.getElementById('securitycode').innerHTML = inputCVC.value;
}
```

PHP: Admin (Login)

```
1  <?php include 'common/common-meta-header.php'; ?>
2
3  <div class="container">
4
5      <?php include 'common/navbar.php'; ?>
6
7      <div class="main_content">
8          <div class="register_form">
9              <form>
10                  
11                  <h2>Admin Log In</h2>
12
13                  <div class="error" id="emailErr"></div>
14                  <input id="email" class="input_box" type="text" size="16" placeholder="Email"><br/>
15
16                  <div class="error" id="passwordErr"></div>
17                  <input id="password" class="input_box" type="password" size="16" placeholder="Password"><br/>
18
19                  <input id="submit-btn" class="btn" type="button" onclick="login()" value="Login"><br/>
20
21                  <hr/>
22                  <p>Please contact your administrator for login credential</p>
23              </form>
24          </div>
25      </div>
26  </div>
27
28  <script src=".//scripts/signup_login.js"></script>
29  <?php include 'common/common-footer.php'; ?>
```

PHP: Admin (Logout)

```
1  <?php include 'common/common-meta-header.php'; ?>
2
3  <div class="container">
4
5      <?php include 'common/navbar.php'; ?>
6
7      <div class="main_content">
8
9          <div class="intro">
10             <h1>Thank you for using our services</h1> <br/>
11             <h2>You can now safely close the window.</h2>
12         </div>
13     </div>
14 </div>
15
16 <script>
17     (function logout() {
18         // [START auth_sign_out]
19         firebase.auth().signOut().then(() => {
20             // Sign-out successful.
```

```
16   <script>
17     (function logout() {
18         // [START auth_sign_out]
19         firebase.auth().signOut().then(() => {
20             // Sign-out successful.
21
22             //var logout_button = document.getElementsByClassName("show")[0];
23             //var login_button = document.getElementsByClassName("hide")[0];
24
25             //logout_button.setAttribute("class", "hide");
26             //login_button.setAttribute("class", "show");
27
28             alert("Logout successful");
29
30         }).catch((error) => {
31             // An error happened.
32             var errorCode = error.code;
33             var errorMessage = error.message;
34
35             //If error occurred, alert user
36             alert(errorMessage);
37         });
38
39         // [END auth_sign_out]
40     })();
41 </script>
42 <script src="./scripts/signup_login.js"></script>
43 <?php include 'common/common-footer.php'; ?>
```

PHP: Admin (Profile)

```
1  <?php include 'common/common-meta-header.php'; ?>
2
3  <div class="container">
4      <?php include 'common/navbar.php'; ?>
5
6      <div class="main_content">
7
8          <?php include 'common/admin_submenu.php'; ?>
9
10         <div class="sub_content">
11             <div class="register_form">
12                 <form>
13                     
14                     <h2>Update User Info</h2>
15                     <div class="error" id="fnameErr"></div>
16                     <input id="first_name" class="input_box" type="text" size="16" placeholder="First Name"><br/>
17
18                     <div class="error" id="lnameErr"></div>
19                     <input id="last_name" class="input_box" type="text" size="16" placeholder="Last Name"><br/>
20
21                     <div class="error" id="usernameErr"></div>
22                     <input id="username" class="input_box" type="text" size="16" placeholder="Username"><br/>
23
24                     <div class="error" id="emailErr"></div>
25                     <input id="email" class="input_box" type="text" size="16" placeholder="Email"><br/>
26
27                     <input id="submit-btn" class="btn" type="button" onclick="updateInfo()" value="Update Info"><br/>
28                 </form>
29             </div>
30         </div>
31     </div>
32 </div>
```



PHP: Admin (Profile)

```
35  <script src="./scripts/signup_login.js"></script>
36 <script>
37 firebase.auth().onAuthStateChanged(function(user) {
38   if (user) {
39     // User is signed in.
40     var userId = user.uid;
41     const dbRef = firebase.database().ref();
42     dbRef.child("admin").child(userId).get().then((snapshot) => {
43       if (snapshot.exists()) {
44         var user_obj = snapshot.val();
45
46           document.getElementById("first_name").value = user_obj["first_name"];
47           document.getElementById("last_name").value = user_obj["last_name"];
48           document.getElementById("username").value = user_obj["user_name"];
49           document.getElementById("email").value = user_obj["email_address"];
50     } else {
51       console.log("No data available");
52     }
53   }).catch((error) => {
54     console.error(error);
55   });
56 }else{
57   console.log("User is logged out");
58 }
59 });
60 </script>
61 <!-- shared page bottom HTML -->
62 <?php include 'common/common-footer.php'; ?>
63
```



PHP: Admin (Register)

```
1  <?php include 'common/common-meta-header.php'; ?>
2
3  <div class="container">
4
5      <?php include 'common/navbar.php'; ?>
6
7      <div class="main_content">
8
9          <?php include 'common/admin_submenu.php'; ?>
10
11     <div class="sub_content">
12         <div class="register_form">
13             <form>
14                 
15                 <h2>Admin Sign Up</h2>
16                 <div class="error" id="fnameErr"></div>
17                 <input id="first_name" class="input_box" type="text" size="16" placeholder="First Name"><br/>
18
19                 <div class="error" id="lnameErr"></div>
20                 <input id="last_name" class="input_box" type="text" size="16" placeholder="Last Name"><br/>
21
22                 <div class="error" id="usernameErr"></div>
23                 <input id="username" class="input_box" type="text" size="16" placeholder="Username"><br/>
24
25                 <div class="error" id="emailErr"></div>
26                 <input id="email" class="input_box" type="text" size="16" placeholder="Email"><br/>
27
28                 <div class="error" id="passwordErr"></div>
29                 <input id="password" class="input_box" type="password" size="16" placeholder="Password"><br/>
30
31                 <div class="error" id="confPasswordErr"></div>
32                 <input id="confirm_password" class="input_box" type="password" size="16" placeholder="Confirm Password"><br/>
33
34                 <input id="submit-btn" class="btn" type="button" onclick="signup()" value="Sign up!"><br/>
35             </form>
36         </div>
37     </div>
38 </div>
39
40
41     <script src="./scripts/signup_login.js"></script>
42     <?php include 'common/common-footer.php'; ?>
```



