FSD Internal - I

Week-1. Write a program to create a simple webpage using HTML.

```
<!DOCTYPE html>
<html>
<body>
<h1>My First Heading</h1>
<p>My first paragraph.</p>
</body>
</html>
```

Week-2. Write a program to create a website using HTML CSS and JavaScript?

```
<!DOCTYPE html>
<html>
<head>
<script>
function validateForm() {
let x = document.forms["myForm"]["fname"].value; if (x == "") {
alert("Name must be filled out");
return false;
}
</script>
</head>
<body>
<h2>JavaScript Validation</h2>
<form name="myForm" onsubmit="return validateForm()" method="post">
Name: <input type="text" name="fname">
<input type="submit" value="Submit">
</form>
</body>
</html>
```

Week-3. Write a program to build a Chat module using HTML CSS and JavaScript?

```
<div class="chat-box">
  <header>
    <h1>André F. Martins</h1>
    <span style="flex: 1"></span>
    <span class="close-button">X</span>
  </header>
  <section id="message-list"></section>
  <footer>
    <input id="message-input" type="text" placeholder="Type a message...">
  </footer>
</div>

<style>
  * {
    box-sizing: border-box;
  }
  ::selection {
    background: #fd0;
    color: #222;
  }
  body {
    font-family: "Karla", sans-serif;
    margin: 0;
    display: flex;
    align-items: center;
  justify-content: center;
  width: 100vw;
  height: 100vh;
  font-size: 16px;
  background-color: #ddd;
}
.chat-box {
  width: 300px;
  height: 400px;
  background-color: #eee;
  border-radius: 16px 16px 0 0;
  overflow: hidden;
  border: 2px #45f solid;
}
header {
  background-color: #45f;
  color: #fff;
  display: flex;
  padding: 0 16px;
}
header > * {
  line-height: 40px;
}
h1 {
  margin: 0;
  font-size: 1.1em;
}
.close-button {
  cursor: pointer;
  user-select: none;
}
section {
  overflow-y: scroll;
  overflow-x: hidden;
  height: calc(100% - 80px);
  padding: 12px;
}
div {
  margin: 12px 0;
}
span {
  display: inline-block;
  padding: 6px 8px;
  margin: 1px 0;
  max-width: 90%;
  word-wrap: break-word;
}
div.me {
  text-align: left;
}
div.me span {
  background-color: #68c;
  border-radius: 4px 16px 16px 4px;
}
div.me span:first-of-type {
  border-top-left-radius: 16px;
}
div.me span:last-of-type {
  border-bottom-left-radius: 16px;
}
div.not-me {
  text-align: right;
}
```

```
  div.not-me span {
    background-color: #bcf;
    border-radius: 16px 4px 4px 16px;
  }
  div.not-me span:first-of-type {
    border-top-right-radius: 16px;
  }
  div.not-me span:last-of-type {
    border-bottom-right-radius: 16px;
  }
  footer input {
    font-family: "Karla", sans-serif;
    outline: 0;
    padding: 0 12px;
    height: 40px;
    width: 100%;
    font-size: 1em;
  }
</style>

<script>
  function sendMessage(message, itsMe) {
    var messageList = document.getElementById("message-list");

    var scrollToBottom = messageList.scrollHeight - messageList.scrollTop - messageList.clientHeight < 80;
    var lastMessage = messageList.children[messageList.children.length - 1];

    var newMessage = document.createElement("span");
    newMessage.innerHTML = message;
    var className;

    if (itsMe) {
      className = "me";
      scrollToBottom = true;
    } else {
      className = "not-me";
    }

    if (lastMessage && lastMessage.classList.contains(className)) {
      lastMessage.appendChild(document.createElement("br"));
      lastMessage.appendChild(newMessage);
    } else {
      var messageBlock = document.createElement("div");
      messageBlock.classList.add(className);
      messageBlock.appendChild(newMessage);
      messageList.appendChild(messageBlock);
    }

    if (scrollToBottom) messageList.scrollTop = messageList.scrollHeight;
  }

  var message = document.getElementById("message-input");
  message.addEventListener("keypress", function (event) {
    var key = event.which || event.keyCode;
    if (key === 13 && this.value.trim() !== "") {
      sendMessage(this.value, true);
      this.value = "";
    }
  });

  sendMessage("Hello!", true);
  sendMessage("Hey!", false);
  sendMessage("How are you doing?", false);
  sendMessage("I'm doing well.", true);
  sendMessage("What about you?", true);
  sendMessage("Good", false);

  function sendRandomMessages() {
    var messageList = [
      "What is your biggest concern about the future?",
      "What is your biggest fear?",
      "At what age would you consider someone to be old?",
      "What is your favorite home cooked dish?",
      "What is the biggest priority in your life right now?",
      "Where did you go on your last vacation?",
      "What was the biggest life change you've gone through?",
      "Do you have any siblings?",
      "What's your family like?",
      "If you knew that you only had a year left to live, what would you do?",
      "What do you usually eat in the morning?",
      "What's in your fridge?",
      "Do you recycle?",
      "What are some things that you should not say during a job interview?",
      "If you could go back in time and change one thing, what would it be?",
      "What do you wear to sleep?",
      "What is the last thing you do before you go to sleep?",
      "If you could only eat one thing for the rest of your life, what would it be?",
      "Would you rather be homeless for a year or be in jail for a year?",
      "What do you do for fun?",
    ];
    var chosenMessage = messageList[Math.floor(Math.random() * messageList.length)];

    sendMessage(chosenMessage, false);

    setTimeout(sendRandomMessages, Math.random() * 10000 + 7000);
  }
  sendRandomMessages();
</script>
```

