Project Report
On
Social Media App

Submitted by

K.Paramesh– R170990

Under the guidance of

S.Shabana

Assistant Professor

Department of Computer Science and Engineering

Rajiv Gandhi University of Knowledge and Technologies(RGUKT)

Declaration

We, hereby declares that this report entitled “Hosting a Dynamic website using Reactjs,mongodb ” submitted by us under the guidance and supervision of K.Paramesh is a bonafide work. We also declare that it has not been Submitted previously in part or in full to this university or other university or Institution for the award of any degree or diploma.

We will be solely responsible if any kind of plagiarism is found.

Place:RK Valley

K.Paramesh-R170990

Rajiv Gandhi University of Knowledge Technologies

RK Valley, Kadapa (Dist), Andhra Pradesh, 516330

CERTIFICATE

This is to certify that the project work titled "HOSTING A Social Media WEBSITE USING Reactjs, mongodb, nodejs is a bonafied project work submitted by **K.Paramesh** in the department of COMPUTER SCIENCE AND ENGINEERING in partial fulfillment of requirements for the award of degree of Bachelor of Technology in Computer science and engineering for the year 2022-2023 carried out the work under the supervision.

GUIDE:

S.SHABANA

HEAD OF THE DEPARTMENT:

N.SATYANANDARAM

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Abstract

Social media applications provide the opportunity for people to connect with others, as well as to record their various activities on a digital canvas that is for all to see. As such, skills and virtues are developed and displayed. Thereby, individual reputations unfold, and this can prompt deeper links between people who pursue selfless benefits. In effect, members of emerging online communities have an increased capacity to share ideas that are more for the common good than for personal gain, as well as determine which people should be invited to participate. As a direct result, what unfolds is a greater likelihood that evolving projects, and related outcomes, will address any number of issues and opportunities related to the public interest than would have been possible otherwise

Introduction

It allows users to upload photos or short videos from a mobile device, edit photos by applying filters, and then share either publicly or privately through the app or to other social media sites including Facebook, Flickr, and Twitter.

The vision of Ithis Social media app is it to “allow you to experience moments in your friends’ lives through pictures as they happen.”

Business owners use this application to engage other accounts through posts, comments and direct messages in addition to the option of sponsored ads.
Similar to Twitter, the more ‘followers’ an account reaches, the more exposure that respective account will have.

Scope

Social media facilitates the sharing of ideas and information through virtual networks From Facebook and Instagram to Twitter and YouTube,social media covers a broad universe of apps and platforms that allow users to share content, interact online, and build communities. More than 4.7 billion people use social media, equal to roughly 60% of the world’s population.

Today, social media messaging apps and platforms are the most commonly used sites worldwide. In early 2023, 94.8% of users accessed chat and messaging apps and websites, followed closely by social platforms, at 94.6% of users. Search engine sites were next, with 81.8% of users accessing them Social media may take the form of video sharing, social gaming, professional business networks, virtual worlds, review platforms, and beyond.

People use various social media applications to network career opportunities, find others across the globe with like-minded interests, and share their views across a social network.

Governments and politicians utilize social media to engage with constituents and voters.

Purpose

Social media allows individuals to keep in touch with friends and extended family. Some people will use various social media applications to network and find career opportunities, connect with people across the globe with like-minded interests, and share their own thoughts, personal updates, and insights online.

Social media has reshaped our lives, capturing more than 4.7 billion users worldwide and counting. Whether or not each platform resonates with you personally, it offers a gateway for people and brands to connect across different interests or communities. From a business marketing perspective, it provides a vital way to promote to a vast audience, target customers, and incentivize them to ultimately make a purchase across digital channels.

Require Specification HTML:

HTML is a markup language that defines the structure of your content. HTML consists of a series of elements, which you use to enclose, or wrap, different parts of the content to make it appear a certain way, or act a certain way. The enclosing tags can make a word or image hyperlink to somewhere else, can italicize words, can make the font bigger or smaller, and so on.