```
1 //initialize table element and table header
2 var table = document.createElement("table");
3 var counter = 0;
4
5 var row = document.createElement("tr");
6
7 var table_header = document.createElement("th");
8 table_header.innerHTML = "No.";
9 row.appendChild(table_header);
10
11 table_header = document.createElement("th");
12 table_header.innerHTML = "Date";
13 row.appendChild(table_header);
14
15 table_header = document.createElement("th");
16 table_header.innerHTML = "Location";
17 row.appendChild(table_header);
18
19 table_header = document.createElement("th");
20 table_header.innerHTML = "Duration";
21 row.appendChild(table_header);
22
23 table_header = document.createElement("th");
24 table_header.innerHTML = "Total";
25 row.appendChild(table_header);
26
27 table_header = document.createElement("th");
28 table_header.innerHTML = "Record Number";
29 row.appendChild(table_header);
30
31 table.appendChild(row);
32
```

JS: Rental Record (admin)

```
33 firebase.database().ref('users').on('value', function(snapshot) {
34   snapshot.forEach(function(childSnapshot) {
35     var snap = childSnapshot.val();
36     for (i in snap) {
37       if (i == "parking_paid") {
38         counter++;
39         console.log(i + "\n");
40
41         //Create user object
42         var parking_obj = {
43           date: "",
44           spot: "",
45           duration: "",
46           total_paid: "",
47           barcode: ""
48         };
49
50         for (n in snap[i]) {
51           //console.log(snap[i][n]);
52           if (n == 'date') {
53             //console.log(snap[i][n]);
54             parking_obj["date"] = snap[i][n];
55           }
56           if (n == 'spot') {
57             //console.log(snap[i][n]);
58             parking_obj["spot"] = snap[i][n];
59           }
60           if (n == 'duration') {
61             //console.log(snap[i][n]);
62             parking_obj["duration"] = snap[i][n];
63           }
64           if (n == 'total_paid') {
65             //console.log(snap[i][n]);
66             parking_obj["total_paid"] = snap[i][n];
67           }
68           if (n == 'barcode') {
69             //console.log(snap[i][n]);
70             parking_obj["barcode"] = snap[i][n];
71           }
72         }
73       }
74     }
75   }
76 }
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
```

```
row = document.createElement("tr");
var cell = document.createElement("td");
cell.innerHTML = counter;
row.appendChild(cell);

cell = document.createElement("td");
cell.innerHTML = parking_obj["date"];
row.appendChild(cell);

cell = document.createElement("td");
cell.innerHTML = parking_obj["spot"];
row.appendChild(cell);

cell = document.createElement("td");
cell.innerHTML = parking_obj["duration"] + "hr";
row.appendChild(cell);

cell = document.createElement("td");
cell.innerHTML = "$" + parking_obj["total_paid"];
row.appendChild(cell);

cell = document.createElement("td");
cell.innerHTML = parking_obj["barcode"];
row.appendChild(cell);

table.appendChild(row);
}
});
});
```

•••

```
document.getElementById('records_div').appendChild(table);
```



JS: Parking Record (Admin)

```
1 //initialize table element and table header
2 var table = document.createElement("table");
3 var counter = 0;
4
5 var row = document.createElement("tr");
6
7 var table_header = document.createElement("th");
8 table_header.innerHTML = "No.";
9 row.appendChild(table_header);
10
11 table_header = document.createElement("th");
12 table_header.innerHTML = "Date";
13 row.appendChild(table_header);
14
15 table_header = document.createElement("th");
16 table_header.innerHTML = "Location";
17 row.appendChild(table_header);
18
19 table_header = document.createElement("th");
20 table_header.innerHTML = "Duration";
21 row.appendChild(table_header);
22
23 table_header = document.createElement("th");
24 table_header.innerHTML = "Total";
25 row.appendChild(table_header);
26
27 table_header = document.createElement("th");
28 table_header.innerHTML = "Record Number";
29 row.appendChild(table_header);
30
31 table.appendChild(row);
```

