CONNECT BUDDY

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE AND ENGINEERING

Rajiv Gandhi University of Knowledge Technologies
R.K.VALLEY

Submitted by
N Harish – R170910

Under the guidance of
K VinodKumar
Assistant Professor
CSE Department
RGUKT RK Valley.

DECLARATION

I hereby declare that the report of the B.Tech Major Project-2 Work entitled "**CONNECT BUDDY** " which is being submitted to Rajiv Gandhi University of Knowledge Technologies, RK Valley, in partial fulfillment of the requirements for the award of Degree of Bachelor of Technology in Computer Science and Engineering, is a bonafide report of the work carried out by us. The material contained in this report has not been submitted to any university/institution for award of any degree.

Date: 04-05-2023
Place: RK Valley

N. Harish -- R170910

RAJIV GANDHI UNIVERSITY OF KNOWLEDGE TECHNOLOGIES

CERTIFICATE FOR PROJECT COMPLETION

This is certify that the project entitled “**CONNECT BUDDY**” submitted by N.HARISH (R170910), under our guidance and supervision for the partial fulfillment for the degree Bachelor of Technology in Computer Science and Engineering-4 during the Academic Semester-2 2022-2023 at RGUKT, RK VALLEY. To the best of my knowledge, the results embodied in this dissertation work have not been submitted to any University or Institute for the award of any degree or diploma.

Project Internal Guide
K VinodKumar
Assistant Professor
RGUKT, RK Valley

Head of the Department
N Satyanandaram
HOD Of CSE
RGUKT, RK Valley

Submitted for the practical examination held on ....…

Internal Examiner

External Examiner

ACKNOWLEDGEMENT

The satisfaction that accompanies the successful completion of any task would be incomplete without the mention of the people who made it possible and who's constant guidance and encouragement crown all the efforts success. We would like to express my sincere gratitude to Mr.K VinodKumar, our project guide for valuable suggestions and keen interest throughout the progress of our project. We are grateful to Mr.N Satyanandaram, HOD CSE, for providing excellent computing facilities and congenial atmosphere for progressing our project. At the outset,We would like to thank Rajiv Gandhi University of Knowledge Technologies(RGUKT),for providing all the necessary resources and support for the successful completion of our course work.

Index

Abstract

A SocialMedia web application which is users can be able to SignUp By Providing Some Personal Details and can Login into users Account.User Can Post Messages and Images and can Follow one Another by friend requesting.In this User Can Know the Status of friends LastSeen,ProfilePage of Friends by Clicking on a Particular Friend Can be Able to see theirs Posts and Active status.User can be able to change DarkMode To LightMode Viceversa,Friends can Get Notification when ever any Post was Uploaded by User.Friends Can Comment,Like,Share and Download Post. Some of the Personal information can add in profile After Signup with basic details.

CONNECT BUDDY

Introduction:

This document has the requirements of SocialMedia Web Application.It reflects the Services,ideas and WHO you are and It is used to Connect with friends and others.

1.1:Purpose

The purpose of this document is to gather the requirements that are needed for implementing the CONNECT BUDDY.It also focuses on various key features, overview.it is a tool that can be used to show what your brand is all about at Glance.

1.2:Intended Audience:

The intended audience will be the Users and the Friends who can access the platform and give posts and the able to watch their posts and can Chat,Like,share etc...
Users are:
1.Users
2.Friends
3.Posts

ConnectBuddy Vision:

ConnectBuddy was designing interventions to reflects the Services,ideas and WHO you are and it is Simple and Friendly UI,Connect Sharing and Messaging System.

Technologies:

➢ Node js

➢ Bootstrap

➢ MongoDB

➢ EJS

➢ ExpressJS

➢ ReactJS

Node JS:

Node.js is an open-source, cross-platform, back-end JavaScript runtime environment that runs on the V8 engine and executes JavaScript code outside a web browser. Node.js lets developers use JavaScript to write command line tools and for server-side scripting running scripts server-side to produce dynamic web page content before the page is sent to the user's web browser. Consequently, Node.js represents a "JavaScript everywhere" paradigm unifying web-application development around a single programming language, rather than different languages for server-side and client-side scripts.

Bootstrap:

Bootstrap is a free and open-source CSS framework directed at responsive, mobile-first front-end web development. It contains CSS and (optionally) JavaScript-based design templates for typography, forms, buttons, navigation, and other interface components.

MongoDB:

MongoDB is a document-oriented NoSQL database used for high volume data storage. Instead of using tables and rows as in the traditional relational databases, MongoDB makes use of collections and documents. Documents consist of key-value pairs which are the basic unit of data in MongoDB. Collections contain sets of documents and function which is the equivalent of relational database tables.
Collections → Table
Documents → Rows

EJS:

EJS (Embedded JavaScript Templating) is one of the most popular template engines for JavaScript. As the name suggests, it **lets us embed JavaScript code in a template language that is then used to generate HTML**

ExpressJS:

Express is a node js web application framework that provides broad features for building web and mobile applications. It is used to build a single page, multipage, and hybrid web application.
It's a layer built on the top of the Node js that helps manage servers and routes.

Express was created to make APIs and web applications with ease,

- It saves a lot of coding time almost by half and still makes web and mobile applications are efficient.

- Another reason for using express is that it is written in javascript as javascript is an easy language even if you don't have a previous knowledge of any language. Express lets so many new developers enter the field of web development.

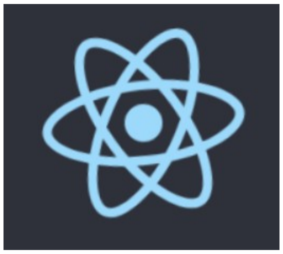
The reason behind creating an express framework for node js is:

- Time-efficient
- Fast
- Economical
- Easy to learn
- Asynchronous

ReactJS:

React, sometimes referred to as a frontend JavaScript framework, is a JavaScript library created by Facebook.React is a tool for building UI components.React creates a VIRTUAL DOM in memory.what needs to be changed.create-react-app includes built tools such as webpack, Babel, and ESLint.If you have npx and Node.js installed, you can create.

React application by using create-react-app.Instead of manipulating the browser's DOM directly, React creates a virtual DOMin memory, where it does all the necessary manipulating, before making the changes in the browser DOM.React only changes what needs to be changed!React finds out what changes have been made, and changes only.



DESIGN

The design phase of software development deals with transforming the requirements as described in the SRS documents into a form implementable using a programming language. The software design process can be divided into the following three levels of phases of design:

1.Interface Design

2.Architectural Design

3.Detailed Design

System-wide Requirements:

Actors:

The system interacts with different kinds of users. Each user has its own functions to access with the system. The functionalities of users are dependent on each other.

