

# PROJECT REPORT ON

## **ExploreIT**



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## **DECLARATION**

We would like to express our special thanks to our project guide **Dr. Manoj**Varshney who gave us the golden opportunity to do this wonderful project called, **ExploreIT**, which also helped us in doing a lot of research and we came to know about so many new things. We are really thankful to them.

Secondly, we would also like to thank our parents and friends who helped us a lot in finalizing this project within the limited time frame.

#### Candidate's Names:

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## **CERTIFICATE**

This is to certify that the above statements made by the candidates are correct to the best of my/our knowledge and belief.

#### Project

#### Supervisor

Dr.Manoj Varshney

**Technical Trainer** 

Date: 27-5-2023



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# **INTRODUCTION**

ExploreIT refers to a group of online platforms and tools that enable users to create, share or exchange information, ideas, pictures, and videos in virtual communities and networks. ExploreIT allows people to connect with others from all over the world, share their thoughts and experiences, and engage in conversations and discussions. Popular social media platforms include Facebook, Twitter, Instagram, LinkedIn, TikTok, and YouTube, among others. Each platform has its own unique features and audience, but they all serve the purpose of connecting people and fostering communication and collaboration. In recent years, social media has become a ubiquitous part of modern life, with billions of users worldwide. Social media has transformed the way people communicate and interact with one another, and it has had a significant impact on many aspects of society, including politics, marketing, and social activism. However, it has also raised about privacy, mental health, and the spread of concerns misinformation.



## **WEB DEVELOPEMENT:**

Web development refers to the process of creating websites on the Internet.

The term "Web Development" is relatively broad in its application. You could create a single website page from a wix template, or you could painstakingly develop a massive website with thousands of original pages — and technically, both of those would count as web development.

Nowadays web development is the thing which is in boost.



## **TECHNOLOGY USED:**

#### HTML:

HTML is an acronym which stands for **Hyper Text Markup Language** which is used for creating web pages and web applications. Let's see what is meant by Hypertext Markup Language, and Web page.

**HyperText:** HyperText simply means "Text within Text." A text has a link within it, is a hypertext. Whenever you click on a link which brings you to a new webpage, you have clicked on a hypertext.

HyperText is a way to link two or more web pages (HTML documents) with each other.

**Markup language:** A markup language is a computer language that is used to apply layout and formatting conventions to a text document. Markup language makes text more interactive and dynamic. It can turn text into images, tables, links, etc.

Web Page: A web page is a document which is commonly written in HTML and translated by a web browser. A web page can be identified by entering an URL. A Web page can be of the static or dynamic type. With the help of HTML only, we can create static web pages.



#### CSS:

CSS stands for Cascading Style Sheets. It is a style sheet language which is used to describe the look and formatting of a document written in markup language. It provides an additional feature to HTML. It is generally used with HTML to change the style of web pages and user interfaces. It can also be used with any kind of XML documents including plain XML, SVG and XUL.

CSS is used along with HTML and JavaScript in most websites to create user interfaces for web applications and user interfaces for many mobile applications.

## MongoDB:

MongoDB is a popular NoSQL database management system that uses a document-oriented data model. Instead of using traditional tables and rows, MongoDB stores data as JSON-like documents, making it a good fit for handling unstructured or



semi-structured data. It offers features such as dynamic schema, horizontal scaling, high availability, and automatic sharding, which make it a scalable and flexible database solution. MongoDB also provides various tools and libraries for interacting with the database, including a command-line interface, GUI tools, and drivers for multiple programming languages.

#### **Express:**

Express is a popular web framework for Node.js that simplifies the process of building web applications and APIs. It provides a set of features for handling HTTP requests and responses, routing, middleware, and templating engines. Express allows developers to write server-side JavaScript code that can respond to client requests with data, HTML, or other resources. It also offers a flexible and extensible architecture that allows developers to add third-party modules and plugins to enhance the functionality of their applications. Express is widely used in the Node.js community and has a large ecosystem of tools and libraries that make it easy to build complex web applications quickly.

#### React:

React is based on a component-based architecture where each UI element is a separate component. These components can be easily composed together to create complex UIs. React also uses a virtual DOM (Document Object Model) which allows for efficient updates to the UI, minimizing the number of actual DOM manipulations needed. React has gained popularity due to its performance, scalability, and ease of use. It also has a large and active community of developers who contribute to its development and provide support through various forums and channels. React can be used with other libraries and frameworks such as Redux, Next. js, and



### JavaScript:

JavaScript is a high-level, object-oriented programming language that is primarily used for creating interactive and dynamic web content. It was created by Netscape in 1995 and is now supported by all modern web browsers. JavaScript can be used for a wide range of tasks, including web development, server-side programming, and mobile application development. It is often used in conjunction with HTML and CSS to create interactive web pages. JavaScript is a loosely typed language, meaning that variables do not need to be declared with a specific data type. It is also an interpreted language, meaning that the code is executed at runtime rather than being compiled beforehand.



## **SYSTEM REQUIREMENTS**

## **Software Requirement-**

#### To build application -

- 64-bit Windows 8/10/11
- Libraries
- Visual Studio code (latest version).

#### To Run Website -

- Web Browsers (chrome, Edge, Brave)

## Hardware Requirement -

- x86\_64 CPU architecture;
- 2nd generation Intel Core or newer
- 4 GB RAM or more
- 8 GB of available disk space minimum



## **IMPLEMENTATION**

#### **Final Code:**

• Login Page:



```
display: 'flex',
   justifyContent: 'center',
   alignItems: 'center',
 <Typography fontWeight="bold" fontSize="150px" color=""
fontFamily="Lucida, courier new, monospace">
   Hemut
 </Typography>
</Box>
       p="2rem"
       m="2rem auto"
       borderRadius="1.5rem
        " sx={{
          backgroundImage:'url(${bg})'
        <Typography fontWeight="500" variant="h5" sx={{ mb: "1.5rem"
} }>
          Welcome to Hemut, Social Media for art Enthusiasts
        </Typography>
        <Form />
      </Box>
    </Box>
 );
```



```
export default LoginPage;
```