CSS:-

Cascading Style Sheets is a stylesheet language used to describe the presentation of a document written in HTML or XML . It describes how elements should be rendered on screen, on paper, in speech, or on other media. It helps Web developers create a uniform look across several pages of a Web site. Instead of defining the style of each table and each block of text within a page's HTML, commonly used styles need to be defined only once in a CSS document.It can be used to define the cell padding of table cells, the style, thickness, and color of a table's border,and the padding around images or other objects.This is why most Web pages today incorporate cascading style sheets.

Java Script:-

JavaScript is a scripting or programming language that allows you to implement complex features on web pages every time a web page does more than just sit there and display static information for you to look at displaying timely content updates, interactive maps, animated 2D/3D graphics, scrolling video jukeboxes etc., It is the third layer of the layer cake of standard web technologies, two of which HTML and CSS. A very common use of JavaScript is to dynamically modify HTML and CSS to update a user interface, via the Document Object Model API .

HTTP:-

HTTP is a protocol for fetching resources such as HTML documents. It is the foundation of any data exchange on the Web and it is a client-server protocol, which means requests are initiated by the recipient, usually the Web browser. A complete document is reconstructed from the different sub-documents fetched, for instance, text, layout description, images, videos, scripts, and more. Clients and servers communicate by exchanging individual message.

Mongodb:-

MongoDB is a source-available cross-platform document-oriented database program. Classified as a NoSQL database program, MongoDB uses JSON-like documents with optional schemas. MongoDB is developed by MongoDB Inc. and licensed under the Server Side Public License which is deemed non-free by several distributions.

ReactJs:-

The React. js framework is an open-source JavaScript framework and library developed by Facebook. It's used for building interactive user interfaces and web applications quickly and efficiently with significantly less code than you would with vanilla JavaScript.

Analysis

Hosting a dynamic website using React Js, Mongo DB offers numerous advantages for users.

The scalability of app infrastructure allows for easy scaling up or down of the website infrastructure as needed, ensuring that it can handle traffic spikes and fluctuations.

The security provided by Mongodb helps protect sensitive data and applications from external threats, making it an ideal solution for users that handle sensitive information.

Basically it provides a website like instagram where we can add photos,vedios and some posts and comments and also edit the profile settings.Likewise instagram, it also helps to access to varoius sources using themongodb we can able to save details for next purpose.

Creating a sign up page

Creating a sign up page for the website named socio-medio ,here we can register our details to the website.By using mongodb and nodejs we are able to save the details of the users in atlas mongodb.So that next time if a user comes again , user can eaisly login to account without registering again in to the account.

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

Creating servers

```
import express from "express"; import bodyParser
from "body-parser"; import mongoose
from "mongoose"; import cors from "cors"; import
dotenv from "dotenv"; import
multer from "multer"; import helmet from
"helmet"; import morgan from "morgan"; import
path from "path"; import { fileURLToPath } from
"url"; import authRoutes from "./routes/auth.js";
import userRoutes from "./routes/users.js";
import postRoutes from "./routes/posts.js"; import {
register } from "./controllers/auth.js"; import {
createPost } from "./controllers/posts.js"; import {
verifyToken } from "./middleware/auth.js"; import
User from "./models/User.js"; import Post
from
"./models/Post.js"; import { users, posts } from
"./data/index.js";
/* CONFIGURATIONS */
const __filename = fileURLToPath(import.meta.url); const
__dirname = path.dirname(__filename); dotenv.config();
const app = express();
app.use(express.json());
app.use(helmet());
app.use(helmet.crossOriginResourcePolicy({ policy: "cross-origin" }));
app.use(morgan("common"));
app.use(bodyParser.json({ limit: "30mb", extended: true }));
app.use(bodyParser.urlencoded({ limit: "30mb", extended: true })); app.use(cors());
app.use("/assets", express.static(path.join(__dirname, "public/assets")));
/* FILE STORAGE */ const storage =
multer.diskStorage({ destination: function
(req, file, cb) { cb(null, "public/assets");
},
filename: function (req, file, cb) {
cb(null, file.originalname);
},
```

```
});
const upload = multer({ storage });
        ROUTES WITH FILES */
pp.post("/auth/register",          upload.single("picture"),          register);
pp.post("/posts", verifyToken, upload.single("picture"), createPost);
* ROUTES */pp.use("/auth", authRoutes); pp.use("/users", userRoutes);
  pp.use("/posts", postRoutes);
* MONGOOSE SETUP */
onst PORT = process.env.PORT || 6001; ongoose
connect(process.env.MONGO_URL,              {
seNewUrlParser: true, seUnifiedTopology: true,
) then(() =>
{
pp.listen(PORT, () => console.log(`Server Port: ${PORT}`));
* ADD DATA ONE TIME */
/ User.insertMany(users);
/ Post.insertMany(posts);
)
catch((error) => console.log(`${error} did not connect`));
```

