



MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(AUTONOMOUS INSTITUTION - UGC, GOVT. OF INDIA)

Affiliated to JNTUH; Approved by AICTE, NBA-Tier 1 & NAAC with A-GRADE | ISO 9001:2015
Maisammaguda, Dhulapally, Komapally, Secunderabad - 500100, Telangana State, India

Name:

Roll No: Branch:

Year: Sem:



FULL STACK DEVELOPMENT LAB LABORATORY MANUAL

(R20A0589)



B.TECH (III YEAR – II SEM)

(2022-23)



**DEPARTMENT OF COMPUTATIONAL
INTELLIGENCE (CSE-AIML,AIML,AI&DS)**

**MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous Institution – UGC, Govt. of India)**

Recognized under 2(f) and 12 (B) of UGC ACT 1956 Affiliated
to JNTUH, Hyderabad, Approved by AICTE - Accredited by NBA Tier 1 &
NAAC – ‘A’ Grade - ISO 9001:2015 Certified) Maisammaguda,
Dhulapally (Post Via. Hakimpet), Secunderabad – 500100, Telangana State, India



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Certificate

Certified that this is the Bonafide Record of the Work Done by
Mr./Ms.....Roll.No.....of
B.Tech.....year..... Semester for Academic year.....
in.....Laboratory.

Date:

Faculty Incharge

HOD

Internal Examiner

External Examiner

SNO	DATE	NO of Experiments	Grade	Marks
Week-1		Write a program to create a simple webpage using HTML.		
Week-2		Write a program to create a website using HTML CSS and JavaScript		
Week-3		Write a program to build a Chat module using HTML CSS and JavaScript		
Week-4		Write a program to create a simple calculator Application using React JS		
Week-5		Write a program to create a voting application using React JS		
Week-6		Write a program to create and Build a Password Strength Check using JQuery		
Week-7		Write a program to create and Build a star rating system using JQuery		
Week-8		Create a Simple Login form using React JS		
Week-9		Using the CMS users must be able to design a web page using the drag and drop method		

Week-10		Create a project on Grocery delivery application		
Week-11		Connecting our TODO React js Project with Firebase		

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

PEO1: PROFESSIONALISM & CITIZENSHIP

To create and sustain a community of learning in which students acquire knowledge and learn to apply it professionally with due consideration for ethical, ecological and economic issues.

PEO2: TECHNICAL ACCOMPLISHMENTS

To provide knowledge based services to satisfy the needs of society and the industry by providing hands on experience in various technologies in core field.

PEO3: INVENTION, INNOVATION AND CREATIVITY

To make the students to design, experiment, analyze, interpret in the core field with the help of other multi disciplinary concepts wherever applicable.

PEO4: PROFESSIONAL DEVELOPMENT

To educate the students to disseminate research findings with good soft skills and become a successful entrepreneur.

PEO5: HUMAN RESOURCE DEVELOPMENT

To graduate the students in building national capabilities in technology, education and research.

PROGRAM SPECIFIC OUTCOMES (PSOs)

After the completion of the course, B. Tech Information Technology, the graduates will have the following Program Specific Outcomes:

1. **Fundamentals and critical knowledge of the Computer System:-** Able to Understand the working principles of the computer System and its components , Apply the knowledge to build, asses, and analyze the software and hardware aspects of it .
2. **The comprehensive and Applicative knowledge of Software Development:** Comprehensive skills of Programming Languages, Software process models, methodologies, and able to plan, develop, test, analyze, and manage the software and hardware intensive systems in heterogeneous platforms individually or working in teams.

Applications of Computing Domain & Research: Able to use the professional, managerial, interdisciplinary skill set, and domain specific tools in development processes, identify the research gaps, and provide innovative solutions to them.

PROGRAM OUTCOMES (POs)

Engineering Graduates should possess the following:

1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. **Design / development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
6. **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as,

being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

11. Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multi disciplinary environments.

12. Life- long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

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DEPARTMENT OF COMPUTATIONAL INTELLIGENCE (CSE-AIML,AIML,AI&DS)

GENERAL LABORATORY INSTRUCTIONS

1. Students are advised to come to the laboratory atleast 5 minutes before (to the starting time), those who come after 5minutes will not be allowed into the lab.
2. Plan your task properly much before to the commencement, come prepared to the lab with the synopsis / program / experiment details.
3. Student should enter into the laboratory with:
 - a) Laboratory observation notes with all the details (Problem statement, Aim, Algorithm, Procedure, Program, Expected Output, etc.,) filled in for the lab session.
 - b) Laboratory Record updated upto the last session experiments and other utensils (if any)needed in the lab.
 - c) Proper Dress code and Identity card.
4. Sign in the laboratory login register, write the TIME-IN, and occupy the computer system allotted to you by the faculty.
5. Executeyourtaskinthelaboratory,andrecordtheresults/outputinthelabobservationnote book,a nd get certified by the concerned faculty.
6. All the students should be polite and cooperative with the laboratory staff, must maintain the discipline and decency in the laboratory.
7. Computer labs are established with sophisticated and highend branded systems, which should be utilized properly.

8. Students / Faculty must keep their mobile phones in SWITCHED OFF mode during the lab sessions. Misuse of the equipment, misbehaviors with the staff and systems etc., will attract severe punishment.

9. Students must take the permission of the faculty in case of any urgency to go out; if any body found loitering outside the lab / class without permission during working hours will be treated seriously and punished appropriately.