## • Login Page(Form):

```
import { useState } from "react";
Box, Button,
  TextField,
useMediaQuery,
 Typography,
 useTheme,
 from "@mui/material";
import EditOutlinedIcon from "@mui/icons-material/EditOutlined";
import { Formik } from "formik";
import * as yup from "yup";
import { useNavigate } from "react-router-dom";
import { useDispatch } from "react-redux";
import {    setLogin } from "state";
import Dropzone from "react-dropzone";
import FlexBetween from "components/FlexBetween";
const registerSchema = yup.object().shape({
  firstName: yup.string().required("required"),
  lastName: yup.string().required("required"),
email: yup.string().email("invalid email").required("required"),
 password: yup.string().required("required"),
location: yup.string().required("required"),
```



```
occupation: yup.string().required("required"),
 picture: yup.string().required("required"),
});
const loginSchema = yup.object().shape({
 email: yup.string().email("invalid email").required("required"),
 password: yup.string().required("required"),
});
const initialValuesRegister =
  { firstName: "",
 lastName: "",
 email: "",
 password: "",
 location: "",
 occupation: "",
 picture: "",
};
const initialValuesLogin = {
 email: "",
 password: "",
};
const Form = () => {
 const [pageType, setPageType] = useState("login");
 const { palette } = useTheme();
 const dispatch = useDispatch();
 const navigate = useNavigate();
```



```
const isNonMobile = useMediaQuery("(min-width:600px)");
const isLogin = pageType === "login";
const isRegister = pageType === "register";
const register = async (values, onSubmitProps) => {
 const formData = new FormData();
  for (let value in values) {
   formData.append(value,
   values[value]);
  formData.append("picturePath", values.picture.name);
  const savedUserResponse = await fetch(
    "http://localhost:3001/auth/register",
     method: "POST",
     body: formData,
  );
 const savedUser = await savedUserResponse.json();
 onSubmitProps.resetForm();
 if (savedUser) {
   setPageType("login");
};
```



```
const loggedInResponse = await
fetch("http://localhost:3001/auth/login",
     headers: { "Content-Type": "application/json" },
     body: JSON.stringify(values),
    });
   const loggedIn = await loggedInResponse.json();
   onSubmitProps.resetForm();
   if (loggedIn) {
     dispatch(
       setLogin({
         user: loggedIn.user,
         token:
         loggedIn.token,
      })
     navigate("/home");
  };
 const handleFormSubmit = async (values, onSubmitProps) => {
   if (isLogin) await login(values, onSubmitProps);
   if (isRegister) await register(values, onSubmitProps);
  };
   <Formik
     onSubmit={handleFormSubmit}
      initialValues={isLogin ? initialValuesLogin :
```

```
handleChange,
       handleSubmit,
        setFieldValue
        <form onSubmit={handleSubmit}>
           display="grid"
           gap="30px"
            gridTemplateColumns="repeat(4, minmax(0, 1fr))"
              "& > div": { gridColumn: isNonMobile ? undefined : "span
4" },
            {isRegister && (
              <>
                <TextField
                  label="First Name"
                  onBlur={handleBlur}
                  onChange={handleChange}
                  value={values.firstName}
                  name="firstName"
```

error=

```
Boolean (touched.firstName)
Boolean(errors.firstName)
                  helperText={touched.firstName && errors.firstName}
                  sx={{ gridColumn: "span 2" }}
                <TextField
                  label="Last Name"
                  onBlur={handleBlur
                  onChange={handleChange
                  value={values.lastName
                  } name="lastName"
                  error={Boolean(touched.lastName)
&& Boolean(errors.lastName)}
                  helperText={touched.lastName
                  errors.lastName} sx={{ gridColumn: "span 2" }}
                <TextField
                  label="Location"
                  onBlur={handleBlur}
                  onChange={handleChange}
                  value={values.location}
                  name="location"
                  error={Boolean(touched.location) &&
Boolean(errors.location) }
                  helperText={touched.location && errors.location}
                  sx={{ gridColumn: "span 4" }}
```



```
label="Occupation"
                  onBlur={handleBlur}
                  onChange={handleChange}
                  value={values.occupation}
                  name="occupation"
                  error={
                    Boolean(touched.occupation) &&
Boolean(errors.occupation)
                  helperText={touched.occupation && errors.occupation}
                  sx={{ gridColumn: "span 4" }}
                />
                <Box
                  gridColumn="span 4"
                  border={ `1px solid
                  ${palette.neutral.medium}`}
                  borderRadius="5px"
                  p="1rem"
                  <Dropzone
                    acceptedFiles=".jpg,.jpeg,.png
                    " multiple={false}
                    onDrop={ (acceptedFiles) =>
                      setFieldValue("picture", acceptedFiles[0])
                    {({ getRootProps, getInputProps }) => (
                        {...getRootProps()}
                        border={ `2px dashed ${palette.primary.main} `}
```



```
p="1rem"
                       sx={{ "&:hover": { cursor: "pointer" } }}
                       <input {...getInputProps()} />
                        {!values.picture ? (
                         Add Picture Here
                         <FlexBetween>
<Typography>{values.picture.name}</Typography>
                           <EditOutlinedIcon />
                         </FlexBetween>
                     </Box>
                 </Dropzone>
               </Box>
             </>
           <TextField
             label="Email"
             onBlur={handleBlur}
             onChange={handleChange}
             value={values.email}
             name="email"
             error={Boolean(touched.email) && Boolean(errors.email)}
             helperText={touched.email && errors.email}
             sx={{ gridColumn: "span 4" }}
```



```
/>
            <TextField
              label="Password"
              type="password"
              onBlur={handleBlur}
              onChange={handleChange}
              value={values.password}
              name="password"
              error={Boolean(touched.password)
&& Boolean(errors.password)}
              helperText={touched.password && errors.password}
              sx={{ gridColumn: "span 4" }}
          </Box>
            <Button
              fullWidth
              type="submit"
              sx={ {
               m: "2rem 0",
               p: "1rem",
                backgroundColor: palette.primary.main,
                color: palette.background.alt,
                "&:hover": { color: palette.primary.main },
```



```
</Button>
          <Typography
            onClick={() =>
              setPageType(isLogin ? "register" : "login");
             resetForm();
             textDecoration:
              palette.primary.main,
             "&:hover": {
               cursor: "pointer",
               color: palette.primary.light,
            {isLogin
              ? "Don't have an account? Sign Up here."
              : "Already have an account? Login here."}
          </Typography>
        </Box>
      </form>
  </Formik>
);
```