Combining front and back end

```
        {name            ":
        "server",
        version": "1.0.0",
        description": "",
        main": "index.js",
        type": "module",
dependencies":          { bcrypt":
"^5.1.0", bodyparser":
"^1.20.1", cors":
"^2.8.5",         "dotenv":
"^16.0.3",
"express": "^4.18.2",
"gridfs-stream": "^1.1.1",
```

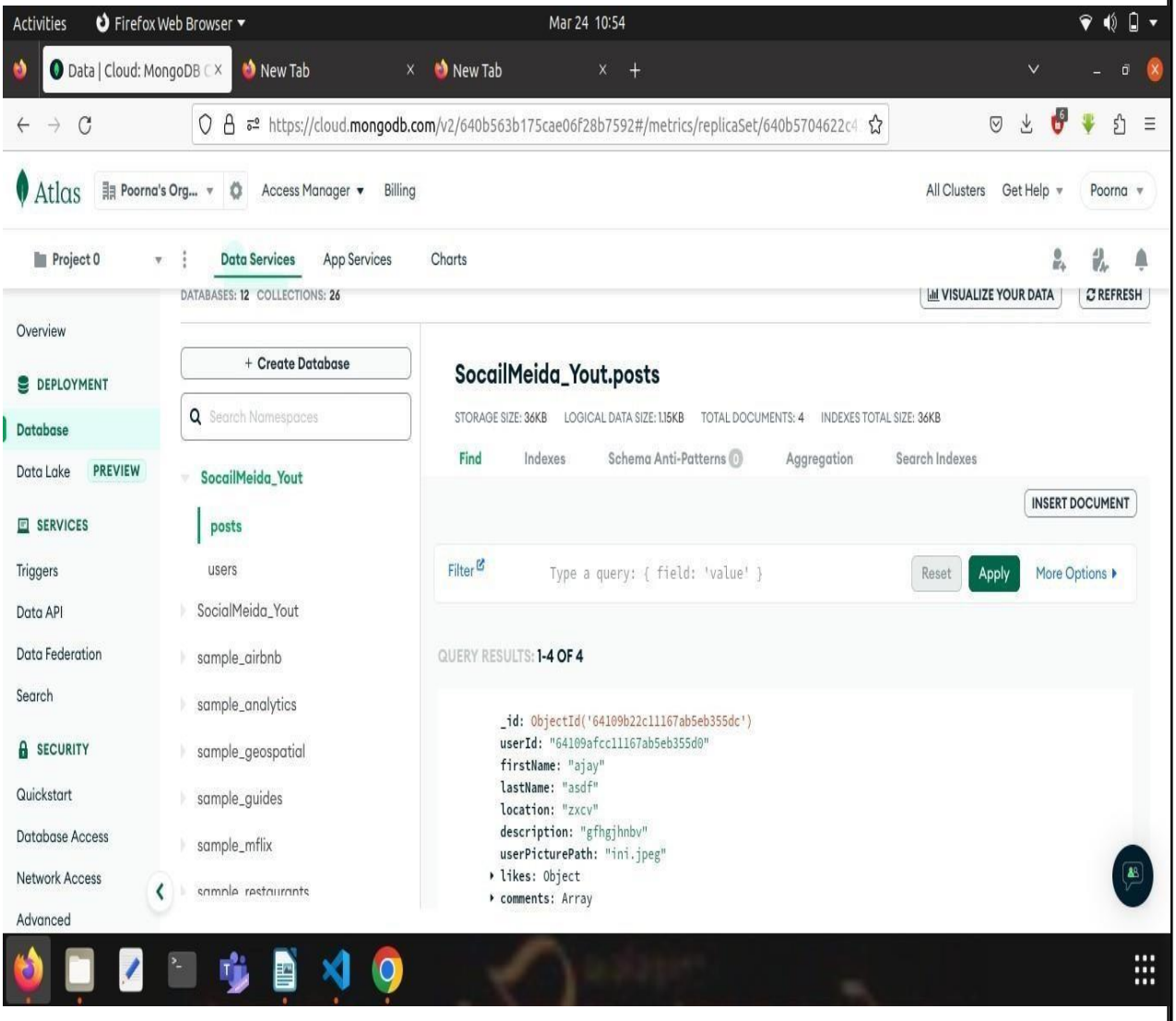
"helmet": "^6.0.0",
"jsonwebtoken": "^8.5.1",
"mongoose": "^6.7.0",
"morgan": "^1.10.0",
"multer": "^1.4.5-lts.1",
"multer-gridfs-storage": "^5.0.2"
},
"devDependencies": {},
"scripts": {
"test": "echo \"Error: no test specified\" && exit 1",
"start": "node index.js"
},
"keywords": [],
"author": "",
"license": "ISC"
}