```
33 firebase.database().ref('users').on('value', function(snapshot) {
34   snapshot.forEach(function(childSnapshot) {
35     var snap = childSnapshot.val();
36     for (i in snap) {
37       if (i == "rental_paid") {
38         counter++;
39         console.log(i + "\n");
40
41         //Create user object
42         var rental_obj = {
43           date: "",
44           spot: "",
45           duration: "",
46           total_paid: "",
47           confirmation: ""
48         };
49
50         for (n in snap[i]) {
51           //console.Log(snap[i][n]);
52           if (n == 'date') {
53             //console.Log(snap[i][n]);
54             rental_obj["date"] = snap[i][n];
55           }
56           if (n == 'location') {
57             //console.Log(snap[i][n]);
58             rental_obj["location"] = snap[i][n];
59           }
60           if (n == 'duration') {
61             //console.Log(snap[i][n]);
62             rental_obj["duration"] = snap[i][n];
63           }
64           if (n == 'total_paid') {
65             //console.Log(snap[i][n]);
66             rental_obj["total_paid"] = snap[i][n];
67           }
68           if (n == 'confirmation') {
69             //console.Log(snap[i][n]);
70             rental_obj["confirmation"] = snap[i][n];
71           }
72         }
73       }
74     }
75   }
76   row = document.createElement("tr");
77
78   var cell = document.createElement("td");
79   cell.innerHTML = counter;
80   row.appendChild(cell);
81
82   cell = document.createElement("td");
83   cell.innerHTML = rental_obj["date"];
84   row.appendChild(cell);
85
86   cell = document.createElement("td");
87   cell.innerHTML = rental_obj["location"];
88   row.appendChild(cell);
89
90   cell = document.createElement("td");
91   cell.innerHTML = rental_obj["duration"] + "hr";
92   row.appendChild(cell);
93
94   cell = document.createElement("td");
95   cell.innerHTML = "$" + rental_obj["total_paid"];
96   row.appendChild(cell);
97
98   cell = document.createElement("td");
99   cell.innerHTML = rental_obj["confirmation"];
100  row.appendChild(cell);
101
102  table.appendChild(row);
103 }
104 }
105 });
106
107 document.getElementById('records_div').appendChild(table);
```



JS: User Record (admin)

```
1 //initialize table element and table header
2 var table = document.createElement("table");
3 var counter = 0;
4
5 var row = document.createElement("tr");
6
7 var table_header = document.createElement("th");
8 table_header.innerHTML = "No.";
9 row.appendChild(table_header);
10
11 table_header = document.createElement("th");
12 table_header.innerHTML = "First Name";
13 row.appendChild(table_header);
14
15 table_header = document.createElement("th");
16 table_header.innerHTML = "Last Name";
17 row.appendChild(table_header);
18
19 table_header = document.createElement("th");
20 table_header.innerHTML = "User Name";
21 row.appendChild(table_header);
22
23 table_header = document.createElement("th");
24 table_header.innerHTML = "Email Address";
25 row.appendChild(table_header);
26
27 table.appendChild(row);
```

```
29 firebase.database().ref('users').on('value', function(snapshot) {
30   var snap = snapshot.val();
31   for (i in snap) {
32     counter++;
33     //console.log(i + "\n");
34
35     //Create user object
36     var user_obj = {
37       first_name: "",
38       last_name: "",
39       user_name: "",
40       email_address: ""
41     };
42
43     for (n in snap[i]) {
44       if (n == 'email_address') {
45         //console.log(snap[i][n]);
46         user_obj["email_address"] = snap[i][n];
47       }
48       if (n == 'first_name') {
49         //console.log(snap[i][n]);
50         user_obj["first_name"] = snap[i][n];
51       }
52       if (n == 'last_name') {
53         //console.log(snap[i][n]);
54         user_obj["last_name"] = snap[i][n];
55       }
56       if (n == 'user_name') {
57         //console.log(snap[i][n]);
58         user_obj["user_name"] = snap[i][n];
59       }
60     }
61   }
62 }
```





JS: User Record (admin)

```
62     row = document.createElement("tr");
63
64     var cell = document.createElement("td");
65     cell.innerHTML = counter;
66     row.appendChild(cell);
67
68     cell = document.createElement("td");
69     cell.innerHTML = user_obj["first_name"];
70     row.appendChild(cell);
71
72     cell = document.createElement("td");
73     cell.innerHTML = user_obj["last_name"];
74     row.appendChild(cell);
75
76     cell = document.createElement("td");
77     cell.innerHTML = user_obj["user_name"];
78     row.appendChild(cell);
79
80     cell = document.createElement("td");
81     cell.innerHTML = user_obj["email_address"];
82     row.appendChild(cell);
83
84     table.appendChild(row);
85   }
86 });
87
88 document.getElementById('records_div').appendChild(table);
```



Code: CSS

```
1 *{
2   margin: 0;
3   padding: 0;
4   font-family: sans-serif;
5 }
6
7 .container{
8   width: 100%;
9   height: 100vh;
10  background-image: linear-gradient(rgba(0,0,0,0.7), rgba(0,0,0,0.7)),url(images/McQueen.jpg);
11  background-position: center;
12  background-size: cover;
13  box-sizing: border-box;
14 }
15
16 .navbar{
17   height: 9%;
18   display: flex;
19   align-items: center;
20   padding-left: 6%;
21   padding-right: 6%;
22   background-color: white;
23   position: fixed;
24   top: 0;
25   width: 90%;
26 }
27
28 .brand_logo{
29   width: 300px;
30   cursor: pointer;
31 }
32
33 .menu_icon{
34   width: 30px;
35   cursor: pointer;
36   margin-left: 60px;
37 }
38
39 nav{
40   flex: 1;
41   text-align: right;
42 }
43
44
```

```
45 nav ul li{
46   list-style: none;
47   display: inline-block;
48   margin-left: 60px;
49 }
50
51 .hide{
52   display: none;
53 }
54
55 nav ul li a{
56   text-decoration: none;
57   color: gray;
58   font-size: 16px;
59   font-weight: bold;
60 }
61
62 nav ul li a:hover{
63   animation: highlight 0.5s forwards;
64 }
65
66 @keyframes highlight {
67   from {}
68   to {color:blue; background-color: lightblue;}
69 }
70
71 .main_content{
72   display: flex;
73   height: 90%;
74   align-items: center;
75   padding-left: 5%;
76   padding-right: 5%;
77   padding-top: 2%;
78   flex-wrap: wrap;
79   justify-content: center;
80 }
81
82 .intro,
83 .services{
84   flex: 50%;
85   display: flex;
86   justify-content: center;
87   flex-wrap: wrap;
88   align-items: center;
89   color: white;
90 }
91
```