Events:

CONNECT BUDDY Platform is a multi-user system which provides activities associated with Socialmedia functionalities & its day to day operations.

SOFTWARE CONFIGURATIONS :

Node.js v16.17.0

Ubuntu 18.04 LTS

BootStrap 5.0

ReactJs v18.2.0

IDE : Visual Studio Code Editor version 1.71

Modules

- **Users**
- **FriendsList**
- **Posts**

User Module

User is the super user of the website who can manage and perform everything on the WebAppl. User can log in through the login page.

ẠDashboard:In this section, the Users can see all detail in brief like Posts,FriendsList and Advertizements.

Ạ friends :All the Friends are Shown Below the Profile Name shown.

Ạ Mode: Feature of DarkMode to White Mode is shown here.

ẠFeatures: All Social profiles,MessageBox,Notifications and LogOut feature are having Here.

ẠProfile :Manage the Profile details and can update them.

FriendsList Module:

Ạ Dashboard:In this section, the Users can see all total Posts of Friendslist friends

Ạ FriendsPost: All the Posts of the Friends are Seen on clicking Their Profile

Ạ Status: Active Status of each friends are Seen here.

ẠMutualfriends: It Shows all the Total No. of Mutual Friends below the profile.

Posts Module:

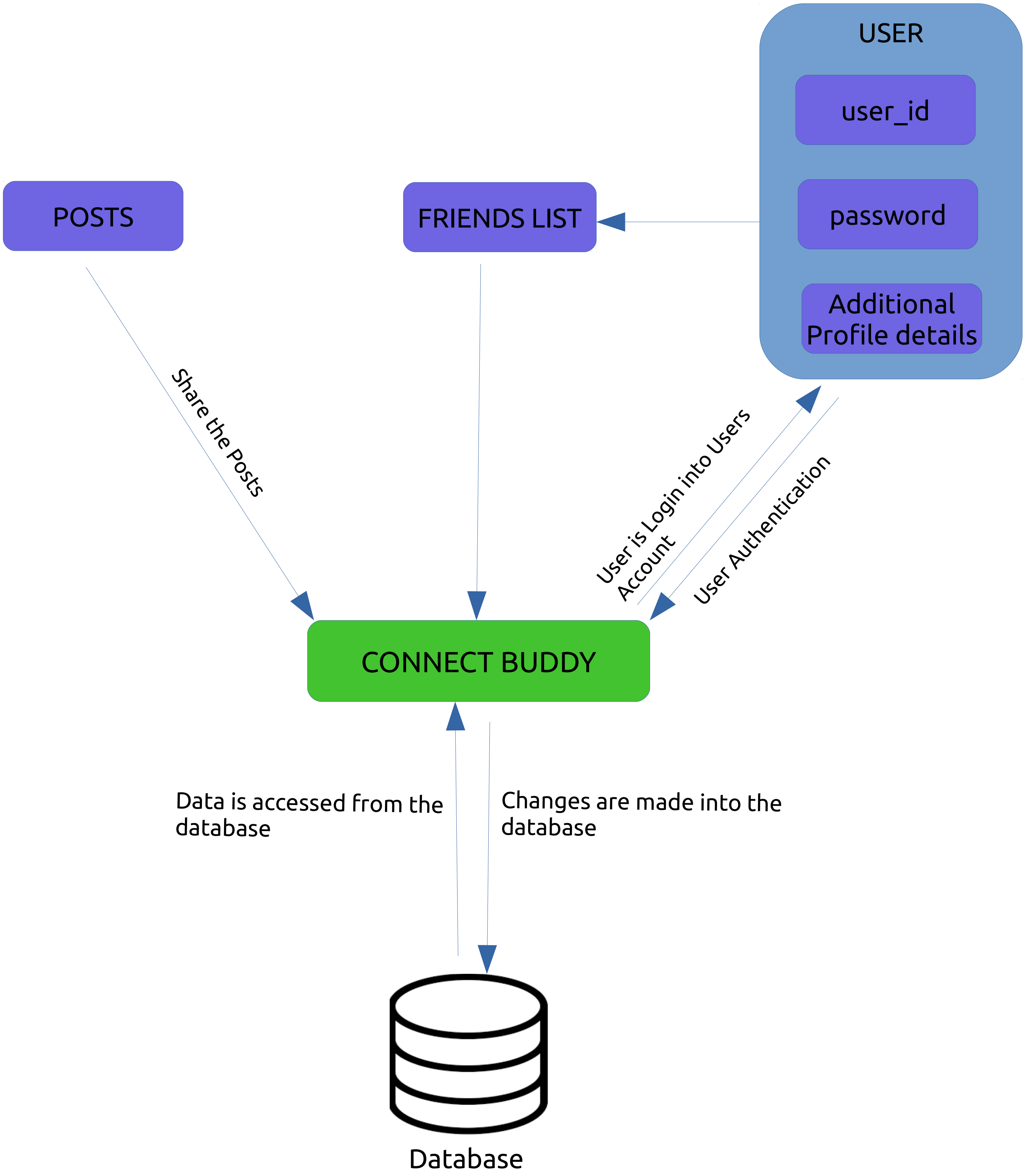
Ạ Dashboard:In this section, the Friends/Users can view all detail in brief like the total No. of Friends,Posts,Likes & Shares.

Ạ Comment: If any Comment has posted here it can be shown here .