Week-6. Write a program to create and Build a Password Strength Check using Jquery.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Password Strength Checker</title>
  <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-
awesome.min.css">
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/bootstrap.min.css">
  <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js"></script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/js/bootstrap.min.js"></script>
  <script src="CheckPasswordStrength.js"></script>
  <link href="CheckPasswordStrength.css" rel="stylesheet" />
  <style>
    .Short {
      width: 100%;
      background-color: #dc3545;
      margin-top: 5px;
      height: 3px;
      color: #dc3545;
      font-weight: 500;
      font-size: 12px;
    }
    .Weak {
      width: 100%;
      background-color: #ffc107;
      margin-top: 5px;
      height: 3px;
      color: #ffc107;
      font-weight: 500;
      font-size: 12px;
    }
    .Good {
      width: 100%;
      background-color: #28a745;
      margin-top: 5px;
      height: 3px;
      color: #28a745;
      font-weight: 500;
      font-size: 12px;
    }
    .Strong {
      width: 100%;
      background-color: #d39e00;
      margin-top: 5px;
      height: 3px;
      color: #d39e00;
      font-weight: 500;
      font-size: 12px;
    }
  </style>
</head>
<body>
  <form id="form1" runat="server">
    <div class="container py-3">
      <h4 class="text-center text-uppercase">How to check password strength in jQuery</h4>
      <div class="row">
        <div class="col-md-12">
          <div class="row">
            <div class="col-md-6 mx-auto">
              <div class="card border-secondary">
                <div class="card-header">
                  <h3 class="mb-0 my-2">Sign Up</h3>
                </div>
                <div class="card-body">
                  <div class="form-group">
                    <label>Name</label>
                    <div class="input-group">
                      <div class="input-group-prepend">
                        <span class="input-group-text"><i class="fa fa-user"></i></span>
                      </div>
                      <asp:TextBox ID="txtFirstName" runat="server" CssClass="form-control"></asp:TextBox>
                    </div>
                  </div>

                  <div class="form-group">
                    <label>Phone Number</label>
                    <div class="input-group">
                      <div class="input-group-prepend">
                        <span class="input-group-text"><i class="fa fa-phone"></i></span>
                      </div>
                      <asp:TextBox ID="txtPhoneNumber" runat="server" CssClass="form-control"></asp:TextBox>
                    </div>
                  </div>

                  <div class="form-group">
                    <label>Email</label>
                    <div class="input-group">
```

```
                      <div class="input-group-prepend">
                        <span class="input-group-text"><i class="fa fa-envelope"></i></span>
                      </div>
                      <asp:TextBox ID="txtEmail" runat="server" CssClass="form-control"></asp:TextBox>
                    </div>
                  </div>