## **Home Page:**

```
import { Box, useMediaQuery } from
"@mui/material"; import { useSelector } from
"react-redux";
import Navbar from "scenes/navbar";
import UserWidget from "scenes/widgets/UserWidget";
import MyPostWidget from "scenes/widgets/MyPostWidget";
import PostsWidget from "scenes/widgets/PostsWidget";
import AdvertWidget from "scenes/widgets/AdvertWidget";
import FriendListWidget from "scenes/widgets/FriendListWidget";
const HomePage = () => {
 const isNonMobileScreens = useMediaQuery("(min-width:1000px)");
 const { id, picturePath } = useSelector((state) =>
  state.user);
  return (
     <Navbar />
      <Box
       width="100%"
       padding="2rem
       6%"
       display={isNonMobileScreens ? "flex" : "block"}
       gap="0.5rem"
        justifyContent="space-between"
         Box flexBasis={isNonMobileScreens ? "26%" : undefined}
```

<Box m="2rem 0" />



```
<FriendListWidget userId={_id} />
      </Box>
       <PostsWidget userId={_id} />
      </Box>
         <AdvertWidget />
       </Box>
   </Box>
  </Box>
);
```

#### Nav Bar:

```
import { useState } from "react";
```



```
import {
 Box,
 IconButton,
 InputBase,
 Typography,
 Select,
 MenuItem,
 FormControl,
 useTheme,
 useMediaQuery,
} from "@mui/material";
 Search,
 Message,
 DarkMode,
 LightMode,
 Notifications,
 Help,
 Menu,
 Close,
} from "@mui/icons-material";
import { useDispatch, useSelector } from "react-redux";
import { setMode, setLogout } from "state";
import { useNavigate } from "react-router-dom";
import FlexBetween from
"components/FlexBetween";
const Navbar = () => {
 const [isMobileMenuToggled, setIsMobileMenuToggled] =
useState(false);
```



```
const dispatch = useDispatch();
const navigate = useNavigate();
const user = useSelector((state) => state.user);
const isNonMobileScreens = useMediaQuery("(min-width: 1000px)");
const theme = useTheme();
const neutralLight = theme.palette.neutral.light;
const dark = theme.palette.neutral.dark;
const background = theme.palette.background.default;
const primaryLight = theme.palette.primary.light;
const alt = theme.palette.background.alt;
const fullName = `${user.firstName} ${user.lastName}`;
  <FlexBetween padding="1rem 6%" backgroundColor='#1B3D81'>
    <FlexBetween gap="1.75rem">
      <Typography
        fontWeight="bold"
        fontSize="clamp(3rem, 5rem,
        2.5rem) " color=""
        fontfamily="Lucida, courier new, monospace"
        onClick={() => navigate("/home")}
          "&:hover": {
           color: primaryLight,
           cursor: "pointer",
```

```
Hemut
  </Typography>
  {isNonMobileScreens && (
    <FlexBetween
     borderRadius="9px"
     gap="3rem"
     padding="0.1rem 1.5rem"
      <InputBase placeholder="Search..." />
     <IconButton>
       <Search />
      </IconButton>
   </FlexBetween>
</FlexBetween>
{isNonMobileScreens ? (
 <FlexBetween gap="2rem">
    <IconButton onClick={() => dispatch(setMode())}>
      {theme.palette.mode === "dark" ? (
        <DarkMode sx={{ fontSize: "25px" }} />
        <LightMode sx={{ color: dark, fontSize: "25px" }} />
    </IconButton>
    <Message sx={{ fontSize: "25px" }} />
```



```
<Notifications sx={{ fontSize: "25px" }} />
          <Help sx={{ fontSize: "25px" }} />
          <FormControl variant="standard" value={fullName}>
           <Select
              value={fullName}
                backgroundColor: neutralLight,
                width: "150px",
                borderRadius: "0.25rem",
               p: "0.25rem 1rem",
                "& .MuiSvgIcon-root": {
                 pr: "0.25rem",
                 width: "3rem",
                },
                "& .MuiSelect-select:focus": {
                  backgroundColor:
                 neutralLight,
              input={<InputBase />}
              <MenuItem value={fullName}>
                <Typography>{fullName}</Typography>
              </MenuItem>
              <MenuItem onClick={() => dispatch(setLogout())}>Log
Out</MenuItem>
            </Select>
          </FormControl>
        </FlexBetween>
```



```
<IconButton
          onClick={() => setIsMobileMenuToggled(!isMobileMenuToggled)}
        </IconButton>
      {!isNonMobileScreens && isMobileMenuToggled && (
          position="fixed-top"
          right="0"
         height="100%"
          zIndex="10"
         maxWidth="500px
          minWidth="300px
          <Box display="flex" justifyContent="flex-end" p="1rem">
            <IconButton
              onClick={()
setIsMobileMenuToggled(!isMobileMenuToggled) }
              <Close />
            </IconButton>
          </Box>
```



```
<FlexBetween</pre>
 display="flex"
 flexDirection="column"
 justifyContent="center"
 alignItems="center"
 gap="3rem"
 <IconButton
   onClick={() =>
   fontSize: "25px" }}
   {theme.palette.mode === "dark" ? (
     <DarkMode sx={{ fontSize: "25px" }} />
     <LightMode sx={{ color: dark, fontSize: "25px" }} />
 </IconButton>
 <Message sx={{ fontSize: "25px" }} />
 <Notifications sx={{ fontSize: "25px" }} />
 <Help sx={{ fontSize: "25px" }} />
 <FormControl variant="standard" value={fullName}>
   <Select
     value={fullName}
       backgroundColor: neutralLight,
       width: "150px",
       borderRadius: "0.25rem",
       p: "0.25rem 1rem",
```



```
"& .MuiSvgIcon-root": {
                   pr: "0.25rem",
                   width: "3rem",
                  },
                  "& .MuiSelect-select:focus": {
                    backgroundColor:
                   neutralLight,
                input={<InputBase />}
               <MenuItem value={fullName}>
                  <Typography>{fullName}</Typography>
               </MenuItem>
               <MenuItem onClick={() => dispatch(setLogout())}>
                 Log Out
               </MenuItem>
             </Select>
           </FormControl>
         </FlexBetween>
       </Box>
   </FlexBetween>
};
export default Navbar;
```