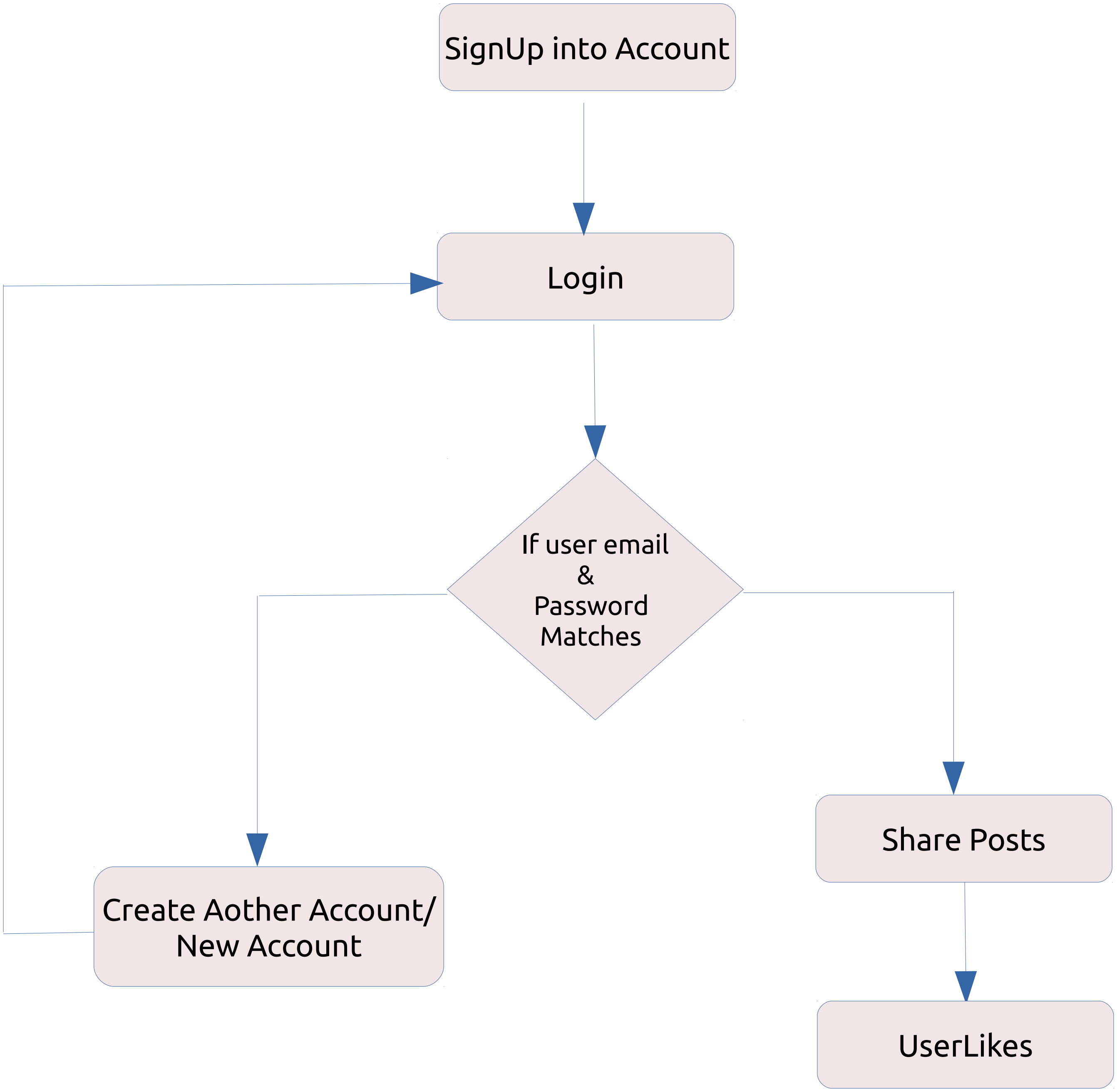
Ạ Likes: Total No. of Likes are Shown Here and it is Shown Below The Post

Ạ User Can be Able to Upload the pics and Can be Able to Delete also.

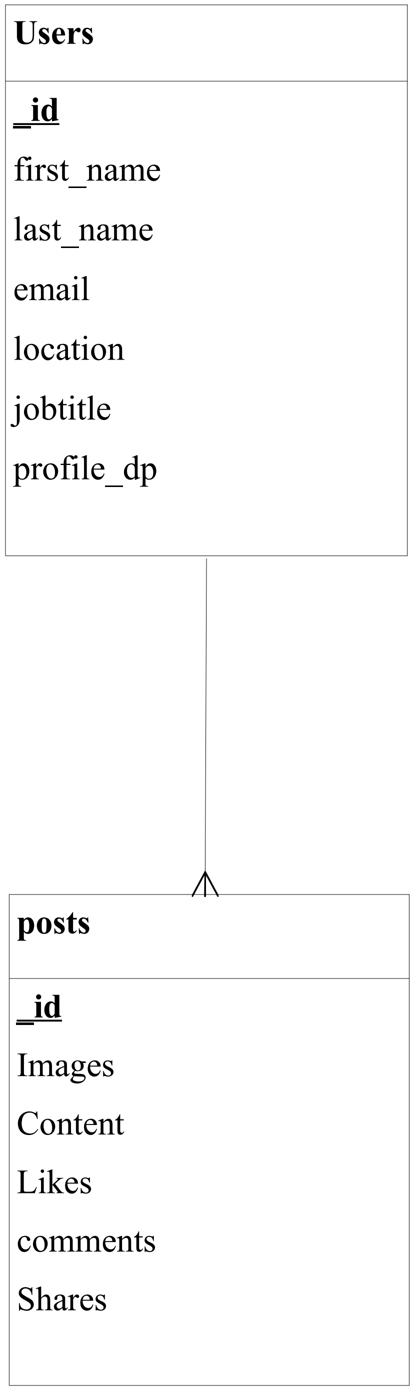
CONTEXT DIAGRAM:


USER
user_id
password
Additional Profile details
POSTS
FRIENDS LIST
Share the Posts
User is Login into Users Account
User Authentication
CONNECT BUDDY
Data is accessed from the database
Changes are made into the database
Database

DONATION FLOW DIAGRAM:



ER Diagrams:


Users
_id
first_name
last_name
email
location
jobtitle
profile_dp
posts
_id
Images
Content
Likes
comments
Shares

Coding

app.js:

```
import { BrowserRouter, Navigate, Routes, Route } from "react-router-dom";
import HomePage from "scenes/homePage";
import LoginPage from "scenes/loginPage";
import ProfilePage from "scenes/profilePage";
import { useMemo } from "react";
import { useSelector } from "react-redux";
import { CssBaseline, ThemeProvider } from "@mui/material";
import { createTheme } from "@mui/material/styles";
import { themeSettings } from "./theme";

function App() {
  const mode = useSelector((state) => state.mode);
  const theme = useMemo(() => createTheme(themeSettings(mode)), [mode]);
  const isAuth = Boolean(useSelector((state) => state.token));

  return (
    <div className="app">
      <BrowserRouter>
        <ThemeProvider theme={theme}>
          <CssBaseline />
          <Routes>
            <Route path="/" element={<LoginPage />} />
            <Route
              path="/home"
              element={isAuth ? <HomePage /> : <Navigate to="/" />}
            />
            <Route
              path="/profile/:userId"
              element={isAuth ? <ProfilePage /> : <Navigate to="/" />}
            />
          </Routes>
        </ThemeProvider>
      </BrowserRouter>
```

```
export default App;
import { BrowserRouter, Navigate, Routes, Route } from "react-router-dom";
import HomePage from "scenes/homePage";
import LoginPage from "scenes/loginPage";
import ProfilePage from "scenes/profilePage";
import { useMemo } from "react";
import { useSelector } from "react-redux";

{
  const mode = useSelector((state) => state.mode);
  const theme = useMemo(() => createTheme(themeSettings(mode)), [mode]);
  const isAuth = Boolean(useSelector((state) => state.token));

 (
    <div className="app">
      <BrowserRouter>
        <ThemeProvider theme={theme}>
          <CssBaseline />
          <Routes>
            <Route path="/" element={<LoginPage />} />
            <Route
              path="/home"
              element={isAuth ? <HomePage /> : <Navigate to="/" />}
            />
            <Route
              path="/profile/:userId"
              element={isAuth ? <ProfilePage /> : <Navigate to="/" />}
            />
          </Routes>
        </ThemeProvider>
      </BrowserRouter>
    </div>
  );
}
export default App;
```