```
93 .intro h1{
94   color: white;
95   font-size: 50px;
96 }
97
98 .intro p{
99   color: white;
100  font-size: 20px;
101  line-height: 20px;
102 }
103
104 .pic, .team_member{
105   text-align: center;
106   display: inline-block;
107   border-radius: 10px;
108   padding: 15px 25px;
109   cursor: pointer;
110   transition: transform 0.5s;
111 }
112
113 .pic:hover, .team_member:hover{
114   transform: translateY(-8px);
115 }
116
117 .pic h3, .team_member h3{
118   color: white;
119 }
120
121 .team_member img{
122   border-radius: 50%;
123   width: 220px;
124   height: 220px;
125 }
126
127 .rental_image, .parking_image{
128   width: 234px;
129   height: 293px;
130 }
131
132 .team_info, .source_info{
133   color: white;
134   flex: 50%;
135 }
136
```

Code: CSS

```
137 .register_form, .payment_form{  
138     width: 350px;  
139     box-shadow: 0 0 3px 0 rgba(0,0,0,0.3);  
140     background: white;  
141     padding: 20px;  
142     margin-top: 5%;  
143     margin-left: auto;  
144     margin-right: auto;  
145     text-align: center;  
146 }  
147  
148 .register_form h2, .payment_form h3{  
149     color: blue;  
150 }  
151  
152 .input_box{  
153     border-radius: 20px;  
154     border: 1px solid gray;  
155     padding: 10px;  
156     margin: 10px 10px;  
157     width: 85%;  
158     outline: none;  
159 }  
160 .btn{  
161     border-radius: 20px;  
162     font-size: 15px;  
163     color: white;  
164     background-color: #1c8adb;  
165     width: 90%;  
166     padding: 10px;  
167     margin: 10px 10px;  
168     border: none;  
169     outline: none;  
170     cursor: pointer;  
171 }  
172  
173 .register_form img{  
174     width: 70px;  
175     margin-top: -50px;  
176 }  
177
```

```
178 .register_form p{  
179     font-size: 15px;  
180     padding: 10px;  
181     margin: 10px 10px;  
182     outline: none;  
183 }  
184  
185 .register_form p a{  
186     text-decoration: none;  
187 }  
188  
189 .register_form hr{  
190     margin-top: 10px;  
191 }  
192  
193 .error {  
194     color: red;  
195     font-size: 90%;  
196     text-decoration: underline;  
197 }  
198  
199 .user_menu{  
200     flex: 30%;  
201     align-items: right;  
202     color: white;  
203 }  
204  
205 .user_menu li{  
206     font-size: 20px;  
207     list-style: none;  
208 }  
209  
210 .sub_content{  
211     flex: 70%;  
212     align-items: right;  
213     color: white;  
214 }  
215  
216 .parkingtablediv {  
217     width:100%;  
218     display:inline-block;  
219     padding-top:10px;  
220     flex: 1;  
221     margin-left: 5%;  
222 }
```

```
223 .parkingtablediv p{  
224     color: white;  
225     font-size: 30px;  
226     line-height: 20px;  
227     text-align: left;  
228     padding-bottom: 3%;  
229 }  
230  
231 .parkingtable {  
232     width:50%;  
233     background-color: white;  
234 }  
235  
236 .parkingtable tr td {  
237     width:30%;  
238     height:30px;  
239     border:solid 1px black;  
240     color: black;  
241     text-align:center;  
242 }  
243  
244 .parkingtable .disable{  
245     background-color: red;  
246 }  
247  
248 .timepicker {  
249     margin-top: 7%;  
250     margin-right: 7%;  
251     float:left;  
252 }  
253  
254 .parkingbody {  
255     background:#fefefe;  
256     border-top:1px solid #dde0e8;  
257     border-bottom:1px solid #dde0e8;  
258     padding:10px 20px;  
259     float:left;  
260 }  
261
```

Code: CSS

```
262 .parkinglist {  
263   border:3px solid #F79FA;  
264   -webkit-border-radius:3px;  
265   -moz-border-radius:3px;  
266   border-radius:3px;  
267   -moz-box-shadow:2px 3px 3px rgba(0, 0, 0, 0.6) inset, 0 0 1px purple inset;  
268   -webkit-box-shadow:2px 3px 3px rgba(0, 0, 0, 0.06) inset, 0 0 1px #95a2a7 inset;  
269   box-shadow:2px 3px 3px rgba(0, 0, 0, 0.3) inset, 0 0 1px purple inset;  
270   margin:3px 0 4px;  
271   padding:8px 0px;  
272   width:30%;  
273   display:block;  
274 }  
275  
276 .parkinglist:focus {  
277   border:3px solid #0f7fc;  
278   -moz-box-shadow:2px 3px 3px rgba(0, 0, 0, 0.04) inset, 0 0 1px #0d6db6 inset;  
279   -webkit-box-shadow:2px 3px 3px rgba(0, 0, 0, 0.04) inset, 0 0 1px #0d6db6 inset;  
280   box-shadow:2px 3px 3px rgba(0, 0, 0, 0.04) inset, 0 0 1px #0d6db6 inset;  
281   color:#333;  
282 }  
283 .parkinglist {  
284   width:294px;  
285 }  
286  
287 .parkingsub {  
288   width:100%;  
289   height:100%;  
290   -moz-border-radius:2px;  
291   -webkit-border-radius:2px;  
292   background:red;  
293   background:-moz-linear-gradient(top, gold, yellow);  
294   -ms-filter: "progid:DXImageTransform.Microsoft.gradient(startColorStr='badff3', EndColorStr='7acbed')";  
295   border:1px solid #fff !important;  
296   cursor: pointer;  
297   padding:11px 16px;  
298   font:bold 20px/20px Verdana, Tahoma, Geneva;  
299   text-shadow:rgba(0,0,0,0.2) 0 1px 0px;  
300   color:#000;  
301   -moz-box-shadow:inset rgba(255,255,255,0.6) 0 1px 1px, rgba(0,0,0,0.1) 0 1px 1px;  
302   -webkit-box-shadow:inset rgba(255,255,255,0.6) 0 1px 1px, rgba(0,0,0,0.1) 0 1px 1px;  
303   box-shadow:inset rgba(255,255,255,0.6) 0 1px 1px, rgba(0,0,0,0.1) 0 1px 1px;  
304   text-align:center;  
305   padding:7px 21px;  
306 }
```

