Internet Technology and Applications Practicals Assignment 4

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Create a simple CRUD app that interacts with a database. UI must be very clean and simple and it must be responsive.

Tech Stack

ReactJS **FirebaseSDK** AlgoliaSearch MaterialUI

Project Directory Structure

```
- App.css
— App.js
- App.scss
- assets
  google_logo.png
  components
    - CreatePost
     └─ index.js
    - Footer
     index.js
    GuestLinks
     └─ index.js
    - Navbar
     └─ index.js
    - policy
     └─ index.js
    - Post
     └─ index.js
    - SignInLinks
     └─ index.js
    - UserView
     └─ index.js
 config
  firebaseConfig.js
 index.css
 index.js
 logo.png
- logo.svg
 registerServiceWorker.js
```

```
├─ routes
├─ Dashboard
├─ Index.js
├─ Home
├─ index.js
├─ OurStory
├─ Profile
├─ index.js
├─ SearchView
├─ index.js
├─ setupTests.js
├─ utils
├─ compress.js
```

Code:

App.scss:

```
$xs: 0px;
$sm: 600px;
$md: 960px;
$lg: 1280px;
$x1: 1920px;
$spacing: 8;
a{
text-decoration: none;
color: inherit;
&:hover{
   text-decoration: none;
}
.search {
position:relative;
border-radius: 4px;
background: rgba(255,255,255,0.15);
&:hover {
  background: rgba(255,255,255,0.25);
};
margin-right: 16px;
width: 100%;
 @media screen and (min-width: $sm) {
```

```
margin-right: 24px;
  width: auto;
.searchIcon {
padding: 6px;
height: 100%;
position: absolute;
pointer-events: none;
display: flex;
align-items: center;
justify-content: center;
.inputBase {
color: inherit;
padding: 4px;
padding-left: 33px;
width: 100%;
@media screen and (min-width: $sm) {
 input{
  transition: 0.5s all ease-in-out;
  width: 20ch;
  &:focus {
    width: 30ch;
  }
 }
}
.grow {
flex-grow: 1;
.navbar {
background-color: black;
.menuButton {
margin-right: '16px';
```

```
.iconDesktop {
width: Orem;
display: flex;
opacity: 0;
transition: all 0.5s ease-in-out;
@media screen and (min-width: $sm) {
  display: flex;
  opacity: 1;
  width: 2.5rem;
  margin-right: 0.5rem;
}
.react-html5-camera-photo {
video {
  width: 100%;
.title {
flex-grow: 1;
color: white;
text-decoration: none;
display: block;
transition: 1s all ease-in-out;
&:hover {
  color: 'white';
  text-decoration: 'none';
}
.sectionDesktop {
&>* {
  margin: #{$spacing*1px};
 display: none;
```

```
@media screen and (min-width: $sm) {
   display: flex;
}
.navButtons *+* {
margin: 0.25rem;
.list {
width: '250px';
.drawerPhoto {
width: 4rem;
height: 4rem;
.block {
display: block;
.progressGrid {
display: flex;
justify-content: center;
/* Home SCSS */
.home {
margin-top: 5rem;
.homeTitle {
font-size: 4rem;
.homeTitlePlaceholder {
width: 15rem;
height: 3rem;
```

```
.homeCenter {
display: flex;
justify-content: center;
margin: 1rem;
.homeLogo {
width: 300px;
.homeLogoPlaceholder {
width: 300px;
height: 300px;
.signInButton {
background-color: #4285F4;
.homeButtonPlaceholder {
width: 15rem;
height: 2rem;
.homeGoogleLogo {
width: 2rem;
margin-right: 1rem;
/* Footer SASS */
.footer {
margin-top: 7rem;
.footerCenter {
display: flex;
justify-content: center;
margin: 1rem;
text-align: center;
* {
  text-align: center;
```

```
color: whitesmoke;
  text-decoration: none;
  margin: 1rem;
  font-size: 0.65rem;
}
/* Dashboard SASS */
.dashboard {
margin-top: 5rem;
@media screen and (min-width: $md) {
  margin-left: 20rem;
  margin-right: 20rem;
.dashboardCreatePostPlaceholder {
height: 6rem;
/* CreatePost SASS */
.createPost {
padding: 1rem;
.createPostTextField {
width: 100%;
.createPostFAB {
width: 2.5rem;
height: 2.5rem;
margin: 1rem;
.createPostHeader {
align-items: center;
.createPostPreview {
```

```
p {
  word-break: break-all;
.createPostCardImage {
width: 100%;
height: 100%;
.cameraDialogContent {
display: contents;
.cameraDialogTitle {
padding-bottom: 0.25rem;
padding-top: 0.25rem;
/* Post SASS */
.postPlaceholder {
height: 15rem;
.postPaper {
margin-top: 2rem;
margin-bottom: 2rem;
/* Profile SASS */
.profile {
margin-top: 5rem;
@media screen and (min-width: $md) {
  margin-left: 14rem;
  margin-right: 14rem;
}
.profileTop {
 & > div {
   text-align: center;
  padding-top: 0.3rem;
```

```
padding-bottom: 0.3rem;
}
.profileTabView {
 & > div {
  text-align: center;
  padding-top: 0.3rem;
  padding-bottom: 0.3rem;
.profilePlaceholder {
height: 16rem
.profilePhoto {
width: 100px;
height: 100px;
/* UserView SASS */
.userViewPlaceholder{
height: 14rem;
.userViewLink {
text-decoration: none;
&:hover{
  text-decoration: none;
```