Installation

1. Open the code in your code editor.
2. To install all the dependencies (listed in package.json file) in your project, go to terminal and type the following command and hit enter:

   npm install

3. Create a file named ".env" and enter the following credentials:

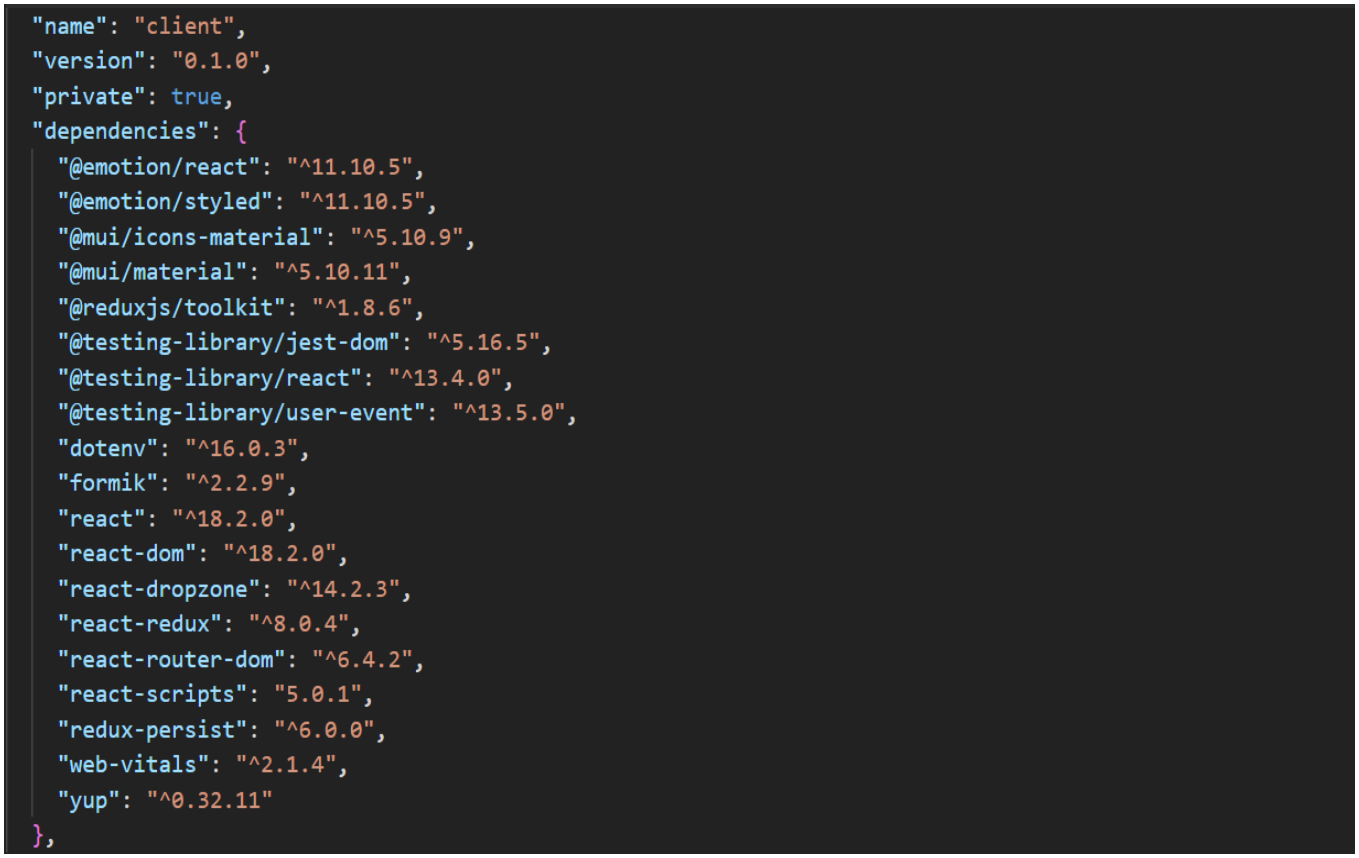
   MONGO_URI=your-mongo-uri

4. Go to terminal and type the following command and hit enter:

   npm run dev

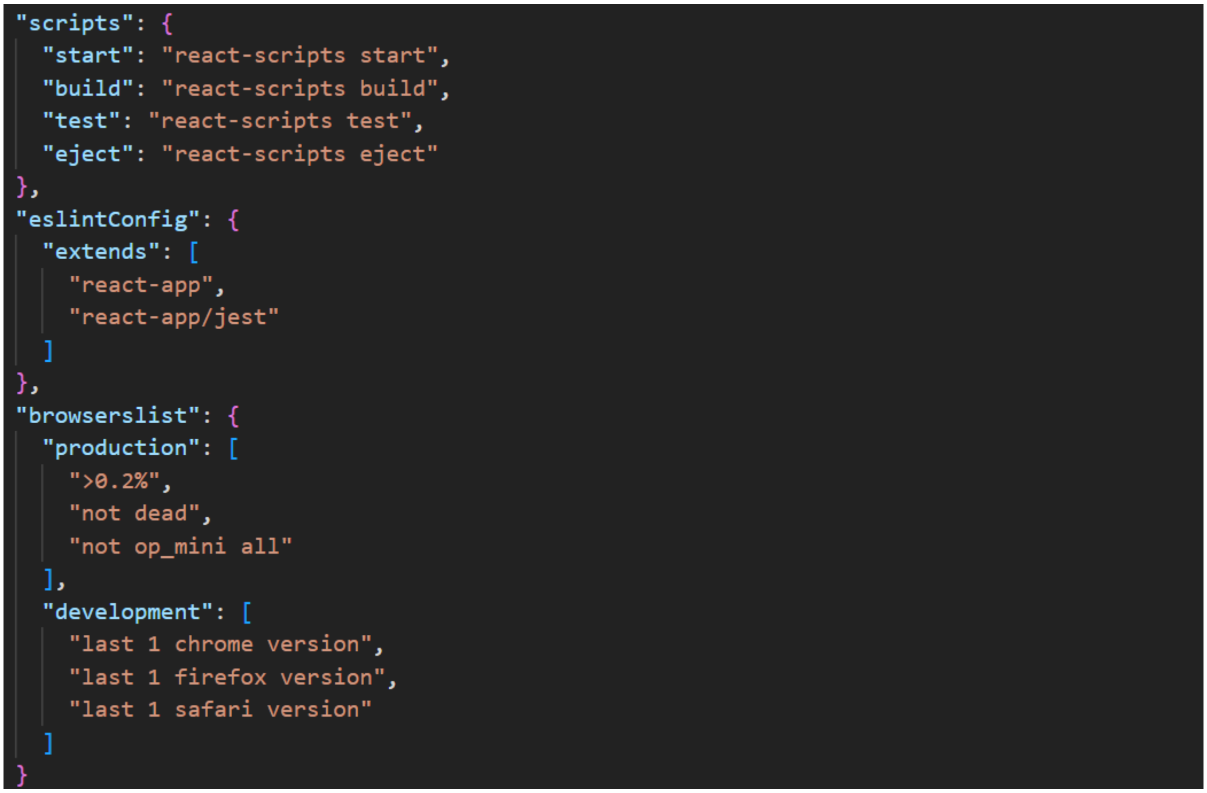
5. Open browser and go to url
6. You need to first signup and then login to run the application.

Dependencies:



```
"name": "client",
"version": "0.1.0",
"private": true,
"dependencies": {
  "@emotion/react": "^11.10.5",
  "@emotion/styled": "^11.10.5",
  "@mui/icons-material": "^5.10.9",
  "@mui/material": "^5.10.11",
  "@reduxjs/toolkit": "^1.8.6",
  "@testing-library/jest-dom": "^5.16.5",
  "@testing-library/react": "^13.4.0",
  "@testing-library/user-event": "^13.5.0",
  "dotenv": "^16.0.3",
  "formik": "^2.2.9",
  "react": "^18.2.0",
  "react-dom": "^18.2.0",
  "react-dropzone": "^14.2.3",
  "react-redux": "^8.0.4",
  "react-router-dom": "^6.4.2",
  "react-scripts": "5.0.1",
  "redux-persist": "^6.0.0",
  "web-vitals": "^2.1.4",
  "yup": "^0.32.11"
},
```

Scripts:



```
"scripts": {
  "start": "react-scripts start",
  "build": "react-scripts build",
  "test": "react-scripts test",
  "eject": "react-scripts eject"
},
"eslintConfig": {
  "extends": [
    "react-app",
    "react-app/jest"
  ]
},
"browserslist": {
  "production": [
    ">0.2%",
    "not dead",
    "not op_mini all"
  ],
  "development": [
    "last 1 chrome version",
    "last 1 firefox version",
    "last 1 safari version"
  ]
}
```

TESTING