                  <div class="form-group">
                    <label>Password</label>
                    <div class="input-group">
                      <div class="input-group-prepend">
                        <span class="input-group-text"><i class="fa fa-lock"></i></span>
                      </div>
                      <asp:TextBox ID="txtPassword" runat="server" TextMode="Password" CssClass="form-
control"></asp:TextBox>
                    </div>
                    <div id="strengthMessage"></div>
                  </div>

                  <div class="form-group">
                    <label>Confirm Password</label>
                    <div class="input-group">
                      <div class="input-group-prepend">
                        <span class="input-group-text"><i class="fa fa-lock"></i></span>
                      </div>
                      <asp:TextBox ID="txtConfirmPassword" runat="server" TextMode="Password"
CssClass="form-control"></asp:TextBox>
                    </div>
                  </div>

                  <div class="form-group">
                    <button type="submit" class="btn btn-success float-right rounded-0">Register</button>
                  </div>
                </div>
              </div>
            </div>
          </div>
        </div>
      </div>
    </div>
  </form>

  <script>
    $(document).ready(function () {
      $('#txtPassword').keyup(function () {
        $('#strengthMessage').html(checkStrength($('#txtPassword').val()));
      });

      function checkStrength(password) {
        var strength = 0;
        if (password.length < 6) {
          $('#strengthMessage').removeClass();
          $('#strengthMessage').addClass('Short');
          return 'Too short';
        }
        if (password.length > 7) strength += 1;

        if (password.match(/([a-z].*[A-Z])|([A-Z].*[a-z])/)) strength += 1;
        if (password.match(/([a-zA-Z])/) && password.match(/([0-9])/)) strength += 1;
        if (password.match(/([!,%,&,@,#,$,^,*,?,_,~])/)) strength += 1;
        if (password.match(/(.*[!,%,&,@,#,$,^,*,?,_,~].*[!,%,&,@,#,$,^,*,?,_,~])/)) strength += 1;

        if (strength < 2) {
          $('#strengthMessage').removeClass();
          $('#strengthMessage').addClass('Weak');
          return 'Weak';
        } else if (strength == 2) {
          $('#strengthMessage').removeClass();
          $('#strengthMessage').addClass('Good');
          return 'Good';
        } else {
          $('#strengthMessage').removeClass();
          $('#strengthMessage').addClass('Strong');
          return 'Strong';
        }
      }
    });
  </script>
</body>
</html>
```

Week-7. Write a program to create and Build a star rating system using Jquery.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>jQuery Simple Star Rating Example</title>

  <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/twitter-
bootstrap/4.4.1/css/bootstrap.min.css">
  <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-
awesome.min.css">


  <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>

  <script src="https://cdnjs.cloudflare.com/ajax/libs/twitter-bootstrap/4.4.1/js/bootstrap.min.js"></script>

  <style>
    body {
      background-color: aquamarine;
      margin: 0;
    }
    .fa-star {
      font-size: 50px;
      align-content: center;
      cursor: pointer;
    }
    .container {
      height: 100px;
      width: 600px;
      margin: auto;
      text-align: center;
    }
  </style>
</head>
<body>

  <div class="container">
    <h2 style="margin-top: 50px;">jQuery Simple Star Rating Example</h2>
    <div class="con">
      <h3 style="margin-top: 80px; color: green;">Rate our product:</h3>
      <i class="fa fa-star" aria-hidden="true" id="st1"></i>
      <i class="fa fa-star" aria-hidden="true" id="st2"></i>
      <i class="fa fa-star" aria-hidden="true" id="st3"></i>
      <i class="fa fa-star" aria-hidden="true" id="st4"></i>
      <i class="fa fa-star" aria-hidden="true" id="st5"></i>
    </div>
  </div>

  <script>
    $(document).ready(function() {
      $("#st1").click(function() {
        $(".fa-star").css("color", "black");
        $("#st1").css("color", "yellow");
      });

      $("#st2").click(function() {
        $(".fa-star").css("color", "black");
        $("#st1, #st2").css("color", "yellow");
      });

      $("#st3").click(function() {
        $(".fa-star").css("color", "black");
        $("#st1, #st2, #st3").css("color", "yellow");
      });

      $("#st4").click(function() {
        $(".fa-star").css("color", "black");
        $("#st1, #st2, #st3, #st4").css("color", "yellow");
      });

      $("#st5").click(function() {
        $(".fa-star").css("color", "black");
        $("#st1, #st2, #st3, #st4, #st5").css("color", "yellow");
      });
    });
  </script>

</body>
</html>
```

Week-8. Create a Simple Login form using React js.