10. Students should LOG OFF/ SHUT DOWN the computer system before he/she leaves the lab after completing the task (experiment) in all aspects. He/she must ensure the system / seat is kept properly.

HEAD OF THE DEPARTMENT

PRINCIPAL

MALLA REDDY COLLEGE OF ENGINEERING AND TECHNOLOGY

III Year B.Tech. CSE- II Sem

L/T/P/C

0-/3/-1.5

(R20A0589) FULL STACK DEVELOPMENT LAB

COURSE OBJECTIVES:

This course will enable the students:

1. Usage of various front and back end Tools
2. They can understand and create applications on their own
3. Demonstrate and Designing of Websites can be carried out.
4. Develop web based application using suitable client side and server side code.
5. Implement web based application using effective database access.

PROGRAMS:

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

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

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

Week-4. Write a program to create a simple calculator Application using React JS

Week-5. Write a program to create a voting application using React JS

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

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

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

Week-9. Create a blog using React JS

Using the CMS users must be able to design a web page using the drag and drop method. Users should be able to add textual or media content into placeholders that are attached to locations on the web page using drag and drop method.

Week-10. Create a project on Grocery delivery application

Assume this project is for a huge online departmental store. Assume that they have a myriad of grocery items at their godown. All items must be listed on the website, along with their quantities and prices. Users must be able to sign up and purchase groceries. The system should present him with delivery slot options, and the user must be able to choose his preferred slot. Users must then be taken to the payment page where he makes the payment with his favourite method.

Week-11. Connecting our TODO React js Project with Firebase

COURSE OBJECTIVES:

Students will be able to understand

1. Usage of various front and back end Tools
2. They can understand and create applications on their own
3. Demonstrate and Designing of Websites can be carried out.
4. Develop web based application using suitable client side and server side code.
5. Implement web based application using effective database access.

PROGRAMS

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>
```

OUTPUT:

My First Heading

My first paragraph.

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

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <title>Collecting Data</title>
  <script src=
"https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js">
  </script>

  <link rel="stylesheet" href=
"https://cdn.jsdelivr.net/npm/bootstrap@4.5.3/dist/css/bootstrap.min.css"
    integrity=
    "sha384-
    TX8t27EcRE3e/ihU7zmQxVncDAy5uIKz4rEkglIXeMed4M0jlfIDPvg6uqKI2xX
    r2"
    crossorigin="anonymous">
</head>

<body class="container" style="margin-top: 50px;
  width: 50%; height:auto;">

  <h2 class="text-primary" style=
    "margin-left: 15px; margin-bottom: 10px">
    Hey There,Help Us In Collecting Data
  </h2>

  <form class="container" id="contactForm">
    <div class="card">
      <div class="card-body">
        <div class="form-group">
          <label for="exampleFormControlInput1">
            Enter Your Name
          </label>

          <input type="text" class="form-control"
            id="name" placeholder="Enter your name">
        </div>
      </div>
    </div>
  </form>
</body>
</html>
```

```
</div>

<div class="form-group">
  <label for="exampleFormControlInput1">
    Email address
  </label>

  <input type="email" class="form-control"
    id="email" placeholder="name@example.com">
</div>
</div>
<button type="submit" class="btn btn-primary"
  style="margin-left: 15px; margin-top: 10px">
  Submit
</button>
</div>
</form>
```

```
<script src=
"https://www.gstatic.com/firebasejs/3.7.4/firebase.js">
</script>
```

```
<script>
var firebaseConfig = {
  apiKey: "Use Your Api Key Here",
  authDomain: "Use Your authDomain Here",
  databaseURL: "Use Your databaseURL Here",
  projectId: "Use Your projectId Here",
  storageBucket: "Use Your storageBucket Here",
  messagingSenderId: "Use Your messagingSenderId Here",
  appId: "Use Your appId Here"
};

firebase.initializeApp(firebaseConfig);

var messagesRef = firebase.database()
  .ref('Collected Data');

document.getElementById('contactForm')
```



```
.addEventListener('submit', submitForm);

function submitForm(e) {
  e.preventDefault();

  // Get values
  var name = getInputVal('name');
  var email = getInputVal('email');

  saveMessage(name, email);
  document.getElementById('contactForm').reset();
}

// Function to get get form values
function getInputVal(id) {
  return document.getElementById(id).value;
}

// Save message to firebase
function saveMessage(name, email) {
  var newMessageRef = messagesRef.push();
  newMessageRef.set({
    name: name,
    email: email,
  });
}
</script>
</body>

</html>
Output:
```



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

```
<div class="container">  
    
  <p>Hello. How are you today?</p>  
  <span class="time-right">11:00</span>  
</div>
```

```
<div class="container darker">  
    
  <p>Hey! I'm fine. Thanks for asking!</p>  
  <span class="time-left">11:01</span>  
</div>
```

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

```
<p>Sweet! So, what do you wanna do today?</p>
<span class="time-right">11:02</span>
</div>
```

```
<div class="container darker">
  
  <p>Nah, I dunno. Play soccer.. or learn more coding perhaps?</p>
  <span class="time-left">11:05</span>
</div>
```

```
/* Chat containers */
```

```
.container {
  border: 2px solid #dedede;
  background-color: #f1f1f1;
  border-radius: 5px;
  padding: 10px;
  margin: 10px 0;
}
```

```
/* Darker chat container */
```

```
.darker {
  border-color: #ccc;
  background-color: #ddd;
}
```

```
/* Clear floats */
```

```
.container::after {
  content: "";
  clear: both;
  display: table;
}
```

```
/* Style images */
```

```
.container img {
  float: left;
  max-width: 60px;
  width: 100%;
  margin-right: 20px;
  border-radius: 50%;
}
```

```
/* Style the right image */
```