Here we performed two types of testing to the software for finding bugs

1.Functional Testing:

we tested main features like testing each and every module like login,signup,Donate,View Previous Donations,View Pending Donations,Profile and status.

a)Integration Testing:
Here,the data flow is tested.For example,if we take login module by entering valid credentials it redirects to the respected user's Dashboard.It is Done to the all created modules.

b)System Testing:
Here,the end to end Testing is done on application from entering credentials, navigating to the all modules such as Donations,Details of the Donor,Status etc. and atlast to the logout page.

2.Non Functional Testing:

Here we tested the Non-functional features like Compatability,Performance and Adhoc Testing

1.Compatability Testing :- Here We tested this software on Various Operating System Such as Linux,windows etc…

2.Performance Testing :- Here we tested the speed,efficiency.The software is given accurate results when the user enters the data

3.Adhoc Testing :- Basically,Adhoc Testing means Testing the software Randomly because every user enters the data differently. So We perform Random testing to our software in order to achieve users perspective.

Advantages:

- It Enhances customer Engaugement by Providing Its Service and solicating Comments to them.
- This software mainly designed for the people who are actually, At present they are following SocialMedia Apps to interact with the world.

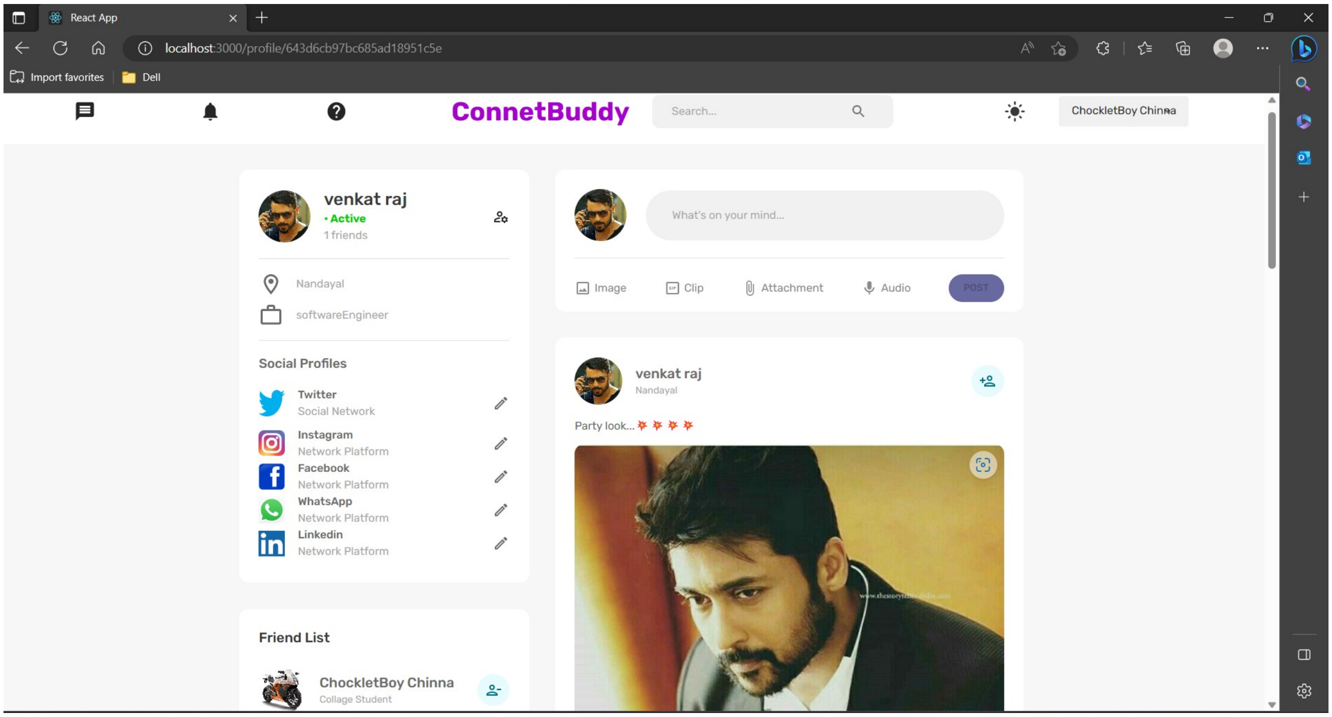
- It will helps to know the world wide information and connect people.
- Increase the Audiance Reach and Sharing anything with others.
- Advantages of SocialMedia Apps are Many.