App.js:

```
import './App.css';
import React, { useState } from "react";

function App() {
  // React States
  const [errorMessages, setErrorMessages] = useState({});
  const [isSubmitted, setIsSubmitted] = useState(false);

  // User Login info
  const database = [
    {
      username: "user1",
      password: "pass1"
    },
    {
      username: "user2",
      password: "pass2"
    }
  ];

  const errors = {
    uname: "invalid username",
    pass: "invalid password"
  };

  const handleSubmit = (event) => {
    // Prevent page reload
    event.preventDefault();
    var { uname, pass } = document.forms[0];

    // Find user login info
    const userData = database.find((user) => user.username === uname.value);

    // Compare user info
    if (userData) {
      if (userData.password !== pass.value) {
        // Invalid password
        setErrorMessages({ name: "pass", message: errors.pass });
      } else {
        setIsSubmitted(true);
      }
    } else {
      // Username not found
      setErrorMessages({ name: "uname", message: errors.uname });
    }
  };

  // Generate JSX code for error message
  const renderErrorMessage = (name) =>
    name === errorMessages.name && (
      <div className="error">{errorMessages.message}</div>
    );

  // JSX code for login form
  const renderForm = (
    <div className="form">
      <form onSubmit={handleSubmit}>
        <div className="input-container">
          <label>Username </label>
          <input type="text" name="uname" required />
          {renderErrorMessage("uname")}
        </div>
        <div className="input-container">
          <label>Password </label>
          <input type="password" name="pass" required />
          {renderErrorMessage("pass")}
        </div>
        <div className="button-container">
          <input type="submit" />
        </div>
      </form>
    </div>
  );

  return (
    <div className="app">
      <div className="login-form">
        <div className="title">Sign In</div>
        {isSubmitted ? <div>User is successfully logged in</div> : renderForm}
      </div>
    </div>
  );
}
```

```
export default App;
```

App.css

```css
.app {
  font-family: sans-serif;
  display: flex;
  align-items: center;
  justify-content: center;
  flex-direction: column;
  gap: 20px;
  height: 100vh;
  font-family: Cambria, Cochin, Georgia, Times, "Times New Roman", serif;
  background-color: #f8f9fd;
}

input[type="text"],
input[type="password"] {
  height: 25px;
  border: 1px solid rgba(0, 0, 0, 0.2);
}

input[type="submit"] {
  margin-top: 10px;
  cursor: pointer;
  font-size: 15px;
  background: #01d28e;
  border: 1px solid #01d28e;
  color: #fff;
  padding: 10px 20px;
}

input[type="submit"]:hover {
  background: #6cf0c2;
}

.button-container {
  display: flex;
  justify-content: center;
}

.login-form {
  background-color: white;
  padding: 2rem;
  box-shadow: 0 4px 8px 0 rgba(0, 0, 0, 0.2), 0 6px 20px 0 rgba(0, 0, 0, 0.19);
}

.list-container {
  display: flex;
}

.error {
  color: red;
  font-size: 12px;
}

.title {
  font-size: 25px;
  margin-bottom: 20px;
}

.input-container {
  display: flex;
  flex-direction: column;
  gap: 8px;
  margin: 10px;
}
```

index.js

```
import React from 'react';
import ReactDOM from 'react-dom';
import './index.css';
import App from './App';

ReactDOM.render(
  <React.StrictMode>
    <App />
  </React.StrictMode>,
  document.getElementById('root')
);
```

Steps to Run:

Create a React app if you haven't yet:

```
npx create-react-app my-app
```

Replace the src/App.js, src/App.css, and src/index.js files with the corresponding code above.

Run your React app:

```
npm start
```