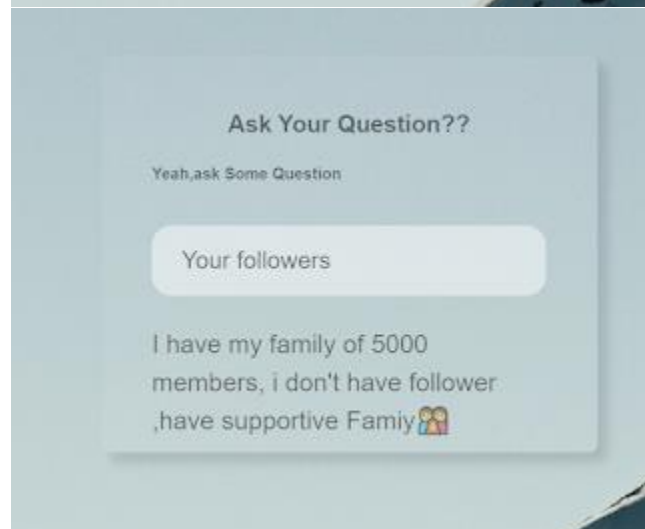
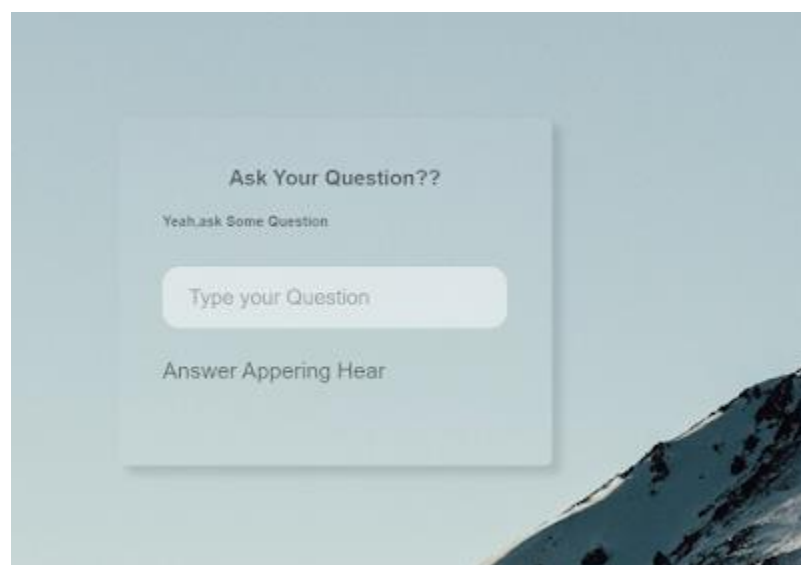
```
.container img.right {  
  float: right;  
  margin-left: 20px;  
  margin-right: 0;  
}
```

```
/* Style time text */
```

```
.time-right {  
  float: right;  
  color: #aaa;  
}
```

```
/* Style time text */
```

```
.time-left {  
  float: left;  
  color: #999;  
}
```