#### **Profile Page:**

```
import { Box, useMediaQuery } from
"@mui/material"; import { useEffect, useState }
from "react";
import { useSelector } from "react-redux";
import { useParams } from "react-router-dom";
import Navbar from "scenes/navbar";
import FriendListWidget from "scenes/widgets/FriendListWidget";
import MyPostWidget from "scenes/widgets/MyPostWidget";
import PostsWidget from "scenes/widgets/PostsWidget";
import UserWidget from "scenes/widgets/UserWidget";
const ProfilePage = () => {
 const [user, setUser] = useState(null);
 const { userId } = useParams();
 const token = useSelector((state) => state.token);
 const isNonMobileScreens = useMediaQuery("(min-width:1000px)");
 const getUser = async () => {
   const response = await
fetch(`http://localhost:3001/users/${userId}`, {
     method: "GET",
     headers: { Authorization: `Bearer ${token}` },
   });
   const data = await response.json();
   setUser(data);
  };
 useEffect(() => {
```



```
getUser();
if (!user) return null;
return (
 <Box>
   <Navbar />
     width="100%"
     padding="2rem
     6용"
     display={isNonMobileScreens ? "flex" : "block"}
     gap="2rem"
     justifyContent="center"
     <Box flexBasis={isNonMobileScreens ? "26%" : undefined}>
        <UserWidget userId={userId} picturePath={user.picturePath} />
       <Box m="2rem 0" />
        <FriendListWidget userId={userId} />
     </Box>
     <Box
        flexBasis={isNonMobileScreens ? "42%" : undefined}
       mt={isNonMobileScreens ? undefined : "2rem"}
        <MyPostWidget picturePath={user.picturePath} />
       <Box m="2rem 0" />
       <PostsWidget userId={userId} isProfile />
      </Box>
```



#### **Advert Page:-**

```
import { Typography, useTheme } from "@mui/material";
import FlexBetween from "components/FlexBetween";
import WidgetWrapper from "components/WidgetWrapper";
 main = palette.neutral.main; const
 medium = palette.neutral.medium;
   <WidgetWrapper>
     <FlexBetween>
         Sponsored
</Typography>
<Typography color={medium}>Create Ad</Typography>
 FlexBetween
```



```
<img
 alt="advert"
  src="http://localhost:3001/assets/ganesha picutre.jpg"
 style={ { borderRadius: "0.75rem", margin: "0.75rem 0"
<FlexBetween>
  <Typography color={main}>abhi arts</Typography>
  <Typography color={medium}>abhi_arts.in</Typography>
</FlexBetween>
<Typography color={medium} m="0.5rem 0">
Art is the perfect combination of procrastination and revolution.
Let the cart be filled with art.
Your customized collection of your own images.
Get Yours Today.
</Typography>
 width="100%"
 height="auto"
 alt="advert"
 src="http://localhost:3001/assets/advert.jpg"
 style={ { borderRadius: "0.75rem", margin: "0.75rem 0" } }
<FlexBetween>
  <Typography color={main}>serene.clicks</Typography>
  <Typography color={medium}>sereneclicks.in</Typography>
```



### **Friend List Widget:**

```
import { Box, Typography, useTheme } from "@mui/material";
import Friend from "components/Friend";
import WidgetWrapper from "components/WidgetWrapper";
import { useEffect } from "react";
import { useDispatch, useSelector } from "react-redux";
import { setFriends } from "state";

const FriendListWidget = ({ userId }) => {
    const dispatch = useDispatch();
    const { palette } = useTheme();
    const token = useSelector((state) => state.token);
    const friends = useSelector((state) => state.user.friends);
```



```
const response = await fetch(
    `http://localhost:3001/users/${userId}/friends`,
     method: "GET",
     headers: { Authorization: `Bearer ${token}` },
 const data = await response.json();
 dispatch(setFriends({ friends: data
 }));
useEffect(() => {
 getFriends();
}, []); // eslint-disable-line react-hooks/exhaustive-deps
  <WidgetWrapper>
    <Typography
     color={palette.neutral.dark
     fontWeight="500"
     sx={{ mb: "1.5rem" }}
      Friend List
    </Typography>
    <Box display="flex" flexDirection="column" gap="1.5rem">
     {friends.map((friend) => (
        <Friend
          key={friend._id}
```



```
friendId={friend._id}
    name={`${friend.firstName} ${friend.lastName}`}
    subtitle={friend.occupation}
    userPicturePath={friend.picturePath}
    />
    ))}
    </Box>
    </WidgetWrapper>
);
export default FriendListWidget;
```

### **My Post Widget:**

```
import {
  EditOutlined,
  DeleteOutlined,
  AttachFileOutlined,
  GifBoxOutlined,
  ImageOutlined,
  MicOutlined,
  MoreHorizOutlined,
} from "@mui/icons-material";
import {
  Box, Divider,
   Typography,
```



```
InputBase,
 useTheme,
 Button,
 IconButton,
 useMediaQuery,
 from "@mui/material";
import FlexBetween from
"components/FlexBetween"; import Dropzone from
"react-dropzone";
import UserImage from "components/UserImage";
import WidgetWrapper from "components/WidgetWrapper";
import { useState } from "react";
import { useDispatch, useSelector } from "react-redux";
import { setPosts } from "state";
const MyPostWidget = ({ picturePath }) => {
 const dispatch = useDispatch();
 const [isImage, setIsImage] =
 useState(false); const [image, setImage] =
 useState(null); const [post, setPost] =
 useState("");
 const { palette } = useTheme();
 const { id } = useSelector((state) => state.user);
 const token = useSelector((state) => state.token);
 const isNonMobileScreens = useMediaQuery("(min-width: 1000px)");
 const mediumMain = palette.neutral.mediumMain;
 const medium = palette.neutral.medium;
 const handlePost = async () => {
   const formData = new FormData()
```