Future Improvements:

1. We can devolop Using of MultiMedia Live and Also Near location Friends.
2. Providing Updates By Adding New features updatedly,Paying attentions towards users Performance.
3. SocialMedia Will Still Exist and Continue to grow
4. Short-form videos and Tiktoks like videos will be included.
5. Identifying targets of Users and Adding Based On it.

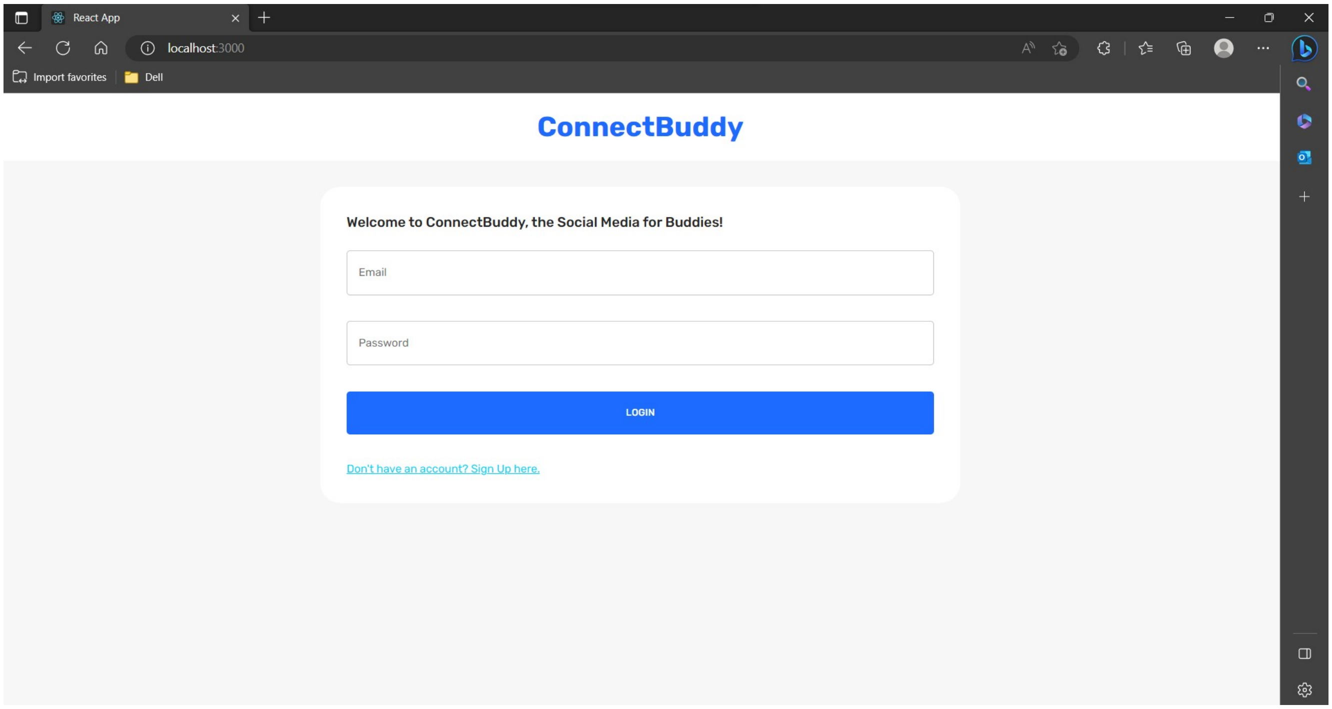
Snippets

Home page:



Party look...

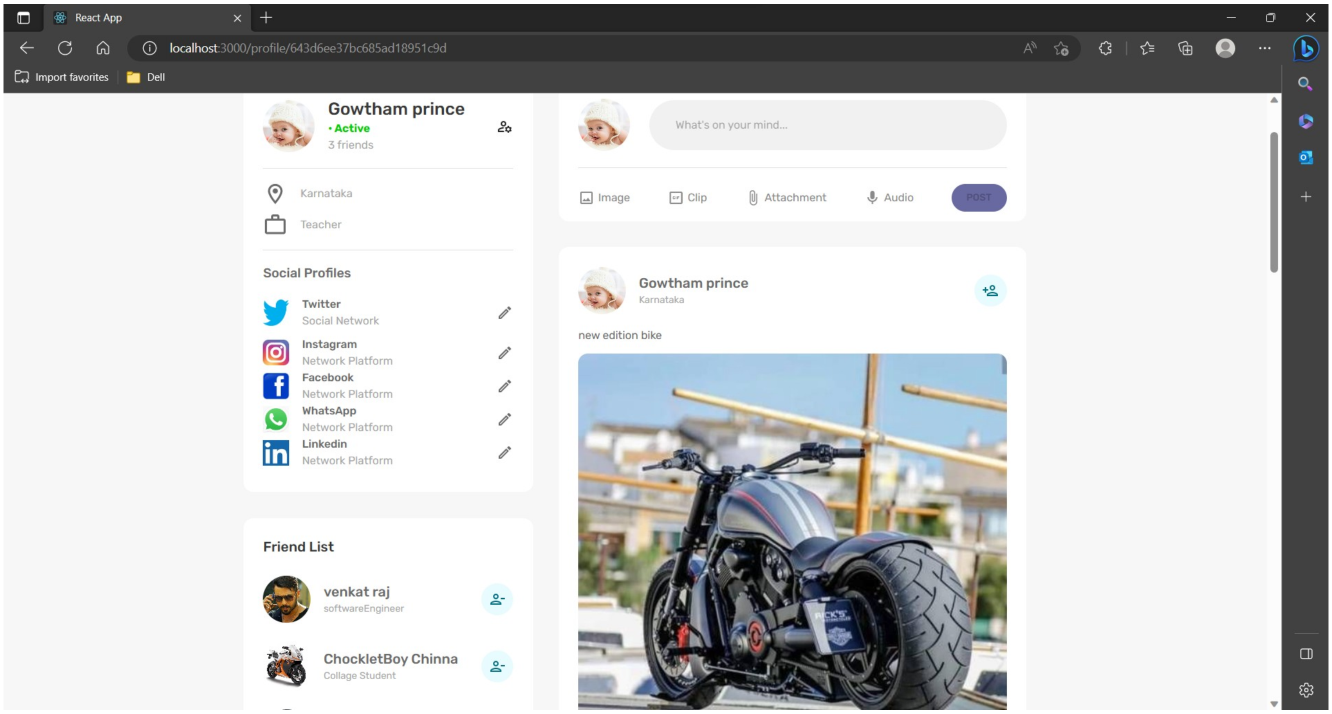
Login page:



Welcome to ConnectBuddy, the Social Media for Buddies!

Don't have an account? Sign Up here.

FriendProfile:



Gowtham prince
• Active
3 friends

Karnataka

Teacher

Social Profiles

Twitter
Social Network

Instagram
Network Platform

Facebook
Network Platform

WhatsApp
Network Platform

Linkedin
Network Platform

Friend List

venkat raj
softwareEngineer

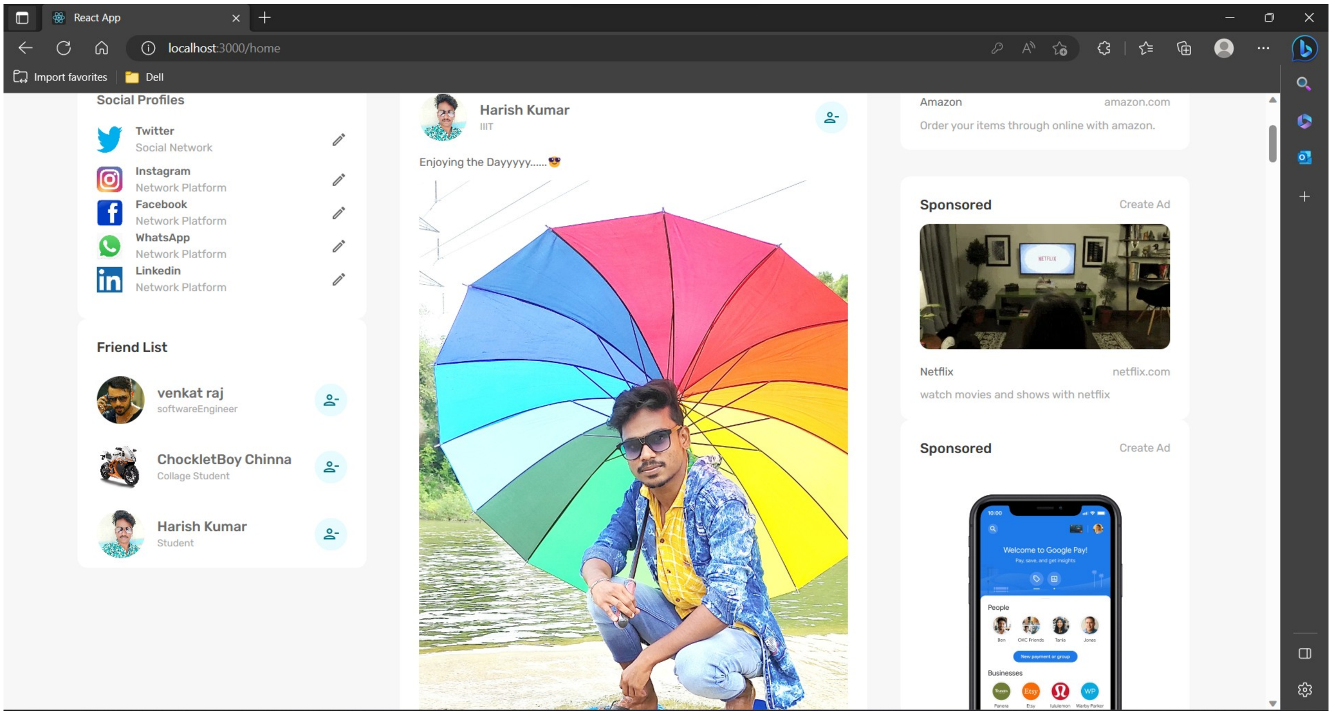
ChockletBoy Chinna
Collage Student

What's on your mind...

Gowtham prince
Karnataka

new edition bike

Friendprofile:



Social Profiles

Twitter
Social Network

Instagram
Network Platform

Facebook
Network Platform

WhatsApp
Network Platform

Linkedin
Network Platform

Friend List

venkat raj
softwareEngineer

ChockletBoy Chinna
Collage Student

Harish Kumar
Student

Harish Kumar
IIIT

Enjoying the Dayyyyy...... 😎

Amazon amazon.com
Order your items through online with amazon.