creating server with mongodb

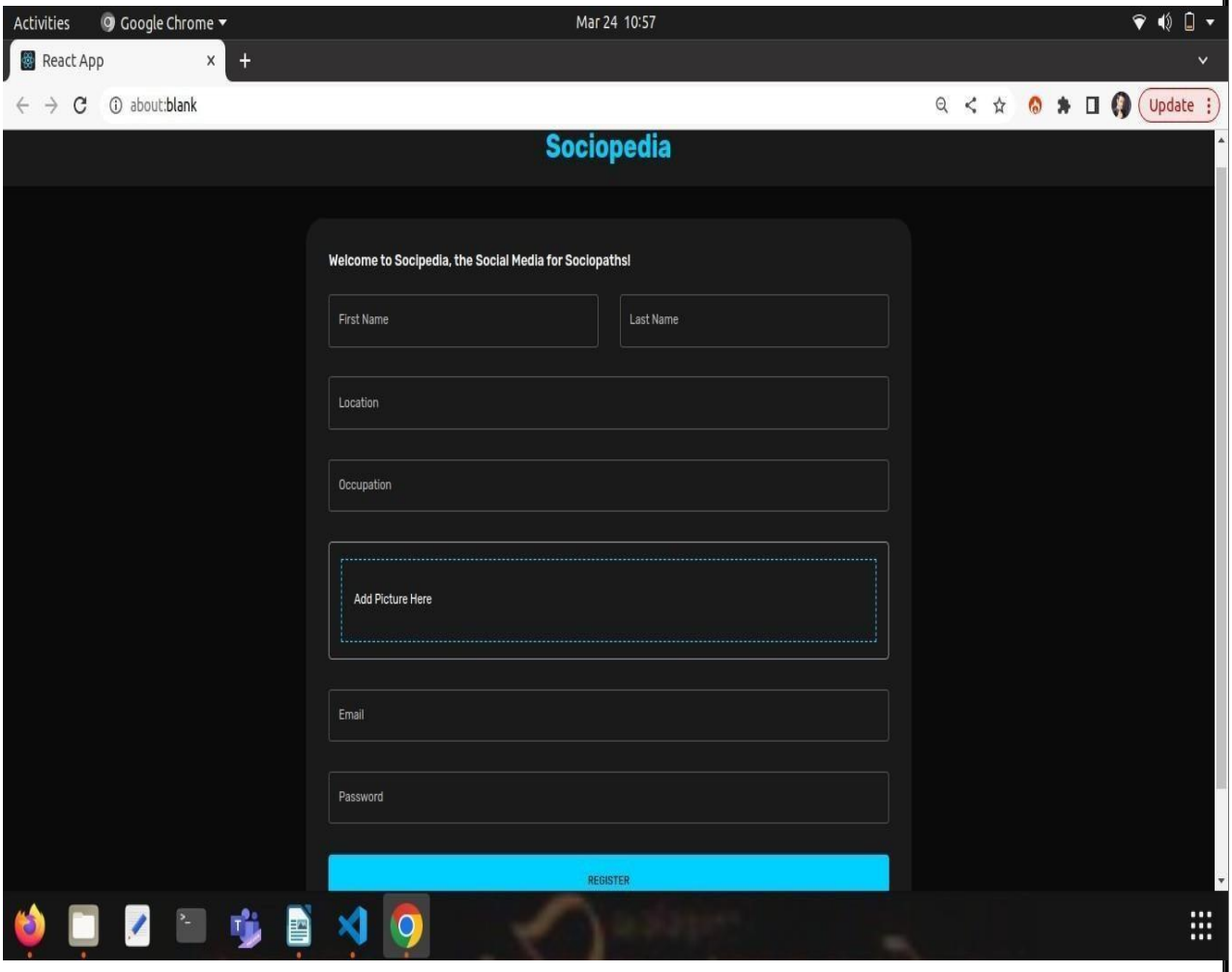
MONGO_URL="mongodb+srv://poorna_mongo:POORNA123123@cluster0.kbqqjzx.mongodb.net/ SocailMeida_Yout?retryWrites=true&w=majority"