Week-4. Write a program to create a simple calculator Application using React JS

```
class App extends Component {
  constructor() {
    super()
    this.state = { operations: [] }
  }
  ....
}
render() {
  return (
    <div className="App">
      <Display data={this.state.operations} />
      <Buttons>
        <Button onClick={this.handleClick} label="C" value="clear" />
        <Button onClick={this.handleClick} label="7" value="7" />
        <Button onClick={this.handleClick} label="4" value="4" />
        <Button onClick={this.handleClick} label="1" value="1" />
        <Button onClick={this.handleClick} label="0" value="0" />      <Button
onClick={this.handleClick} label="/" value="/" />
        <Button onClick={this.handleClick} label="8" value="8" />
        <Button onClick={this.handleClick} label="5" value="5" />
        <Button onClick={this.handleClick} label="2" value="2" />
        <Button onClick={this.handleClick} label="." value="." />      <Button
onClick={this.handleClick} label="x" value="*" />
        <Button onClick={this.handleClick} label="9" value="9" />
        <Button onClick={this.handleClick} label="6" value="6" />
        <Button onClick={this.handleClick} label="3" value="3" />
        <Button label="" value="null" />      <Button onClick={this.handleClick}
label="-" value="-" />
        <Button onClick={this.handleClick} label="+" size="2" value="+" />
        <Button onClick={this.handleClick} label="=" size="2" value="equal" />
      </Buttons>
    </div>
  )
}
class Buttons extends Component {
  render() {
    return <div className="Buttons"> {this.props.children} </div>
```

```

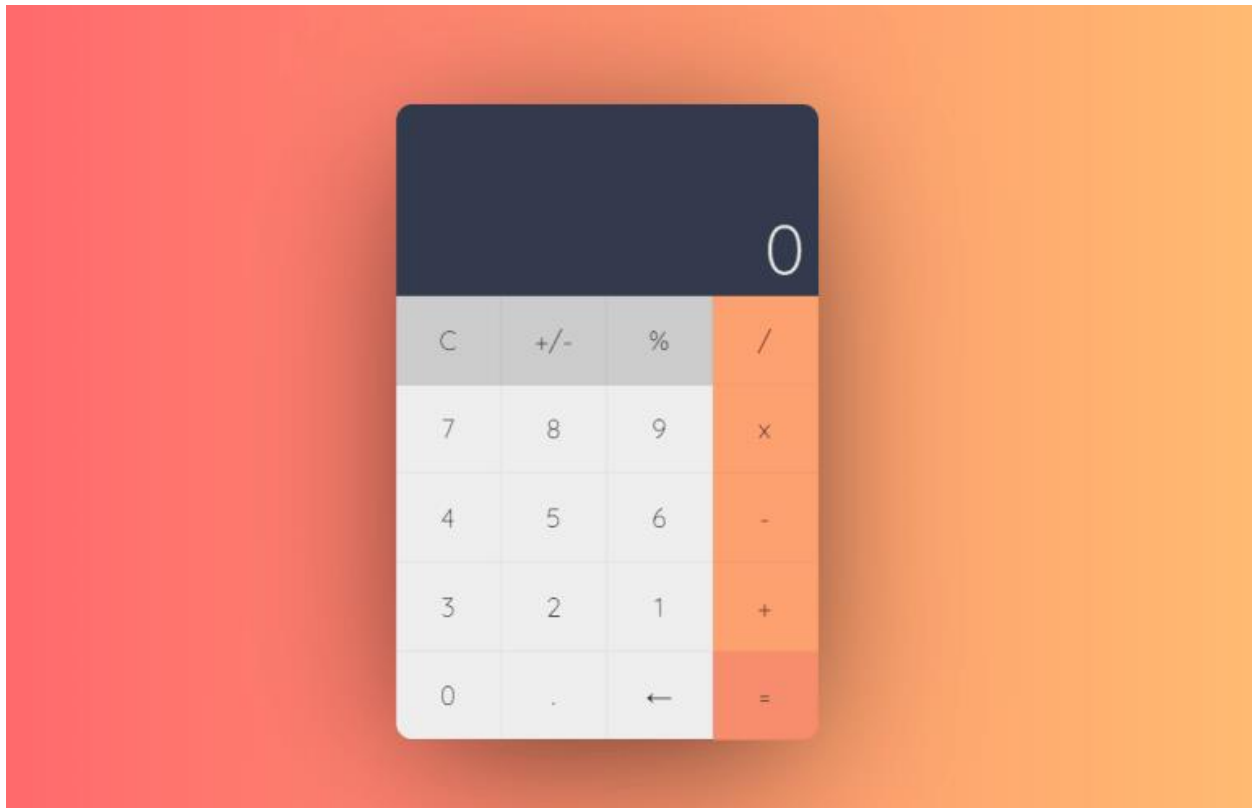
}
} class Button extends Component {
  render() {
    return (
      <div
        onClick={this.props.onClick}
        className="Button"
        data-size={this.props.size}
        data-value={this.props.value}
      >
        {this.props.label}
      </div>
    )
  }
}
class Display extends Component {
  render() {
    const string = this.props.data.join("")
    return <div className="Display"> {string} </div>
  }
}
handleClick = e => {
  const value = e.target.getAttribute('data-value')
  switch (value) {
    case 'clear':
      this.setState({
        operations: [],
      })
      break
    case 'equal':
      this.calculateOperations()
      break
    default:
      const newOperations = update(this.state.operations, {
        $push: [value],
      })
      this.setState({
        operations: newOperations,
      })
  }
}

```

```
    break  
  }
```

```
calculateOperations = () => {  
  let result = this.state.operations.join("")  
  if (result) {  
    result = math.eval(result)  
    result = math.format(result, { precision: 14 })  
    result = String(result)  
    this.setState({  
      operations: [result],  
    })  
  }  
}
```

OUTPUT:



Week-5. Write a program to create a voting application using React JS

CREATE

OR REPLACE VIEW "public"."poll_results" AS

SELECT

poll.id AS poll_id,

o.option_id,

count(*) AS votes

FROM

(

(

SELECT

vote.option_id,

option.poll_id,

option.text

FROM

(

vote

LEFT JOIN option ON ((option.id = vote.option_id))

)

) o

LEFT JOIN poll ON ((poll.id = o.poll_id))

)

GROUP BY

poll.question,

o.option_id,

poll.id;

CREATE

OR REPLACE VIEW "public"."online_users" AS

SELECT

count(*) AS count

FROM

"user"

WHERE

(

"user".last_seen_at > (now() - '00:00:15' :: interval)

);

import { ApolloClient, HttpLink, InMemoryCache, split } from "@apollo/client";

import { GraphQLWsLink } from '@apollo/client/link/subscriptions';

import { createClient } from "graphql-ws";

```

import { getMainDefinition } from "@apollo/client/utilities";
const GRAPHQL_ENDPOINT = "realtime-poll-example.hasura.app";

const scheme = (proto) =>
  window.location.protocol === "https:" ? `${proto}s` : proto;

const wsURI = `${scheme("ws")}://${GRAPHQL_ENDPOINT}/v1/graphql`;
const httpURL = `${scheme("https")}://${GRAPHQL_ENDPOINT}/v1/graphql`;
const splitter = ({ query }) => {
  const { kind, operation } = getMainDefinition(query) || {};
  const isSubscription =
    kind === "OperationDefinition" && operation === "subscription";
  return isSubscription;
};
const cache = new InMemoryCache();
const options = { reconnect: true };

const wsLink = new GraphQLWsLink(createClient({ url: wsURI,
connectionParams: { options } }));
const httpLink = new HttpLink({ uri: httpURL });
const link = split(splitter, wsLink, httpLink);
const client = new ApolloClient({ link, cache });