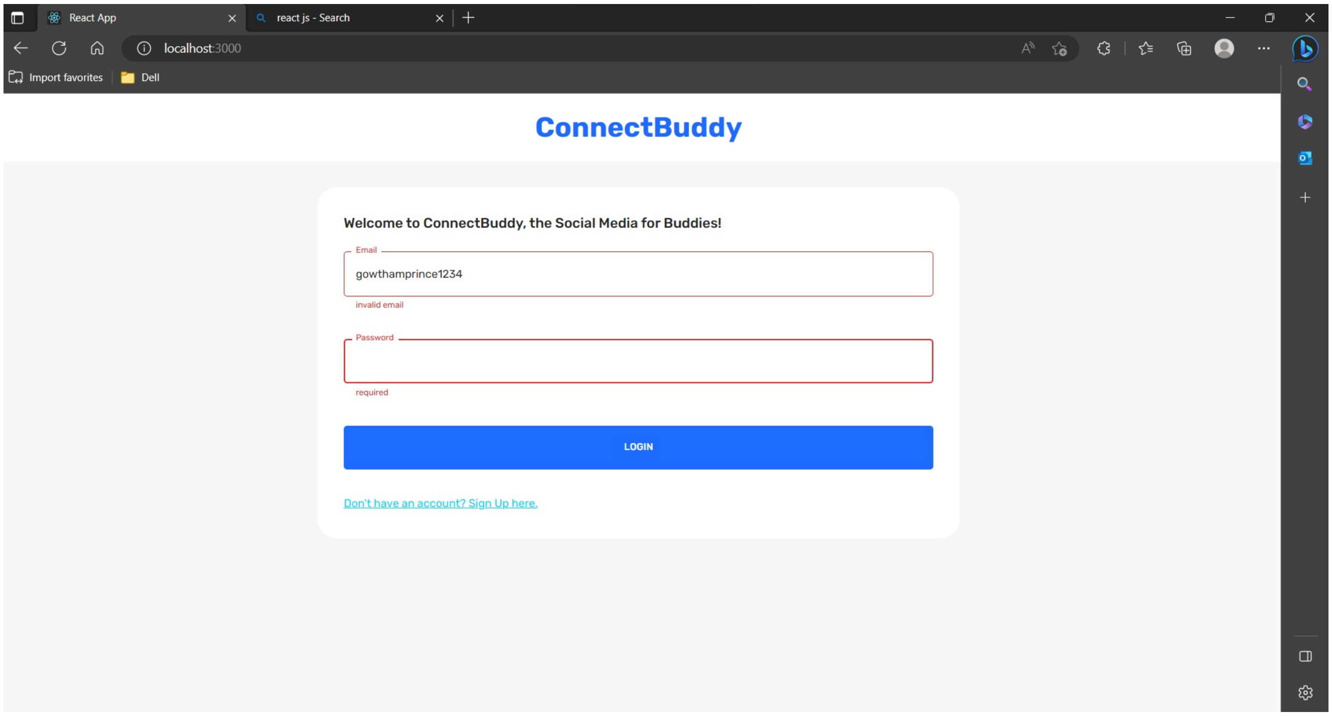
Sponsored Create Ad

Netflix netflix.com
watch movies and shows with netflix

Sponsored Create Ad

Testing Site:

Not Registered member:



ConnectBuddy

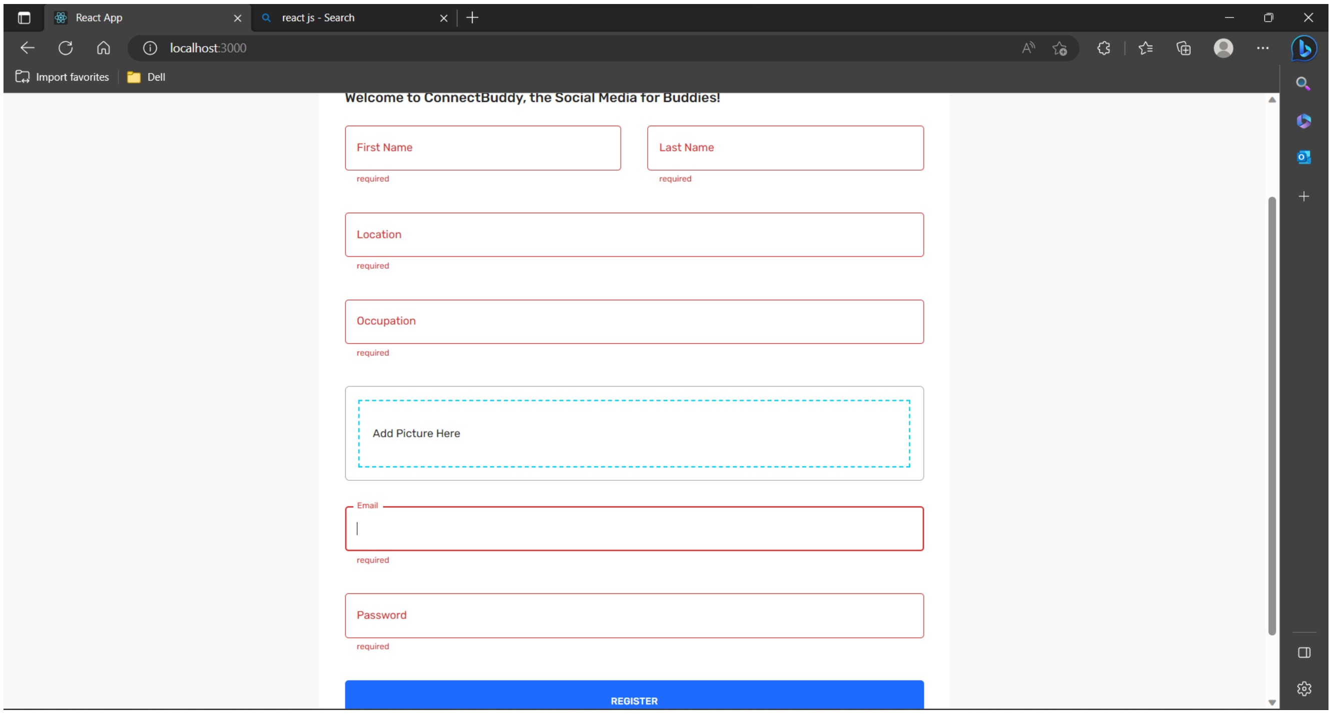
Welcome to ConnectBuddy, the Social Media for Buddies!

Email
gowthamprince1234
invalid email

Password
required

LOGIN

Don't have an account? Sign Up here.



Welcome to ConnectBuddy, the Social Media for Buddies!

First Name
required

Last Name
required

Location
required

Occupation
required

Add Picture Here

Email
required

Password
required

REGISTER

Form Validation:

Conclusion:

I would like to conclude that our project shall aim at it is a web application which is users can be able to Signup By Providing Some Personal Details and can Login into users Account.User Can Post Messages and Images and can Follow one Another by friend requesting.In this User Can Know the Status of friends LastSeen,ProfilePage of Friends by Clicking on a Particular Friend Can be Able to see theirs Posts and Active status.User can be able to change DarkMode To LightMode Viceversa,Friends can Get Notification when ever any Post was Uploaded by User.Friends Can Comment,Like,Share and Download Post. Some of the Personal information can add in profile, After Signup with basic details and Future Implementations will be Also done by me.

References:

https://www.youtube.com/watch?v=-RCnNyD0L-s&t=1274s Login System

https://nodejs.org/en/docs/ NodeJS docs

https://getbootstrap.com/docs/4.1/ Bootstrap Docs

https://www.mongodb.com/docs/ MongoDB Docs

https://heynode.com/tutorial/authenticate-users-node-expressjs-and-passportjs/