PORT=3001

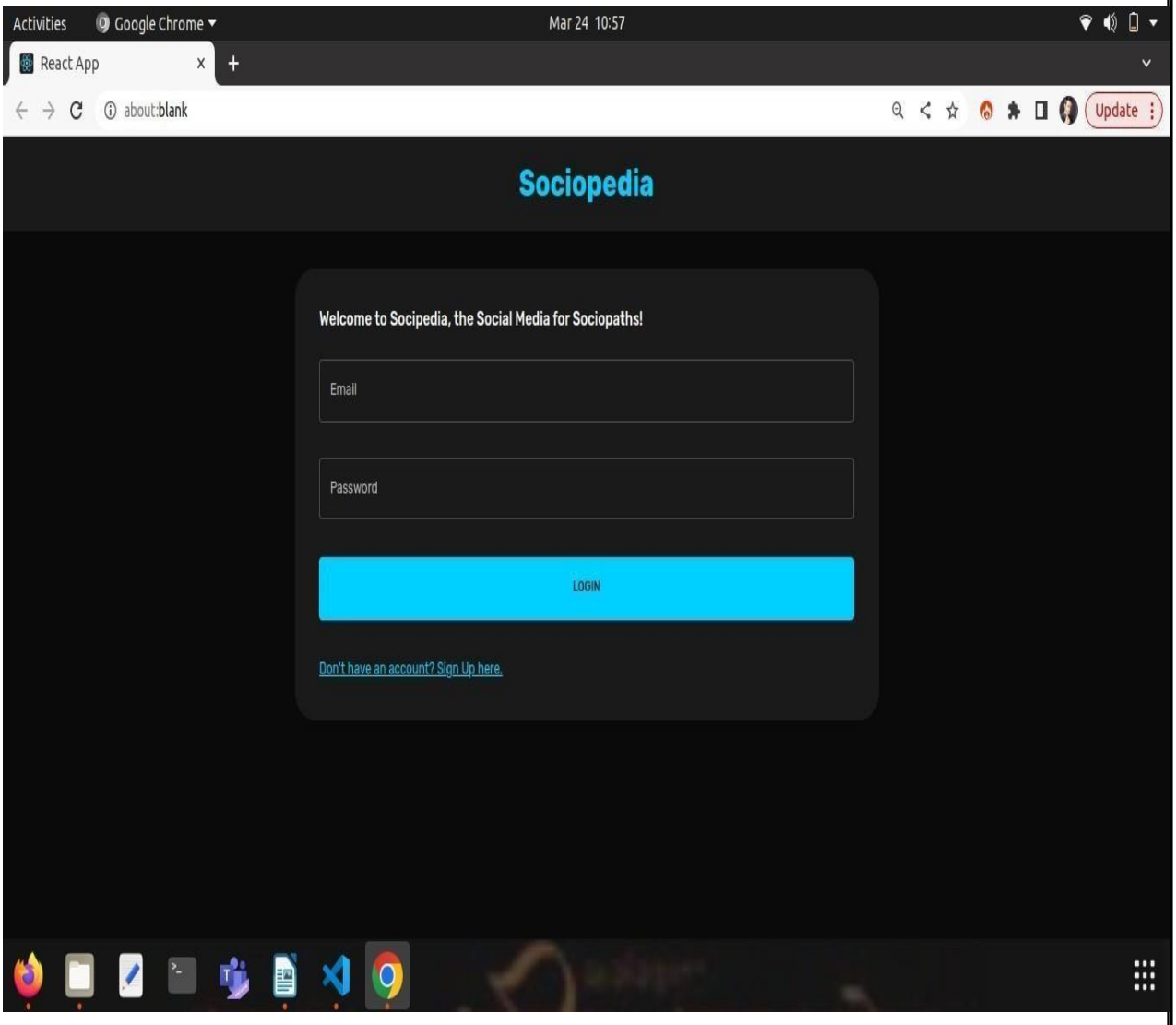
JWT_SECRET="superset"