CreatePost/index.js:

```
import { Component } from "react"
import { withRouter } from 'react-router-dom'
import { IconButton, CardHeader, Card, CardActions, CardContent, Container, Grid, Paper,
TextField, Box, Fab, Tooltip, Zoom, Divider, Avatar, Typography, CircularProgress,
import firebase from 'firebase'
import { Send, Publish, MoreVert, Favorite, Cancel } from '@material-ui/icons'
import Cameralcon from '@material-ui/icons/Camera'
import Camera from 'react-html5-camera-photo'
import reduceFileSize from '../../utils/compress'
class CreatePost extends Component {
constructor(props) {
  super(props)
  this.state = {
    user: this.props.user,
    imageUrl: '',
    postContent: '',
    sendingPost: false,
    isProfilePicModalOpen: false,
    isPhotoModalOpen: false,
    isCameraModalOpen: false,
    videoStream: null
  }
 }
preventDefault = (e) => {
  e.preventDefault()
 handleTextFieldChange = (e) => {
  if (e.target.value.length > 200) return;
  this.setState({
    ...this.state,
    postContent: e.target.value,
  })
 onFileUpload = (e) => {
  let file = e.target.files[0]
  reduceFileSize(file, 500 * 1024, 1000, Infinity, 0.6, (file) => {
```

```
let reader = new FileReader()
    reader.readAsDataURL(file)
    let flag = 0
    reader.onload = () => {
      if (!reader.result.startsWith('data:image'))
        flag = 1
      else {
        this.setState({
          ...this.state,
          imageUrl: reader.result
        })
      }
    };
    if (flag) {
      return
    }
 })
toggleProfilePicModal = () => {
 this.setState({
    ...this.state,
    isProfilePicModalOpen: !this.state.isProfilePicModalOpen
 })
}
togglePhotoModal = () => {
 this.setState({
    ...this.state,
    isPhotoModalOpen: !this.state.isPhotoModalOpen
 })
}
toggleCameraModal = async () => {
 await this.setState({
    ...this.state,
    isCameraModalOpen: !this.state.isCameraModalOpen
 })
 if (!this.state.isCameraModalOpen) {
    await Promise.all(this.state.videoStream.getTracks().map(async (t) => {
      console.log(t)
     await t.stop();
    }))
    this.setState({
      ...this.state,
```

```
videoStream: null
    })
  }
}
handleUpload = async () => {
  const fileSelector = document.getElementById('fileUpload')
  fileSelector.click()
handleCameraStart = (stream) => {
  this.setState({
    ...this.state,
    videoStream: stream
  })
}
takeSnapPhoto = async () => {
  const videoElement = document.getElementsByTagName('video')[0]
  const canvas = document.createElement("canvas");
  canvas.width = videoElement.videoWidth;
  canvas.height = videoElement.videoHeight;
  canvas.getContext('2d')
    .drawImage(videoElement, 0, 0, canvas.width, canvas.height);
  const dataURL = canvas.toDataURL();
  await this.setState({
    imageUrl: dataURL,
  })
  this.toggleCameraModal()
}
getTime = (timestamp) => {
  if (this.state.isLoading) return ''
  let d = timestamp
  let currentTime = new Date().getTime()
  const monthNames = ["January", "February", "March", "April", "May", "June",
    "July", "August", "September", "October", "November", "December"
  1;
  const min = 60 * 1000
  const hour = 60 * min
  if (currentTime - d <= 15 * min) return 'Few mins ago'
  else if (currentTime - d <= 30 * min) return 'Half hour ago'
  else if (currentTime - d <= hour) return 'An hour ago'
```

```
else if (currentTime - d <= 2 * hour) return '2 hours ago'
  else if (currentTime - d <= 4 * hour) return '4 hours ago'
  else if (currentTime - d <= 8 * hour) return '8 hours ago'
  else if (currentTime - d <= 12 * hour) return '12 hours ago'
  else if (currentTime - d <= 24 * hour) return 'A day ago'
  d = new Date(d)
  return monthNames[d.getMonth()] + ' ' + d.getDate() + ', ' + d.getFullYear()
createPostMethod = async () => {
  if (this.state.imageUrl.length === 0) {
    return
  this.setState({
    ...this.state,
    sendingPost: true
  })
  try {
    let tags = this.state.postContent.split(/[\n\t ]+/).filter((e) => { return
tags = [].concat.apply([], tags).filter((e) => { return e.length !== 0 }).map((e) =>
{ return e.toLowerCase() }).filter((v, i, a) => a.indexOf(v) === i)
    let dbRef = firebase.firestore()
    let postData = {
      byID: this.state.user.uid,
      imageUrl: this.state.imageUrl,
      likes: [],
      postContent: this.state.postContent,
      tags: tags,
      downloads: 0,
      timestamp: new Date().getTime(),
    let postResult = await dbRef.collection('posts').add(postData)
    let postID = postResult.id.toString()
    await Promise.all(tags.map(async (tag) => {
      let tagRef = dbRef.collection('tags').doc(tag)
      let tagResult = await tagRef.get()
      if (!tagResult.exists) {
```

```
await tagRef.set({
           posts: [postID],
           search: 0,
         })
       } else {
         let data = tagResult.data()
         tagRef.set({
           posts: [...data.posts, postID]
         })
       }
     }))
     this.setState({
      postContent: '',
      imageUrl: '',
      imageFile: null,
       sendingPost: false
     })
   } catch (e) {
     console.log(e)
render() {
  if (this.state.sendingPost)
    return (
       <Grid item className='progressGrid' xs={12}>