```
307 .parkingsub:hover,  
308 .parkingsub:focus,  
309 v .parkingsub:active {  
310   background:red;  
311   background:-moz-linear-gradient(top, yellow, gold);  
312   background:-webkit-gradient(linear, left top, left bottom, from:#7acbed, to:#badff3);  
313   -ms-filter: "progid:DXImageTransform.Microsoft.gradient(startColorStr='7acbed', EndColorStr='badff3')";  
314 }  
315 v .parkingsub:active {  
316   text-shadow:rgba(0,0,0,0.3) 0 -1px 0px;  
317 }  
318  
319 v .payment_form{  
320   color: black;  
321 }  
322  
323  
324 v .payment_form label{  
325   text-align: left;  
326 }  
327  
328 v .parking_info{  
329   color: white;  
330   margin-left: 8%;  
331 }  
332  
333 v .parking_info p, .rental_info p{  
334   font-size: 22px;  
335 }  
336  
337 v .parking_info h1, .rental_info h1{  
338   font-size: 33px;  
339 }  
340  
341 v .user_menu a{  
342   color: white;  
343   text-decoration: none;  
344 }  
345  
346 v .rental_info{  
347   color: white;  
348   margin-right: 20%;  
349 }  
350
```

Code: CSS

```
353 .credit_container {  
354     padding-top:20%;  
355     justify-content: center;  
356     width: 100%;  
357     text-align: center;  
358     margin: 0 auto;  
359     width: 400px;  
360 }  
361  
362  
363  
364 .card_info {  
365     color: white;  
366     padding: 0.5px;  
367     text-align: center;  
368 }  
369  
370 input {  
371     margin: 1px 0px;  
372 }  
373  
374 < 3  
375 < 4  
376 input[type="submit"] {  
377     display: block;  
378     height: 45px;  
379     width: 100%;  
380     border: none;  
381     color: white;  
382     background-color: #3d4f87;  
383     cursor: pointer;  
384     text-transform: uppercase;  
385     font-weight: bold;  
386     font-size: 15px;  
387 }  
388  
389 input[type="submit"]:hover {  
390     transition: 0.5s ease;  
391     background-color: #8594c7;  
392 }  
393
```

```
394 select {  
395     -webkit-appearance: none;  
396     -moz-appearance: none;  
397     -o-appearance: none;  
398     appearance: none;  
399  
400     background-color: white;  
401 }  
402  
403 #card_num{  
404     width: 100%;  
405     height: 30px;  
406 }  
407  
408 #card_name {  
409     width: 100%;  
410     height: 30px;  
411 }  
412  
413 #exp_date {  
414     width: 50%;  
415     float: left;  
416     height: 40px;  
417 < 6  
418     text-align: center;  
419 }  
420  
421 #exp_month, #exp_year {  
422     width: 43%;  
423     float: left;  
424     margin-top: 1px;  
425     border-radius: 0px;  
426     color: black;  
427     height: 37px;  
428     text-align: center;  
429 }  
430  
431 #exp_slash {  
432     float: left;  
433     font-size: 25px;  
434     padding: 3px;  
435     color: white;  
436 }  
437
```

```
438 #cvc {  
439     width: 30%;  
440     height:33px;  
441     float: left;  
442 }  
443  
444 /* Type */  
445  
446 #card_type {  
447     float: right;  
448 }  
449  
450  
451 #visa {  
452     float: right;  
453     padding: 8px;  
454     font-weight: bold;  
455     border: 3px solid rgba(252, 133, 10, 1);  
456     background-color: rgba(252, 255, 255, 0.9);  
457     color: rgba(12, 33, 116, 1);  
458 }  
459  
460 #master {  
461     float: right;  
462     padding: 8px;  
463     font-weight: bold;  
464     border: 3px solid rgba(0, 0, 83, 1);  
465     background-color: rgba(255, 255, 255, 0.9);  
466     color: rgba(252, 134, 10, 1);  
467 }  
468  
469 span {  
470     color: rgba(190, 0, 6, 1);  
471 }  
472  
473 #mex {  
474     float: right;  
475     padding: 8px;  
476     font-weight: bold;  
477     border: 3px solid rgba(255, 255, 255, 1);  
478     background-color: blue;  
479     color: rgba(255, 255, 255, 1);  
480 }  
481
```



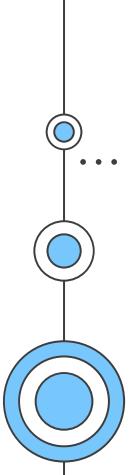
Code: CSS