Activities
Firefox Web Browser
Mar 24 10:54
Data | Cloud: MongoDB
New Tab
New Tab
https://cloud.mongodb.com/v2/640b563b175cae06f28b7592#/metrics/replicaSet/640b5704622c
Atlas
Poorna's Org...
Access Manager
Billing
All Clusters
Get Help
Poorna
Project 0
Data Services
App Services
Charts
DATABASES: 12 COLLECTIONS: 26
VISUALIZE YOUR DATA
REFRESH
Overview
DEPLOYMENT
Database
Data Lake
PREVIEW
SERVICES
Triggers
Data API
Data Federation
Search
SECURITY
Quickstart
Database Access
Network Access
Advanced
+ Create Database
Search Namespaces
SocailMeida_Yout
posts
users
SocialMeida_Yout
sample_airbnb
sample_analytics
sample_geospatial
sample_guides
sample_mflix
SocailMeida_Yout.posts
STORAGE SIZE: 36KB
LOGICAL DATA SIZE: 1.15KB
TOTAL DOCUMENTS: 4
INDEXES TOTAL SIZE: 36KB
Find
Indexes
Schema Anti-Patterns
Aggregation
Search Indexes
INSERT DOCUMENT
Filter
Type a query: { field: 'value' }
Reset
Apply
More Options
QUERY RESULTS: 1-4 OF 4
_id: ObjectId('64109b22c11167ab5eb355dc')
userId: "64109afcc11167ab5eb355d0"
firstName: "ajay"
lastName: "asdf"
location: "zxcv"
description: "gfhgjhnbv"
userPicturePath: "ini.jpeg"
likes: Object
comments: Array