         <CircularProgress color='secondary' />
       </Grid>
  return (
     <Paper elevation={0}>
       <input hidden type="file" id='fileUpload' accept='.jpg,.jpeg,.png'</pre>
onChange={this.onFileUpload} />
       <Grid className='createPost'>
        <Grid item xs={12}>
           <TextField
             className='createPostTextField'
             label="Write your Story"
             id="outlined-size-normal"
             variant="outlined"
             color='secondary'
             multiline
```

```
onChange={this.handleTextFieldChange}
             value={this.state.postContent}
             rowsMax='3'
           <Box display='flex' flexDirection='row-reverse'>
             {200 - this.state.postContent.length} characters left.
           </Box>
        </Grid>
        <Grid item xs={12}>
           <Box display='flex' flexDirection="row-reverse">
             <Tooltip TransitionComponent={Zoom} title="Create Post" aria-label="Create
Post" arrow>
               <Fab color="secondary" className='createPostFAB' size='small'</pre>
onClick={this.createPostMethod} >
                 <Send />
               </Fab>
             </Tooltip>
             <Tooltip TransitionComponent={Zoom} title="Upload Photo" aria-label="Upload
Photo" arrow>
               <Fab color="secondary" className='createPostFAB' size='small'</pre>
onClick={this.handleUpload} >
                 <Publish />
               </Fab>
             </Tooltip>
             <Tooltip TransitionComponent={Zoom} title="Snap Photo" aria-label="Snap
Photo" arrow>
               <Fab color="secondary" className='createPostFAB' size='small'</pre>
onClick={this.toggleCameraModal} >
                 <CameraIcon />
               </Fab>
             </Tooltip>
           </Box>
         </Grid>
         <Divider />
           (this.state.postContent.length !== 0 || this.state.imageUrl.length !== 0)
             <Grid item xs={12} className='createPostPreview'>
               <Grid item xs={12}>
                 <Typography>Post Preview</Typography>
               </Grid>
               <Card variant='outlined' className='createPostCard'>
```

```
<CardHeader
                   avatar={
                      <Avatar alt={this.state.user.displayName}</pre>
src={this.state.user.photoURL.replace('s96-c', 's500-c')}
onClick={this.toggleProfilePicModal} />
                   action={
                     <IconButton aria-label="settings">
                        <MoreVert />
                     </IconButton>
                   title={this.state.user.displayName}
                    subheader={this.getTime(new Date().getTime())}
                 />
                 <CardContent>
                    \{this.state.postContent.split('\n').map((e) => \{ return {e} \}) \}
                 </CardContent>
                    this.state.imageUrl.length !== 0
                     <div>
                       <img alt='Upload'</pre>
                          className='createPostCardImage'
                          src={this.state.imageUrl} onClick={this.togglePhotoModal}
                        />
                     </div>
                     nul1
                 <CardActions disableSpacing>
                   <IconButton aria-label="Like Post">
                      <Favorite />
                   </IconButton>
                 </CardActions>
               </Card>
             </Grid>
             null
       </Grid>
       <Dialog className='dialog'</pre>
         aria-labelledby='Profile Photo Dialog'
         aria-describedby='Profile Photo' onClose={this.toggleProfilePicModal}
open={this.state.isProfilePicModalOpen}>
```

```
<img src={this.state.user.photoURL.replace('s96-c', 's500-c')} alt='Profile' />
       </Dialog>
       <Dialog className='dialog'</pre>
         aria-labelledby='Photo Dialog'
         aria-describedby='Photo' onClose={this.togglePhotoModal}
open={this.state.isPhotoModalOpen}>
         <img src={this.state.imageUrl} alt='Upload' />
       </Dialog>
       <Dialog className='dialog'</pre>
         aria-labelledby='Camera Photo Dialog'
         aria-describedby='Camera Photo' onClose={this.toggleCameraModal}
onBackdropClick="false" onClick={this.preventDefault}
open={this.state.isCameraModalOpen}>
         <DialogTitle className='cameraDialogTitle'>
           <Box display='flex' flexDirection='row-reverse' justifyContent='space-between'</pre>
alignItems='center'>
             <IconButton onClick={this.toggleCameraModal}><Cancel />/IconButton>
               Snap your Photo</div>
           </Box>
         </DialogTitle>
         <DialogContent className='cameraDialogContent'>
           <Camera isImageMirror={false}</pre>
             onCameraStart={this.handleCameraStart} />
           <Tooltip TransitionComponent={Zoom} title="Snap Photo" aria-label="Snap Photo"
arrow>
             <Fab color="secondary" className='createPostFAB' size='small'</pre>
onClick={this.takeSnapPhoto} variant='extended' >
               <CameraIcon />
                   Snap
                 </Fab>
           </Tooltip>
         </DialogContent>
       </Dialog>
     </Paper>
  )
export default withRouter(CreatePost);
```