formData.append("userId", id);



```
formData.append("description", post);
 if (image) {
   formData.append("picture", image);
   formData.append("picturePath",
   image.name);
 const response = await fetch(`http://localhost:3001/posts`, {
   method: "POST",
   headers: { Authorization: `Bearer ${token}` },
   body: formData,
 });
 const posts = await response.json();
 dispatch(setPosts({ posts }));
 setImage(null);
 setPost("");
};
 <WidgetWrapper>
   <FlexBetween gap="1.5rem">
     <UserImage image={picturePath} />
     <InputBase</pre>
       placeholder="What's on your mind..."
       onChange={ (e) =>
       sx={ {
         width: "100%",
         backgroundColor: palette.neutral.light,
```



```
padding: "1rem 2rem",
</FlexBetween>
{isImage && (
 <Box
   border={`1px solid ${medium}`}
   mt="1rem
    p="1rem"
    <Dropzone
      acceptedFiles=".jpg,.jpeg,.png"
     multiple={false}
      onDrop={ (acceptedFiles) => setImage(acceptedFiles[0]) }
      {({ getRootProps, getInputProps }) => (
        <FlexBetween>
            {...getRootProps()}
            border={ `2px dashed ${palette.primary.main} `}
            p="1rem"
           width="100%"
            sx={{ "&:hover": { cursor: "pointer" } }}
            <input {...getInputProps()} />
            {!image ? (
              Add Image Here
```



```
<FlexBetween>
                      <Typography>{image.name}</Typography>
                      <EditOutlined />
                    </FlexBetween>
                </Box>
                {image && (
                  <IconButton
                    onClick={() => setImage(null)}
                    sx={ { width: "15%" } }
                    <DeleteOutlined />
                  </IconButton>
              </FlexBetween>
         </Dropzone>
       </Box>
     <Divider sx={{ margin: "1.25rem 0" }} />
     <FlexBetween>
       <FlexBetween gap="0.25rem" onClick={()</pre>
=> setIsImage(!isImage)}>
          <ImageOutlined sx={{ color: mediumMain }} />
         <Typography
           color={mediumMain}
           sx={{ "&:hover": { cursor: "pointer", color: medium } }}
```

```
Image
  </Typography>
</FlexBetween>
{isNonMobileScreens ? (
   <FlexBetween gap="0.25rem">
     <GifBoxOutlined sx={{ color: mediumMain }} />
     <Typography color={mediumMain}>Clip</Typography>
   </FlexBetween>
   <FlexBetween gap="0.25rem">
     <AttachFileOutlined sx={{ color: mediumMain }} />
     <Typography color={mediumMain}>Attachment</Typography>
   </FlexBetween>
   <FlexBetween gap="0.25rem">
     <MicOutlined sx={{ color: mediumMain }} />
      <Typography color={mediumMain}>Audio</Typography>
   </FlexBetween>
 <FlexBetween gap="0.25rem">
   <MoreHorizOutlined sx={{ color: mediumMain }} />
 </FlexBetween>
<Button
```



```
disabled={!post}
  onClick={handlePost}
  sx={{
      color: palette.background.alt,
      backgroundColor: palette.primary.main,
      borderRadius: "3rem",
    }}
  >
    POST
    </Button>
  </FlexBetween>
  </WidgetWrapper>
);
export default MyPostWidget;
```

## **Post Widget:**

```
import { useEffect } from "react";
import { useDispatch, useSelector } from "react-redux";
import { setPosts } from "state";
import PostWidget from "./PostWidget";

const PostsWidget = ({ userId, isProfile = false }) => {
   const dispatch = useDispatch();
const posts = useSelector((state) => state.posts);
```



```
const token = useSelector((state) => state.token);
const getPosts = async () => {
 const response = await fetch("http://localhost:3001/posts", {
   method: "GET",
   headers: { Authorization: `Bearer ${token}` },
 const data = await response.json();
 dispatch(setPosts({ posts: data
 }));
const getUserPosts = async () => {
 const response = await fetch(
   `http://localhost:3001/posts/${userId}/posts`,
     method: "GET",
     headers: { Authorization: `Bearer ${token}` },
  );
 const data = await response.json();
 dispatch(setPosts({ posts: data
 }));
};
useEffect(() => {
 if (isProfile)
   getUserPosts();
    else
```

getPosts();

```
}, []); // eslint-disable-line react-hooks/exhaustive-deps
 <>
    {posts.map
       userId,
        firstName,
       description,
       location,
       picturePath,
       userPicturePath
        , likes,
        comments,
        <PostWidget
         postUserId={userId}
         name={`${firstName} ${lastName}`}
          description={description}
          location={location}
         picturePath={picturePath}
         userPicturePath={userPicturePath}
          likes={likes}
         comments={comments}
```



```
)
)
</>
/>
);
);
export default PostsWidget;
```

#### Page 3:

```
ChatBubbleOutlineOutlined,
 FavoriteBorderOutlined,
 FavoriteOutlined,
 ShareOutlined,
 from "@mui/icons-material";
import { Box, Divider, IconButton, Typography, useTheme } from
import FlexBetween from "components/FlexBetween";
import Friend from "components/Friend";
import WidgetWrapper from "components/WidgetWrapper";
import { useState } from "react";
import { useDispatch, useSelector } from "react-redux";
import { setPost } from "state";
const PostWidget = ({
```

postUserId,



```
description,
 picturePath,
 userPicturePath,
 likes,
 const [isComments, setIsComments] = useState(false);
 const dispatch = useDispatch();
 const token = useSelector((state) => state.token);
 const loggedInUserId = useSelector((state) => state.user. id);
 const isLiked = Boolean(likes[loggedInUserId]);
 const likeCount = Object.keys(likes).length;
 const { palette } = useTheme();
 palette.neutral.main;
 const primary = palette.primary.main;
 const patchLike = async () => {
   const response = await
fetch(`http://localhost:3001/posts/${postId}/like`, {
     method: "PATCH",
     headers: {
       Authorization: `Bearer ${token}`,
        "Content-Type":
       "application/json",
     },
     body: JSON.stringify({ userId: loggedInUserId }),
```



```
const updatedPost = await response.json();
 dispatch(setPost({ post: updatedPost }));
};
 <WidgetWrapper m="2rem 0">
   <Friend
     friendId={postUserId
     } name={name}
     subtitle={location}
     userPicturePath={userPicturePath}
   <Typography color={main} sx={{ mt: "1rem" }}>
     {description}
   </Typography>
   {picturePath && (
       width="100%"
       height="auto"
       alt="post"
       style={ { borderRadius: "0.75rem", marginTop: "0.75rem" } }
       src={`http://localhost:3001/assets/${picturePath}`}
   <FlexBetween mt="0.25rem">
     <FlexBetween gap="1rem">
       <FlexBetween gap="0.3rem">
         <IconButton onClick={patchLike}>
           {isLiked ? (
```



```
<FavoriteOutlined sx={{ color: primary }} />
               <FavoriteBorderOutlined />
           </IconButton>
           <Typography>{likeCount}</Typography>
         </FlexBetween>
         <FlexBetween gap="0.3rem">
           <IconButton onClick={() => setIsComments(!isComments)}>
             <ChatBubbleOutlineOutlined />
           </IconButton>
           <Typography>{comments.length}</Typography>
         </FlexBetween>
       </FlexBetween>
       <IconButton>
         <ShareOutlined />
       </IconButton>
     </FlexBetween>
     {isComments && (
       <Box mt="0.5rem">
         {comments.map((comment, i) => (
           <Box key={`${name}-${i}`}>
             <Divider />
             <Typography sx={{ color: main, m: "0.5rem 0", pl: "1rem"
} }>
                {comment}
             </Typography>
```