```

output:

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

```

<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"></s
cript>
<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" />

```

```

$(document).ready(function () {
    $('#txtPassword').keyup(function () {
        $('#strengthMessage').html(checkStrength($('#txtPassword').val()))
    })
    function checkStrength(password) {
        var strength = 0
        if (password.length < 6) {
            $('#strengthMessage').removeClass()
            $('#strengthMessage').addClass('Short')
            return 'Too short'
        }
        if (password.length > 7) strength += 1
        // If password contains both lower and uppercase characters, increase strength value.
        if (password.match(/[a-z].*[A-Z]|([A-Z].*[a-z])/)) strength += 1
        // If it has numbers and characters, increase strength value.
        if (password.match(/[a-zA-Z]/) && password.match(/[0-9]/)) strength += 1
        // If it has one special character, increase strength value.
        if (password.match(/([!%,&,@,#,$^*,?_,~])/)) strength += 1
        // If it has two special characters, increase strength value.
        if (password.match(/(. *([!%,&,@,#,$^*,?_,~]. *([!%,&,@,#,$^*,?_,~])/))
    ) strength += 1
        // Calculated strength value, we can return messages
        // If value is less than 2
        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'
        }
    }
}

```

```
));  
.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;  
}  
<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" Css
Class="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" Text
Mode="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="serv
er" 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>
</body>
```

HOW TO CHECK PASSWORD STRENGTH IN JQUERY

The image shows a 'Sign Up' form with the following fields and icons:

- Name: User icon
- Phone Number: Phone icon
- Email: Envelope icon
- Password: Lock icon and strength indicator (two dots)
- Confirm Password: Lock icon

A red error message 'Too short' is displayed below the Password field. A green 'Register' button is located at the bottom right of the form.

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

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

  });
```

```
<!DOCTYPE html>
<html lang = "en">
```

```
<head>
  <meta charset = "UTF-8">
  <meta name = "viewport" content="width=device-width, initial-
scale=1.0">
  <link rel = "stylesheet" href = "https://cdnjs.cloudflare.com/ajax/libs/twitter-
bootstrap/4.4.1/css/bootstrap.min.css">
  <script src = "https://cdnjs.cloudflare.com/ajax/libs/jquery/3.4.1/jquery.js">
</script>
  <script src = "https://cdnjs.cloudflare.com/ajax/libs/twitter-
bootstrap/4.4.1/js/bootstrap.min.js"> </script>
  <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.j
s"></script>
  <title> jQuery simple star rating example </title>
  <style>
body {
  background-color: aquamarine;
  margin : 0px;
}
.fa-star {
  font-size : 50px;
  align-content: center;
}
.container {
  height: 100px;
  width: 600px;
  margin: auto;
}
</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>
```

jQuery simple star rating example

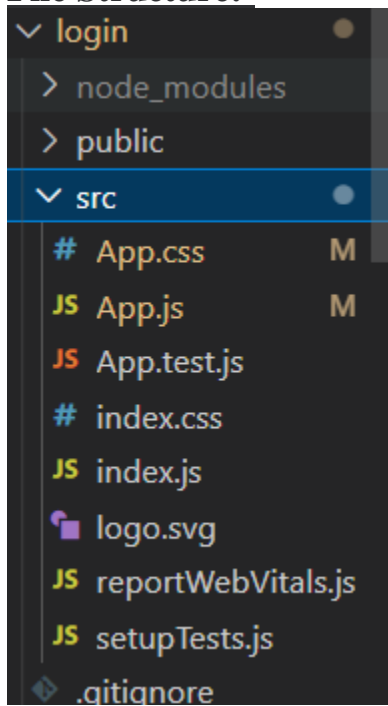
Rate our product :-



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

Now we are creating a login form which is a very important in any application or website as you know if open any website or application you will get a message to login if you click that you will be redirected to login page in this week we will be creating login page

File Structure:-



App.js

```
import './App.css';

import React, { useState } from "react";
import ReactDOM from "react-dom";

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 = {
```

```
  unname: "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
    setErrorMessage({ name: "pass", message: errors.pass });
  } else {
    setIsSubmitted(true);
  }
} else {
  // Username not found
  setErrorMessage({ 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;
```

-----Now Create a App.css file in same folder-----

App.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;  
}
```

Sign In

Username

Password

Submit

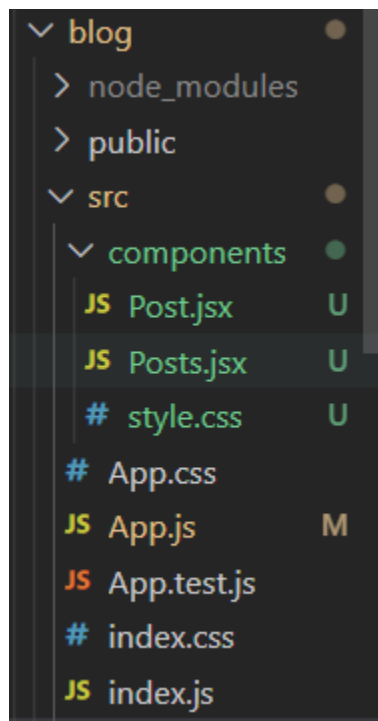
Week-9. Create a blog in React js

In this week we are going to create a blog website using react js

We have mainly 3 pages

- 1.App.js
- 2.Post.js
- 3.Posts.js

This is the Structure of the project



1.App.js

```
import logo from './logo.svg';
import './App.css';
import Posts from "./components/Posts";
function App() {
  return (
    <div className="main-container">
      <h1 className="main-heading">
        Blog App using React Js
      </h1>
      <Posts />
    </div>
  );
}

export default App;
```