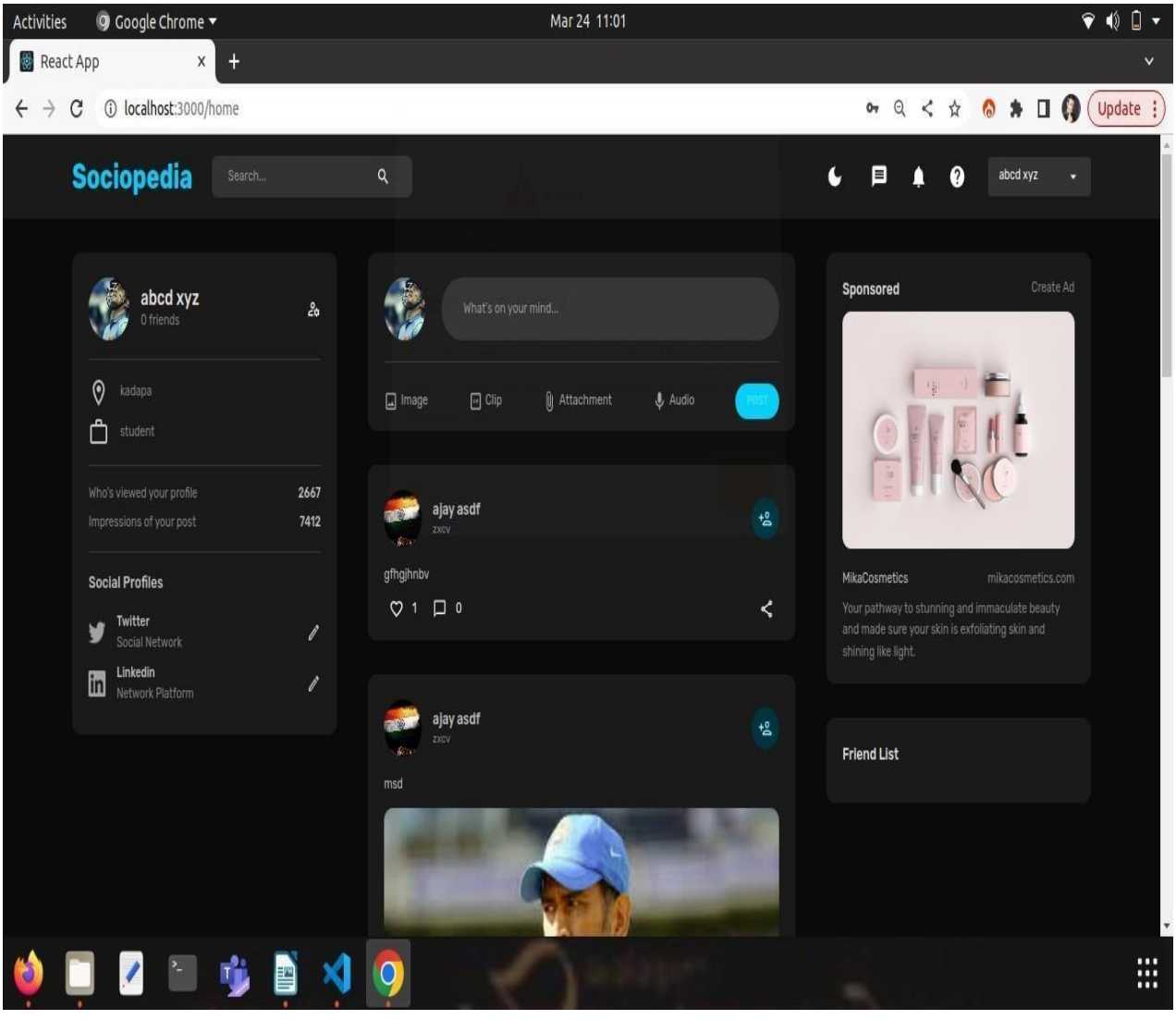
Sign Up

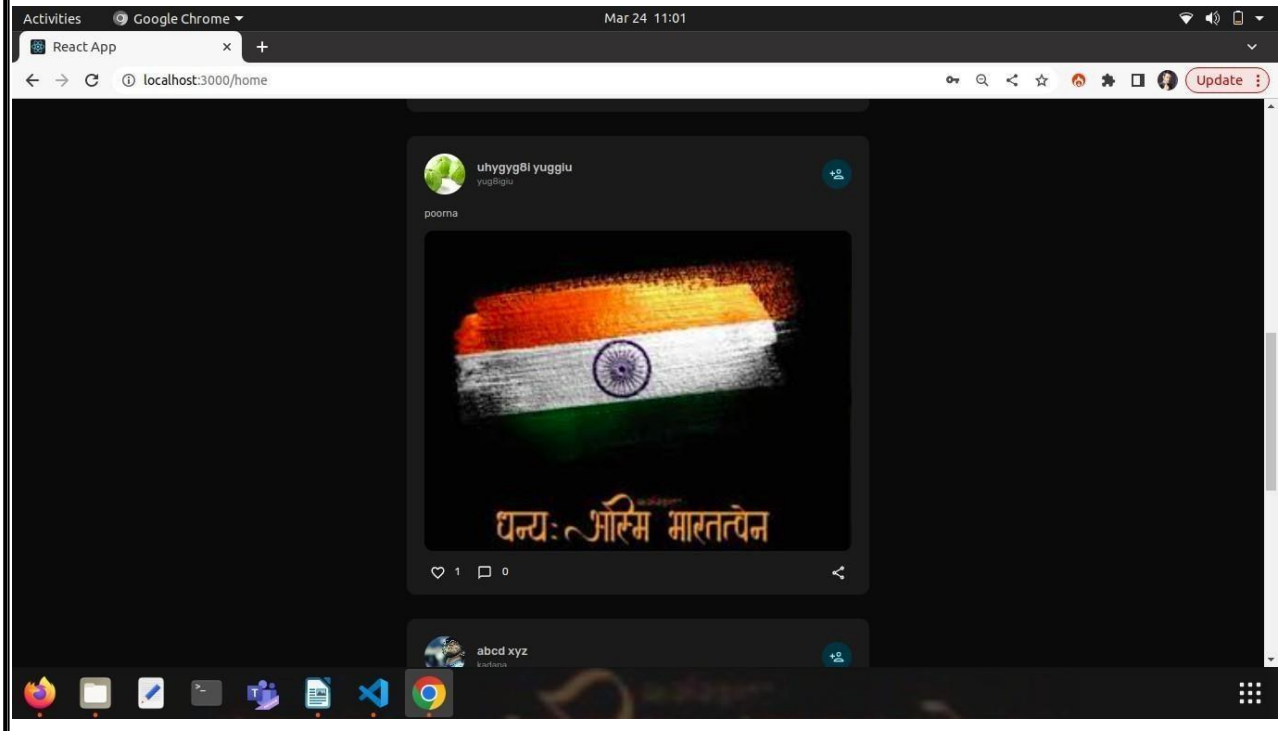

Activities
Google Chrome
Mar 24 10:57
React App
about:blank
Update
Sociopedia
Welcome to Socipedia, the Social Media for Sociopaths!
First Name
Last Name
Location
Occupation
Add Picture Here
Email
Password
REGISTER

Login



Hosting website outside the remote server.


Activities
Google Chrome
Mar 24 11:01
React App
localhost:3000/home
Update
Sociopedia
Search...
abcd xyz
abcd xyz
0 friends
kadapa
student
Who's viewed your profile 2667
Impressions of your post 7412
Social Profiles
Twitter
Social Network
Linkedin
Network Platform
What's on your mind...
Image
Clip
Attachment
Audio
POST
ajay asdf
zxcv
gfhgjhnbv
1
0
ajay asdf
zxcv
msd
Sponsored
Create Ad
MikaCosmetics
mikacosmetics.com
Your pathway to stunning and immaculate beauty and made sure your skin is exfoliating skin and shining like light.
Friend List


Activities
Google Chrome
Mar 24 11:01
React App
localhost:3000/home
Update
uhygyg8i yuggiu
yug8iglu
poorna
धन्यः अस्मि भारतत्वेन
1
0
abcd xyz

Conclusion

In conclusion, hosting a dynamic website using mongodb and nodejs provides numerous benefits for socail media application. The scalability, security,customization, high availability, and infrastructure make it an ideal solution for hosting dynamic websites. Like other media apps it also provides us a complete security for the data and it is encypted.

The vision of this Social media app is it to “allow you to experience moments in your friends’ lives through pictures as they happen.”

References

For HTML

- https://www.w3schools.com/html/html_intro.asp
- https://www.tutorialspoint.com/html/index.html

For CSS

- https://www.w3schools.com/css/css_intro.asp

For Java Script:

- https://www.tutorialspoint.com/javascript/javascript_overview.html

For Monogdb:

- https://www.w3schools.com/mongodb/

For ReactJs:

- https://www.w3schools.com/REACT/DEFAULT.ASP

********** THANK YOU **********