#### **User Widget:**

```
import {
   ManageAccountsOutlined,
   EditOutlined,
   LocationOnOutlined,
   WorkOutlineOutlined,
} from "@mui/icons-material";
import { Box, Typography, Divider, useTheme } from "@mui/material";
import UserImage from "components/UserImage";
import FlexBetween from "components/FlexBetween";
import WidgetWrapper from "components/WidgetWrapper";
import { useSelector } from "react-redux";
import { useEffect, useState } from "react";
import { useNavigate } from "react-router-dom";
```



```
const [user, setUser] = useState(null);
 const { palette } = useTheme();
 const navigate = useNavigate();
 const token = useSelector((state) => state.token);
 const dark = palette.neutral.dark;
 const medium = palette.neutral.medium;
 const main = palette.neutral.main;
 const getUser = async () => {
   const response = await
fetch(`http://localhost:3001/users/${userId}`, {
     method: "GET",
     headers: { Authorization: `Bearer ${token}` },
   const data = await response.json();
   setUser(data);
  };
 useEffect(() => {
   getUser();
  }, []); // eslint-disable-line react-hooks/exhaustive-deps
 if (!user) {
   return
   null;
    lastName,
```

```
location,
 occupation,
 viewedProfile,
 impressions,
} = user;
 <WidgetWrapper>
   <FlexBetween</pre>
     gap="0.5rem"
     pb="1.1rem"
     onClick={() => navigate(`/profile/${userId}`)}
     <FlexBetween gap="1rem">
        <UserImage image={picturePath} />
          <Typography
            color={dark}
            fontWeight="500"
              "&:hover": {
                color: palette.primary.light,
               cursor: "pointer",
              },
```



```
{firstName} {lastName}
           </Typography>
            <Typography color={medium}>{friends.length}
friends</Typography>
          </Box>
       </FlexBetween>
       <ManageAccountsOutlined />
     </FlexBetween>
     <Divider />
       <Box display="flex" alignItems="center" gap="1rem" mb="0.5rem">
         <LocationOnOutlined fontSize="large" sx={{ color: main }} />
          <Typography color={medium}>{location}</Typography>
       </Box>
       <Box display="flex" alignItems="center" gap="1rem">
          <WorkOutlineOutlined fontSize="large" sx={{ color: main }} />
          <Typography color={medium}>{occupation}</Typography>
       </Box>
      </Box>
      <Divider />
     <Box p="1rem 0">
       <FlexBetween mb="0.5rem">
          <Typography color={medium}>Who's viewed
your profile</Typography>
```



```
<Typography color={main} fontWeight="500">
            {viewedProfile}
          </Typography>
        </FlexBetween>
        <FlexBetween>
          <Typography color={medium}>Impressions of
your post</Typography>
          <Typography color={main} fontWeight="500">
            {impressions}
          </Typography>
        </FlexBetween>
      </Box>
      <Divider />
     <Box p="1rem 0">
        <Typography fontSize="1rem" color={main} fontWeight="500"</pre>
mb="1rem">
          Social Profiles
        </Typography>
        <FlexBetween gap="1rem" mb="0.5rem">
          <FlexBetween gap="1rem">
            <img src="../assets/twitter.png" alt="twitter" />
            <Box>
              <Typography color={main} fontWeight="500">
                Twitter
              </Typography>
              <Typography color={medium}>Social Network</Typography>
```



```
</Box>
        </FlexBetween>
      </FlexBetween>
        <FlexBetween gap="1rem">
          <img src="../assets/linkedin.png" alt="linkedin" />
            <Typography color={main} fontWeight="500">
              Linkedin
            </Typography>
            <Typography color={medium}>Network Platform</Typography>
          </Box>
        </FlexBetween>
      </FlexBetween>
    </Box>
  </WidgetWrapper>
);
```

## **BACKEND CODE: (DATABASE, SIGNUP, LOGIN)-**



#### **Index.js:**

```
import express from "express";
import bodyParser from "body-parser";
import mongoose from "mongoose";
import cors from "cors";
          dotenv
import
                    from
"dotenv";
           import multer
from "multer";
                   import
         from "helmet";
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);
```

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")));
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 });
app.post("/auth/register", upload.single("picture"), register);
app.post("/posts", verifyToken, upload.single("picture"),
createPost);
/* ROUTES */
app.use("/auth", authRoutes);
app.use("/users", userRoutes);
app.use("/posts", postRoutes);
```



```
/* MONGOOSE SETUP */
const PORT = process.env.PORT || 6001;
mongoose
   .connect(process.env.MONGO_URL, {
    useNewUrlParser: true,
    useUnifiedTopology: true,
})
   .then(() => {
    app.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`));
```

#### **Controllers**

<u>:</u>

#### Auth.js:

```
import bcrypt from_"bcrypt";
import jwt from_"jsonwebtoken";
import User from_"../models/User.js";

/* REGISTER USER */
export_const_register_=_async (req, res) => {
    try {
```



```
const {
   firstName,
   lastName,
   email,
   password,
   picturePath,
   friends,
   location,
   occupation,
 } = req.body;
 const salt = await bcrypt.genSalt();
 const passwordHash = await bcrypt.hash(password, salt);
 const newUser = new User({
   <u>firstName,</u>
   lastName,
   email,
   password: passwordHash,
  picturePath,
   friends,
   location,
   occupation,
   viewedProfile: Math.floor(Math.random() * 10000);
   impressions: Math.floor(Math.random() * 10000),
 });
 const savedUser = await newUser.save();
 res.status(201).json(savedUser);
} catch (err) {
```