2.Posts.js

```
import React from "react";
import './style.css';

import Post from './Post';

const Posts = () => {
  const blogPosts = [
    {
      title: "JAVASCRIPT",
      body: `JavaScript is the world most popular
      lightweight, interpreted compiled programming
      language. It is also known as scripting
      language for web pages. It is well-known for
      the development of web pages, many non-browser
```

```
environments also use it. JavaScript can be
used for Client-side developments as well as
Server-side developments`,
author: "Nishant Singh ",
imageUrl:
  "https://media.geeksforgeeks.org/img-practice/banner/diving-into-excel-
thumbnail.png",
},
{
  title: "Data Structure ",
  body: `There are many real-life examples of
a stack. Consider an example of plates stacked
over one another in the canteen. The plate
which is at the top is the first one to be
removed, i.e. the plate which has been placed
at the bottommost position remains in the
stack for the longest period of time. So, it
can be simply seen to follow LIFO(Last In
First Out)/FILO(First In Last Out) order.`,
  author: "Suresh Kr",
  imageUrl:
    "https://media.geeksforgeeks.org/img-practice/banner/coa-gate-2022-
thumbnail.png",
},
{
  title: "Algorithm",
  body: `The word Algorithm means “a process
or set of rules to be followed in calculations
or other problem-solving operations”. Therefore
Algorithm refers to a set of rules/instructions
that step-by-step define how a work is to be
executed upon in order to get the expected
results. `,
  author: "Monu Kr",
  imageUrl:
    "https://media.geeksforgeeks.org/img-practice/banner/google-test-series-
thumbnail.png",
},
{
```

```
    title: "Computer Network",
    body: `An interconnection of multiple devices,
    also known as hosts, that are connected using
    multiple paths for the purpose of sending/
    receiving data media. Computer networks can
    also include multiple devices/mediums which
    help in the communication between two different
    devices; these are known as Network devices
    and include things such as routers, switches,
    hubs, and bridges. `,
    author: "Sonu Kr",
    imgUrl:
      "https://media.geeksforgeeks.org/img-practice/banner/cp-maths-java-
      thumbnail.png",
  },
];

return (
  <div className="posts-container">
    {blogPosts.map((post, index) => (
      <Post key={index} index={index} post={post} />
    ))}
  </div>
);
};

export default Posts;
```

3.Post.js

```
import React from "react";
import "./style.css";
const Post = ({ post: { title, body,
imgUrl, author }, index }) => {
  return (
    <div className="post-container">
      <h1 className="heading">{title}</h1>
      <img className="image" src={imgUrl} alt="post" />
      <p>{body}</p>
      <div className="info">
        <h4>Written by: {author}</h4>
      </div>
    </div>
  );
};

export default Post;
```

Now we will style the project

Style.css in componenets folder

```
body {
  background-color: #0e9d57;
}
.posts-container {
  display: flex;
  justify-content: center;
  align-items: center;
}
.post-container {
  background: #e2e8d5;
  display: flex;
  flex-direction: column;
  padding: 3%;
  margin: 0 2%;
```

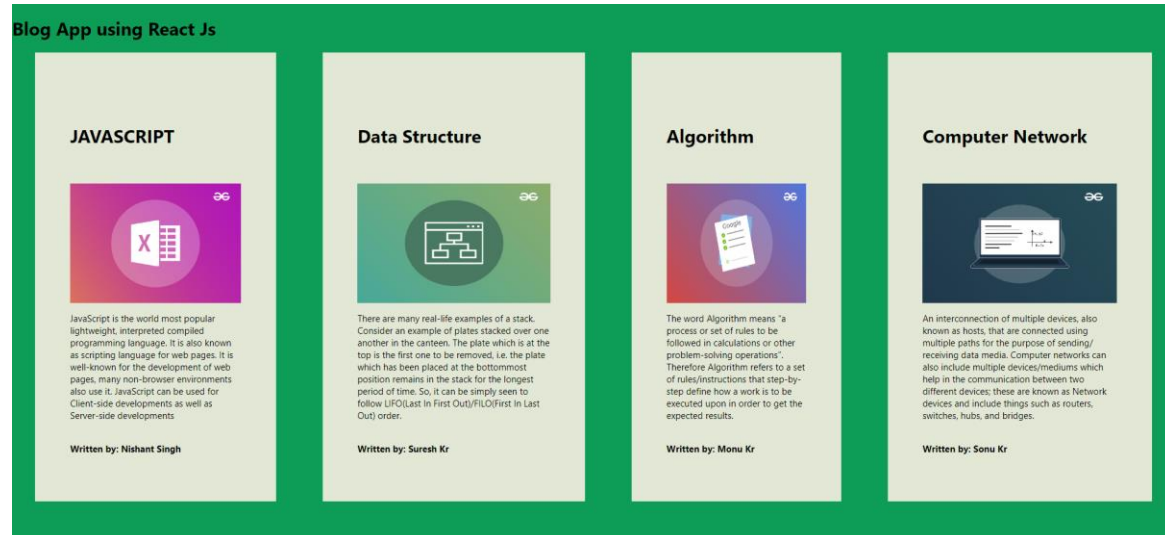


```

    height: 40%;
  }
  .heading {
    height: 126px;
    text-align: center;
    display: flex;
    align-items: center;
  }
  .image {
    width: 100%;
    height: 210px;
  }