```
482 #discover {  
483   float: right;  
484   padding: 8px;  
485   font-weight: bold;  
486   border: 3px solid rgba(0, 0, 0, 1);  
487   background-color: rgba(255, 255, 255, 0.9);  
488   color: rgba(251, 77, 9, 1);  
489 }  
490  
491 /* Layout */  
492 .front, .back {  
493   position: absolute;  
494   font-family: monospace;  
495 }  
496  
497 .bank {  
498   position: absolute;  
499   text-align: left;  
500   padding: 20px;  
501  
502   font-size: 30px;  
503   font-weight: bold;  
504 }  
505  
506 .chip {  
507   position: absolute;  
508   padding: 25px;  
509   margin-top: 40px;  
510 }  
511  
512 .chip img {  
513   width: 50px;  
514 }  
515  
516 .card_number {  
517   position: absolute;  
518   font-size: 28px;  
519   padding: 15px;  
520   text-align: left;  
521   margin-top: 120px;  
522   margin-left: 15px;  
523 }  
524
```

```
525 .card_name {  
526   position: absolute;  
527   float: left;  
528   text-align: left;  
529   padding: 10px;  
530   margin-left: 25px;  
531   width: 43%;  
532   font-size: 18px;  
533   bottom: 20px;  
534   font-weight: bold;  
535 }  
536  
537 .good_thru {  
538   position: absolute;  
539   float: left;  
540   width: 10%;  
541   text-align: justify;  
542   font-size: 8px;  
543   bottom: 29px;  
544   right: 150px;  
545   font-weight: bold;  
546 }  
547  
548 .exp_date {  
549   position: absolute;  
550   float: right;  
551   padding: 10px;  
552   text-align: left;  
553   width: 15%;  
554   font-size: 18px;  
555   bottom: 20px;  
556   right: 0;  
557   font-weight: bold;  
558 }  
559  
560 #expmonth {  
561   position: absolute;  
562   right: 90px;  
563   bottom: 10px;  
564 }  
565  
566 #expslash {  
567   position: absolute;  
568   right: 75px;  
569   bottom: 10px;  
570 }  
571
```

```
572 #expyear {  
573   position: absolute;  
574   right: 50px;  
575   bottom: 10px;  
576 }  
577  
578 .back_style {  
579   position: relative;  
580   background-color: black;  
581   height: 55px;  
582   margin-top: 25px;  
583 }  
584  
585 .info_style {  
586   position: relative;  
587   float: left;  
588   background-color: white;  
589   border-radius: 30px;  
590   height: 40px;  
591   margin-top: 20px;  
592   margin-left: 30px;  
593   width: 280px;  
594 }  
595  
596 .cvc {  
597   position: relative;  
598   text-align: left;  
599   margin-top: 33px;  
600   float: right;  
601   margin-right: 15px;  
602   width: 50px;  
603 }  
604  
605 #logo-img {  
606   position: absolute;  
607   width: 80px;  
608   bottom: 0;  
609   right: 0;  
610   padding: 13px;  
611 }  
612
```



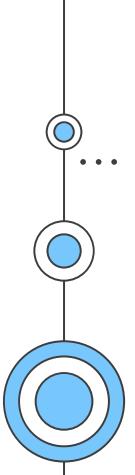


Code: CSS



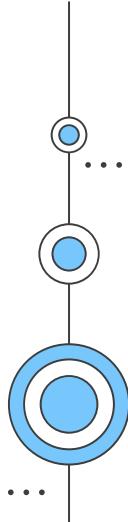
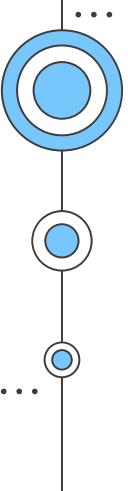
```
614 /* Flip Animation */  
615  
616 .flip_container {  
617   -webkit-perspective: 1000;  
618   -moz-perspective: 1000;  
619   -o-perspective: 1000;  
620   perspective: 1000;  
621   width: 100%;  
622   height: 245px;  
623   overflow: hidden;  
624   padding: 1%;  
625   margin: 0 auto;  
626 }  
627  
628  
629 .flipped {  
630   -webkit-transform: rotateY(180deg);  
631   -moz-transform: rotateY(180deg);  
632   -o-transform: rotateY(180deg);  
633   transform: rotateY(180deg);  
634 }  
635  
6 .flip {  
7   -webkit-transition: 0.5s;  
8   -webkit-transform-style: preserve-3d;  
9  
10  -moz-transition: 0.5s;  
11  -moz-transform-style: preserve-3d;  
12  
13  -o-transition: 0.5s;  
14  -o-transform-style: preserve-3d;  
15  
16  transition: 0.5s;  
17  transform-style: preserve-3d;  
18  
19  position: relative;  
20 }  
21
```