```
res.status(500).json({ error: err.message });
 <u>}</u>
};
/* LOGGING IN */
<u>export_const_login_=_async (req, res) => {</u>
 try {
   _const { email, password } = req.body;
  const user = await User.findOne({ email: email });
  <u>if (!user) return res.status(400).json({ msg: "User does not exist.</u>
" });
    const isMatch = await bcrypt.compare(password, user.password);
   if (!isMatch) return res.status(400).json({ msg: "Invalid
credentials. " });
    const token = jwt.sign({ id: user. id }, process.env.JWT SECRET);
   delete user.password;
   res.status(200).json({ token, user });
 } catch (err) {
    res.status(500).json({ error: err.message });
1:
```

## Posts.js:

```
import Post from_"../models/Post.js";
import User from_"../models/User.js";
```



```
/* CREATE */
export_const_createPost = async (reg, res) => {
 try {
  const { userId, description, picturePath } = req.body;
   _const_user = await_User.findById(userId);
   const newPost = new Post({
     userId,
     firstName: user.firstName,
     lastName: user.lastName,
     location: user.location,
     description,
     userPicturePath: user.picturePath,
     picturePath,
     likes: {},
     comments: [],
   });
   await newPost.save();
   const post = await Post.find();
   res.status(201).json(post);
 } catch (err) {
   res.status(409).json({ message: err.message });
} :
/* READ */
export const getFeedPosts = async (req, res) => {
 try {
   const post = await Post.find().sort({"updatedAt":-1});
```



```
res.status(200).json(post);
 } catch (err) {
   res.status(404).json({ message: err.message });
 _}
};
export-const-getUserPosts-=-async (req, res) => {
 try {
  const { userId } = req.params;
   -const-post-=-await-Post.find({-userId-});
  res.status(200).json(post);
 } catch (err) {
   res.status(404).json({ message: err.message });
 <u>}</u>
/* UPDATE */
export const likePost = async (req, res) => {
 try {
   const { id } = req.params;
   const { userId } = req.body;
   const post = await Post.findById(id);
   const isLiked = post.likes.get(userId);
   if (isLiked) {
     post.likes.delete(userId);
   } else {
     post.likes.set(userId, true);
```



```
const_updatedPost = await Post.findByIdAndUpdate(
    id,
    { likes: post.likes },
    { new: true }
    };

    res.status(200).json(updatedPost);
    } catch (err) {
        res.status(404).json({ message: err.message });
    }
};
```

### Users.js:

```
import User from "../models/User.js";

/* READ */
export_const_getUser_=_async (req, res) => {
    try {
        const { id } = req.params;
        const user = await User.findById(id);

        res.status(200).json(user);
    } catch (err) {
        res.status(404).json({ message: err.message });
    }
};
```



```
export_const_getUserFriends_=_async_(req, res) => {
  try {
   const { id } = req.params;
  const user = await_User.findById(id);
   _const_friends = await_Promise.all(
     user.friends.map((id) =>___
     User.findById(id))
   const formattedFriends = friends.map(
      ({ _id, firstName, lastName, occupation, location, picturePath })
       return { id, firstName, lastName, occupation,
location, picturePath };
     _}
   res.status(200).json(formattedFriends);
 } catch (err) {
   res.status(404).json({ message: err.message });
 _}
};
/* UPDATE */-
export const addRemoveFriend = async (req, res) => {
 try
   const { id, friendId } = req.params;
   const user = await
   User.findById(id);
   const friend = await User.findById(friendId);
```

```
if (user.friends.includes(friendId)) {
  user.friends = user.friends.filter((id) => id !== friendId);
```