```

OUTPUT

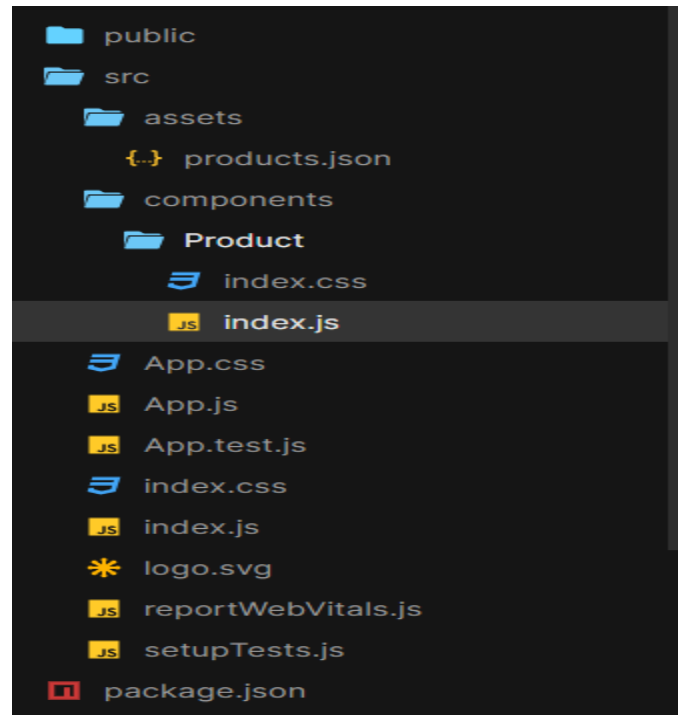


Week-10. Create a project on Grocery delivery application

Assume this project is for a huge online departmental store. Assume that they have a myriad of grocery items at their godown. All items must be listed on the website, along with their quantities and prices. Users must be able to sign up and purchase groceries. The system should present him with delivery slot options, and the user must be able to choose his preferred slot. Users must then be taken to the payment page where he makes the payment with his favorite method.

This week will have many pages like Header, footer, categories and app.jsx

File Structure:



App.jsx

```
import './index.css'
import './App.css'
import products from './assets/products.json'
import Product from './components/Product';
```

```

export default function App() {
  return (
    <div className={"container"}>
      <main className={"main"}>
        <h1>
          E-Commerce in React and SnipCart
        </h1>

        <div className={"grid"}>
          {
            products.map((product, i) => <Product {...product} key={i}/>)
          }
        </div>
      </main>
      <div
        id="snipcart"
        data-api-
key="NWMwZWNkZGMtZjU2ZS00YzM3LWFIZjYtMmM5Zjk0MWViZDcxNj
M3Njg0OTY0ODg5NTk4MTM3" hidden
      >
    </div>
  </div>
);
}

```

Components/Product/index.js

```

import "../index.css";

export default function Product(props) {
  const {id, imageUrl, name, description, price} = props

  return (
    <div
      key={id}
      className={"product"}
    >
      <img
        src={imageUrl}

```

```

        alt={`Image of ${name}`}
        className={"image-product"}
    />
    <h3>{name}</h3>
    <p>{description}</p>
    <span>${price}</span>
    <div>
        <button
            className="snipcart-add-item"
            data-item-id={id}
            data-item-image={imageUrl}
            data-item-name={name}
            data-item-url="/"
            data-item-price={price}
        >
            Add to Cart
        </button>
    </div>
</div>
);
}

```

Assets/products.json

```

[
  {
    "id": "t-shirt",
    "name": "Fruits",
    "price": 35.0,
    "imageUrl": "https://www.lalpathlabs.com/blog/wp-content/uploads/2019/01/Fruits-and-Vegetables.jpg",
    "description": "A Basket of fruits",
    "url": "/api/products/halfmoon"
  },
  {
    "id": "wallet",
    "name": "Vegitables",
    "price": 20.0,

```

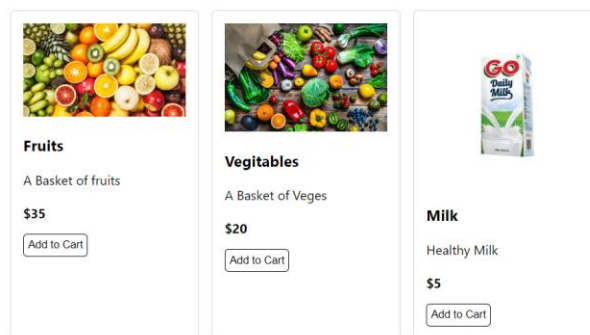
```

    "imageUrl": "https://img.freepik.com/free-photo/bottom-view-fruits-vegetables-
radish-cherry-tomatoes-persimmon-tomatoes-kiwi-cucumber-apples-red-cabbage-
parsley-quince-aubergines-blue-table_140725-146174.jpg",
    "description": "A Basket of Veges",
    "url": "/api/products/wallet"
  },
  {
    "id": "cup",
    "name": "Milk",
    "price": 5.0,
    "imageUrl": "https://encrypted-
tbn0.gstatic.com/images?q=tbn:ANd9GcSeujHMy6OLRZHTpsrUMVLsHyio1mZ
iZI4fMQ&usqp=CAU",
    "description": "Healthy Milk",
    "url": "/api/products/veiltail"
  }
]