```
652 .front, .back {  
653   -webkit-backface-visibility: hidden;  
654   -moz-backface-visibility: hidden;  
655   -o-backface-visibility: hidden;  
656   backface-visibility: hidden;  
657   border-radius: 10px;  
658   position: absolute;  
659   top: 0;  
660   left: 0;  
661   width: 100%;  
662   height: 250px;  
663   overflow: hidden;  
664 }  
665  
666 .front {  
667   background-color: grey;  
668   z-index: 2;  
669 }  
670  
671 .back {  
672   -webkit-transform: rotateY(180deg);  
673   -moz-transform: rotateY(180deg);  
674   -o-transform: rotateY(180deg);  
675   transform: rotateY(180deg);  
676   background-color: #b5c3d2;  
677 }
```



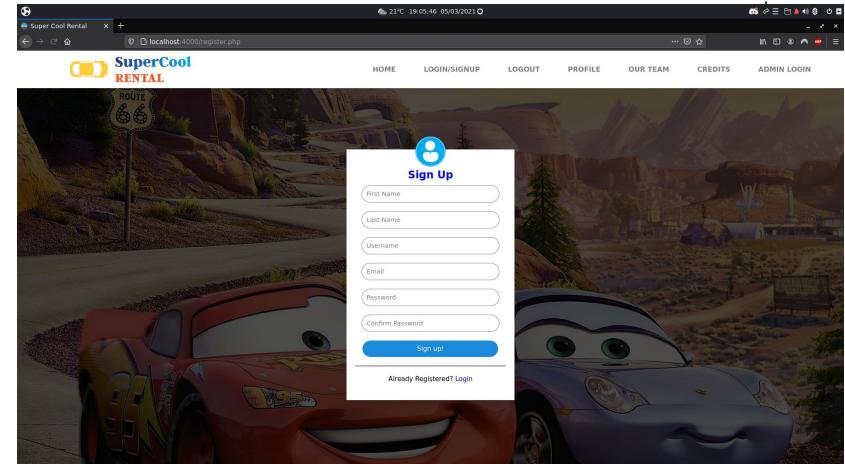
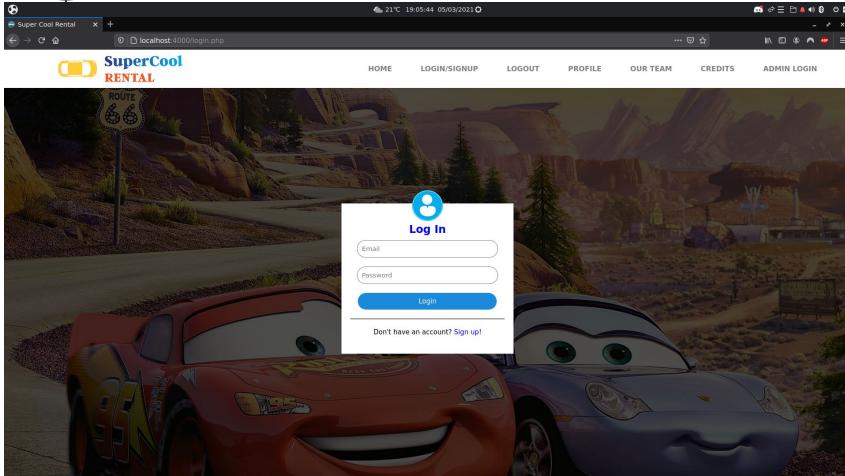
04

Test Cases

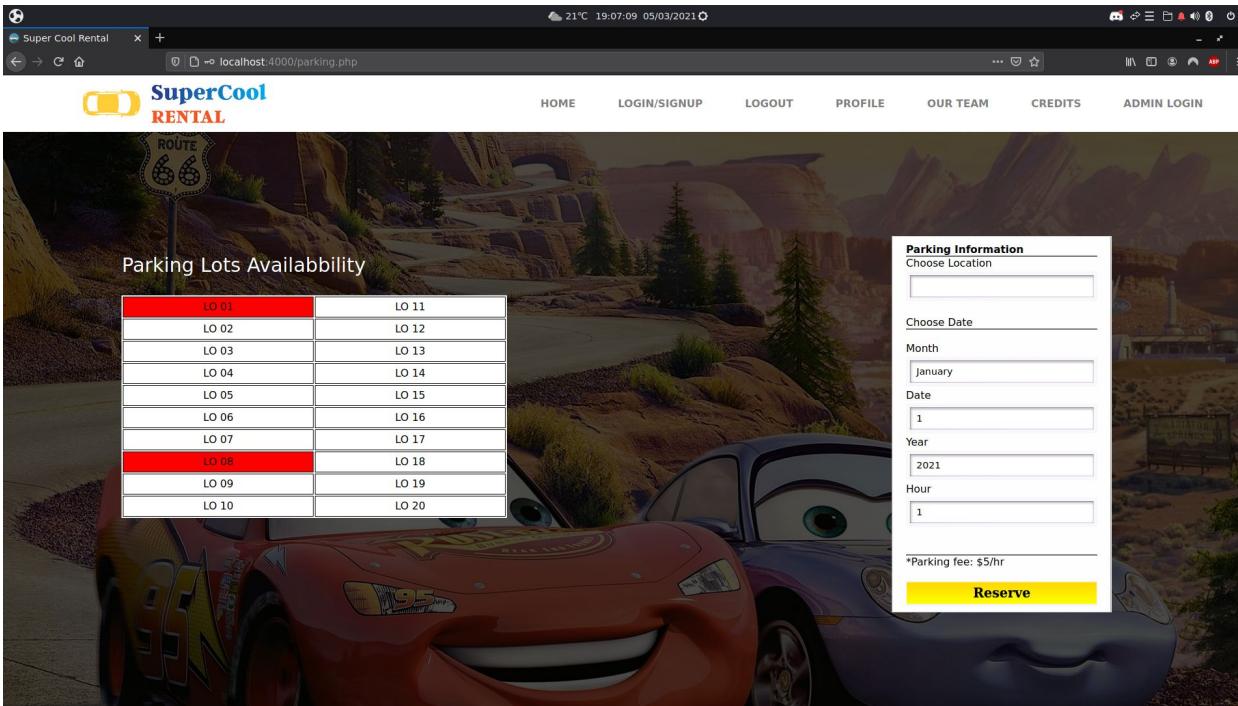




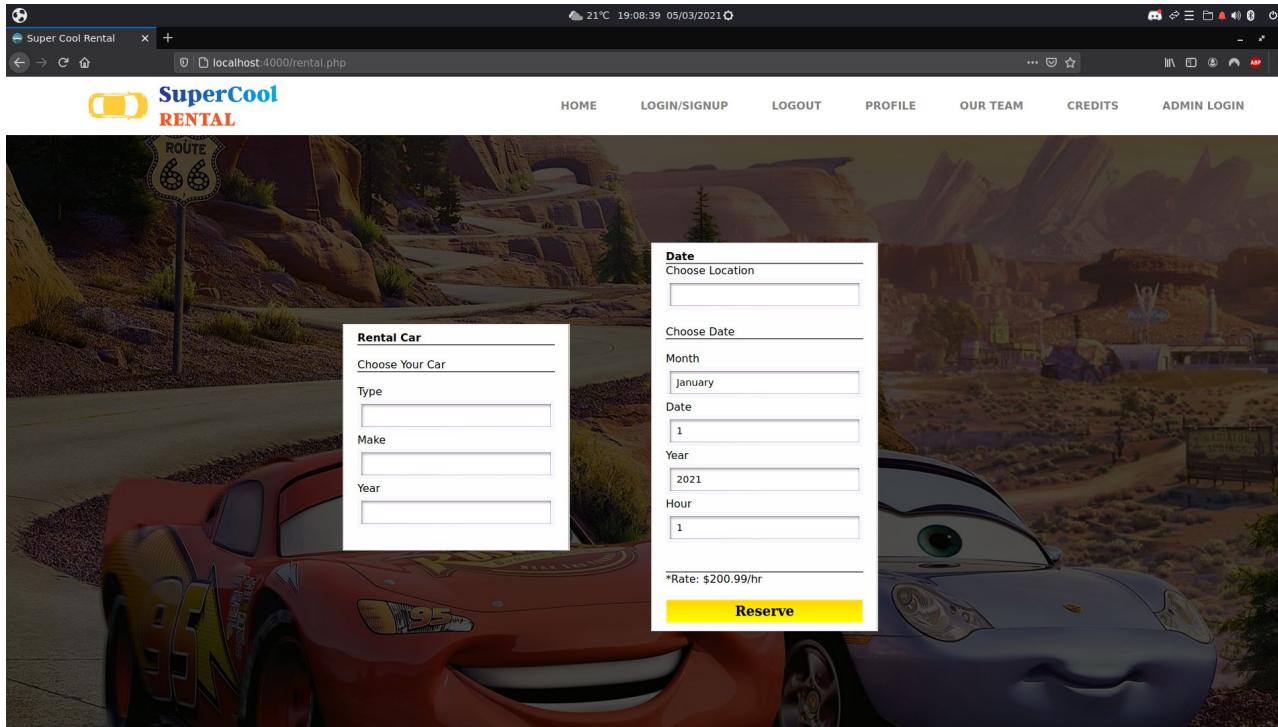
Sign Up/Login for New Users



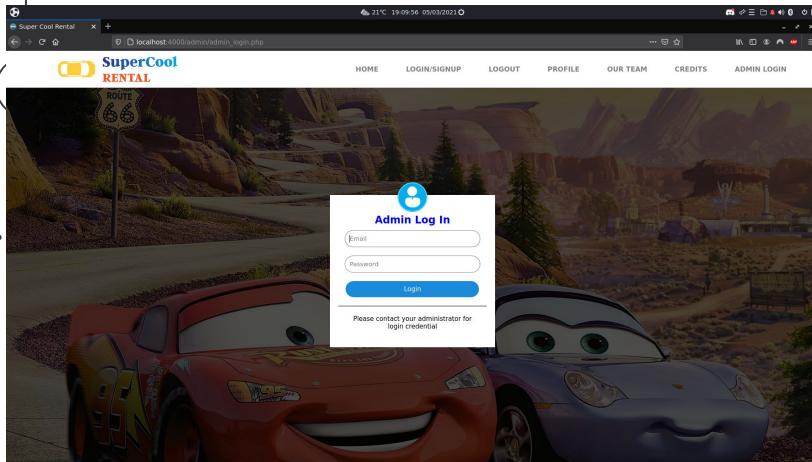
Purchase a Parking Spot



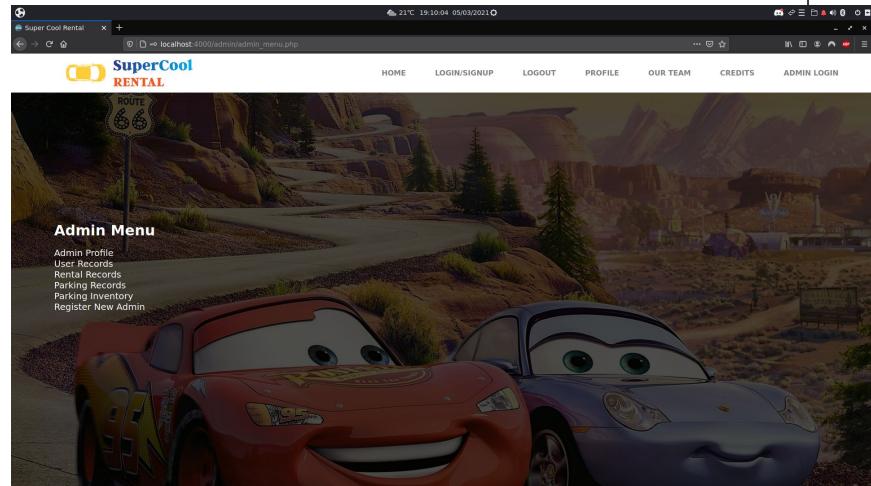
Reserve A Car Rental



Admin Functions



Admin login credential
[admin@admin.com](#)
password



05

Demonstration