```
friend.friends = friend.friends.filter((id) => id !== id);
   } else {
    user.friends.push(friendId);
     friend.friends.push(id);
   <u>.</u>
   await user.save();
   <u>await</u>
   friend.save();
   const friends = await Promise.all(
     user.friends.map((id) =>
     User.findById(id))
   const formattedFriends = friends.map(
     ({ id, firstName, lastName, occupation, location, picturePath })
=> {
       return { _id, firstName, lastName, occupation,
location, <u>picturePath };</u>
  }
  res.status(200).json(formattedFriends);
 } catch (err) {
  res.status(404).json({ message: err.message });
```

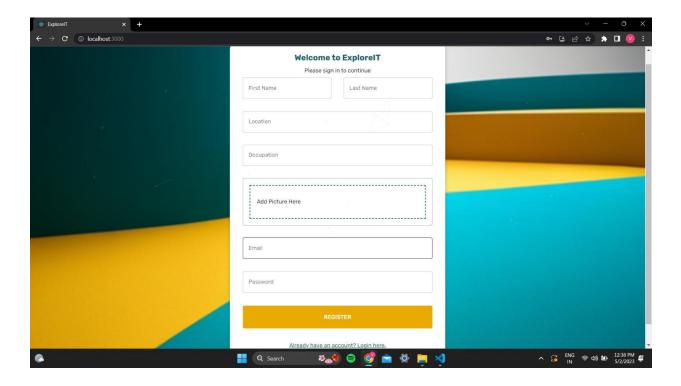


# **WORKING**

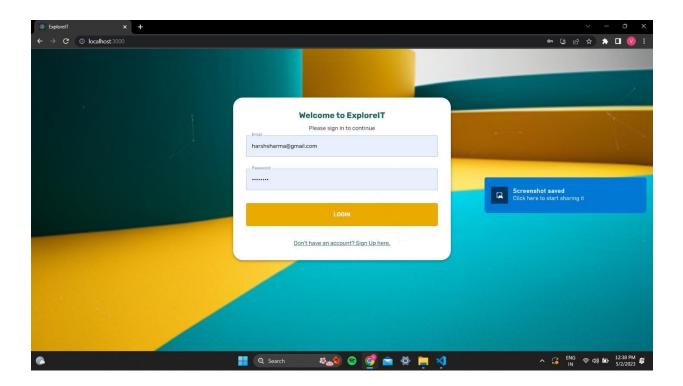
- 1. User will open the site and will see the Login Page.
- 2. On the Login page, we have two options: signup and login.
- 3. Here a new user can sign up and can create an account, Existing Users can login by entering the desired details.
- 4. After login, the customer will be directed to the main landing page of the website, where we have all our services.



### Sign Up Page:

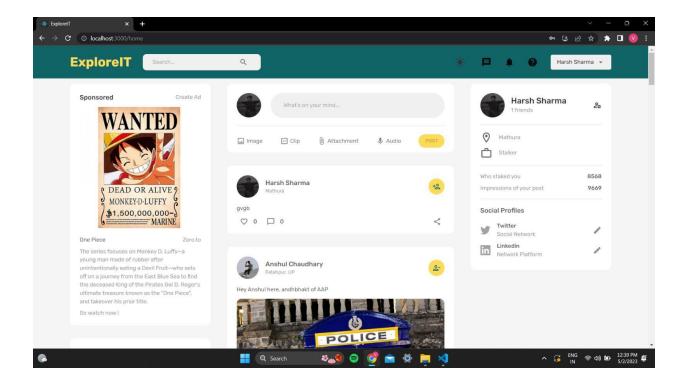


# Sign In Page:



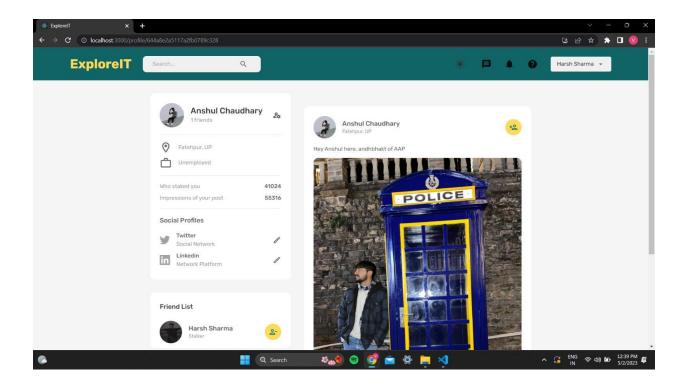


# **Home Page:-**



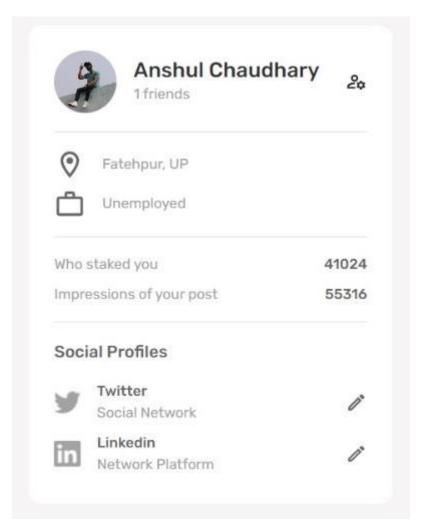


### **Profile Page:-**

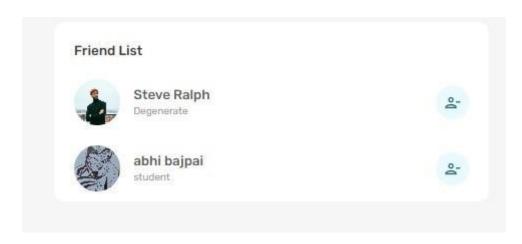




### **UserWidget:-**

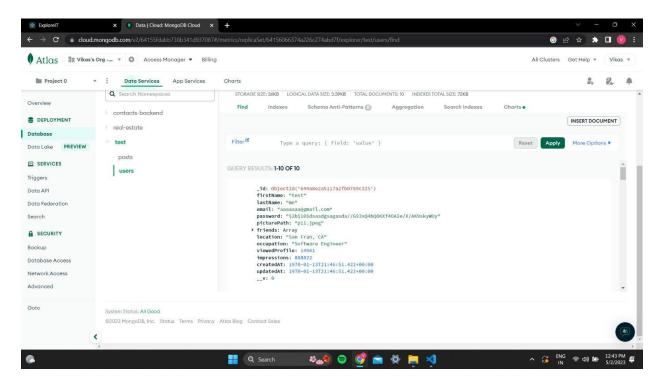


# **Friends List:-**

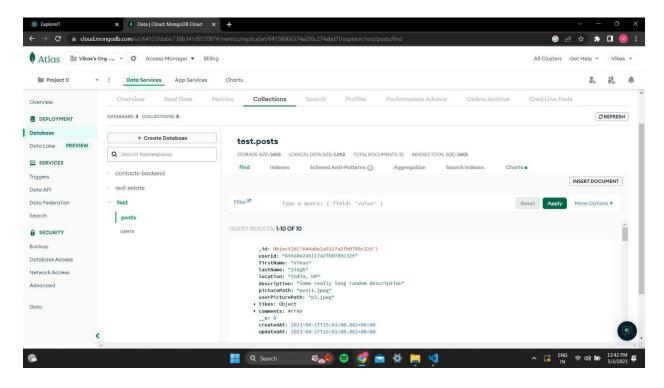




#### **Users Database:-**



#### **Posts Database:-**





# **CONCLUSION AND FUTURE WORK**

#### **Conclusion:**

As per the attempt of the project is to create a safe and fun platform for the artists to create, upload and interact with other artists of all forms. The artists, photographers, creators and collaborators can interact with, get along with and promote their works on our platform. They can create all kinds of content and get amazing deals while working with the other creators and artists.

The data of the users and the posts are saved in the database. We used MongoDB database for saving the data of the users and the posts they create, upload and promote.

The users can register using our sign up page and once registered, the data is saved in the backend. The data will be fetched and used again when log in using the saved credentials from the backend.

Once landed on the home page, they can create a post by uploading a picture. We have also created a theme changing option: which included light and dark themes.

#### **Future work: -**

The scope of the project is to help more and more creators promote their works and get ahead in their career by increasing their reach by collaborating with the other artists and creators and providing the audience with the original exclusive



content for entertainment.

Their data will be used by using multiple algorithms to create a better environment and a better platform for the collaborators to engage with the audience.

The plan is to add more features for the users to chat with others on the network, create an even easier interface to make better and more effective content.

#### Github Link:

https://github.com/Vikas-Singh-10/FullStack-Project-Social-Media