```

Output

Grocery Website in React

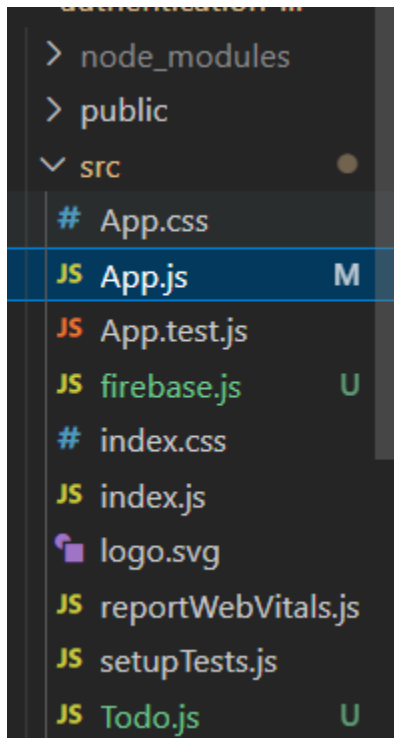


Week-11. Connecting our TODO React js Project with Firebase

We all can create applications but in realtime when we are building an application we have to store the user data some ware now a days best way to store is Firebase which can be integrated in react app

In this week we will learn how to connect our application to firebase

File Structure:



After creating the project make sure to install firebase dependencies:

Install it using `npm install firebase`

-Now we have mainly 3 pages

1.firebase.js

2.App.js

3.TODO.js

-In firebase.js we will establish connection to our app and firebase

-In TODO.js we will write the code

And we will import it in to the App.js file

firebase.js

```
import firebase from 'firebase/compat/app';
import 'firebase/compat/auth';
import 'firebase/compat/firestore';

const firebaseApp = firebase.initializeApp({
  apiKey: "",
  authDomain: "",
  projectId: "",
  storageBucket: "",
  messagingSenderId: "",
  appId: "",
  measurementId: ""
});

const db = firebaseApp.firestore();

export default db;
```

Note Replace the highlighted code with your firebase connection components

You can get your own keys from firebase account for more details Take the

Reference of below video

<https://www.youtube.com/watch?v=ad6IavyAHsQ>

Todo.js

```
import { ListItem, List, ListItemAvatar, ListItemText, Button, Modal,
makeStyles } from '@material-ui/core'
import './Todo.css';
import React, { useState } from 'react';
import db from './firebase'
```

```
function Todo(props) {
  const [open, setOpen] = useState(false);
  const [input, setInput] = useState(props.todo.todo);

  const handleOpen = () => {
    setOpen(true)
  };

  const updateTodo = () => {
    // update to do with the new input text

    db.collection('todos').doc(props.todo.id).set({
      todo: input
    }, { merge: true })

    setOpen(false);
  }

  return (
    <>
      <div
        open={open}
        onClose={e => setOpen(false)}
      >
        <div >
```



```

        <h1>I am a model</h1>
        <input placeholder={props.todo.todo} value={input}
onChange={event => setInput(event.target.value)} />
        <button onClick={updateTodo}>Update Todo</button>
    </div>
</div>
<ul className='todo_list'>
    <li>
        <li primary={props.todo.todo} secondary='Dummy
deadline 🕒' />
    </li>
    <button onClick={e => setOpen(true)}>Edit</button>
    <button
        onClick={event =>
            db.collection('todos').doc(props.todo.id).delete()> ✖ DELETE
        ME</button>
    </ul>
</>
)
}

export default Todo

```

Now the last file App.js

```

import React, { useEffect, useState } from 'react';
import './App.css';
import Todo from './Todo';
import db from './firebase';
import firebase from 'firebase/compat/app';
import 'firebase/compat/auth';
import 'firebase/compat/firestore';

function App() {

```

```

const [todos, setTodos] = useState([]);
const [input, setInput] = useState("");

// when the upload, we need to listen to the database and fetch new todos as they get
added/remove
useEffect(() => {
  // This code here... fires when the app.js lodes
  db.collection('todos').orderBy('timestamp', 'desc').onSnapshot(snapshot => {
    // console.log(snapshot.docs.map(doc => doc.data()));
    setTodos(snapshot.docs.map(doc => ({id: doc.id, todo: doc.data().todo})))
  })
}, []);

const addTodo = (event) => {
  // this will fire off when we click the button
  event.preventDefault(); //will stop the refresh

  db.collection('todos').add({
    todo: input,
    timestamp: firebase.firestore.FieldValue.serverTimestamp()
  })

  setTodos([...todos, input]);
  setInput(' '); // clear up the input after clicking todo
  console.log(todos)
}

return (
  <div className="App">
    <h1>Build A TODO App 🚀!</h1>

    <form>

      <form>
        <span> ☒ Write a Todo</span>
        <input value={input} onChange={event => setInput(event.target.value)} />
      </form>
    </form>
  </div>
)

```

```
      <button      disabled={!input}      type='submit'      onClick={addTodo}
variant="contained" color="primary">Add Todo</button>
    </form>

    <ul>
      {todos.map(todo => (
        <Todo todo={todo}/>
        // <li>{todo}</li>
      ))}

      <li></li>
    </ul>

  </div>
);
}

export default App;
```

OUTPUT

Build A TODO App 🚀!

✓ Write a Todo

Add Todo

I am a model

Task2 Update Todo

Edit ✖ DELETE ME

I am a model

Task1 Update Todo

Edit ✖ DELETE ME