Footer/index.js:

```
import { Component } from "react"
import { Link, withRouter } from 'react-router-dom'
import {    Grid, Dialog, DialogContent,DialogTitle,Typography } from '@material-ui/core'
import policy from '../policy'
var template = { html: policy };
class Footer extends Component {
constructor(props) {
  super(props)
  this.state = {
     openPolicy: false,
    openHelp: false,
  }
}
preventDefault = (event) => event.preventDefault();
handlePolicyModal = (event, reason) => {
  if (reason === 'clickaway') {
     return
  this.setState({
     ...this.state,
     openPolicy: !this.state.openPolicy,
  })
handleHelpModal = (event, reason) => {
  if (reason === 'clickaway') {
     return
  this.setState({
     ...this.state,
     openHelp: !this.state.openHelp,
  })
}
render() {
  return (
     <Grid container className='footer'>
       <Grid container className='footerCenter'>
         <Grid item xs={3} sm={1}>
           <Link to='/ourstory'>About</Link>
        </Grid>
         <Grid item xs={3} sm={1}>
           <Link to='/'>Blog</Link>
         </Grid>
```

```
<Link onClick={this.handleHelpModal}>Help</Link>
         </Grid>
         <Grid item xs={3} sm={1}>
           <Link to='/'>Jobs</Link>
         </Grid>
        <Grid item xs={3} sm={1}>
           <Link to='/'>API</Link>
        </Grid>
         <Grid item xs={3} sm={1}>
           <Link to='/hashtags'>Hashtags</Link>
         </Grid>
         <Grid item xs={3} sm={1}>
          <Link to='/'>Locations</Link>
        </Grid>
        <Grid item xs={3} sm={1}>
           <Link to='/accounts'>Accounts</Link>
        </Grid>
         <Grid item xs={12}>
           <Link onClick={this.handlePolicyModal}>@Copyright 2021 - Present</Link>
         </Grid>
        <Grid item xs={12}>
          <Link onClick={this.handlePolicyModal}>All Rights Reserved.</Link>
        </Grid>
        <Grid item xs={12}>
           <Link to='/'>Fotorama</Link>
         </Grid>
       </Grid>
       <Dialog className='dialog'</pre>
             aria-labelledby="alert-dialog-title"
             aria-describedby="alert-dialog-description" onClick={this.handleHelpModal}
open={this.state.openHelp}>
             <DialogTitle id="alert-dialog-title">Fotorama | Help & FAQ</DialogTitle>
             <DialogContent>
               <Typography variant="h6">What is Fotorama all about?</Typography>
               <Typography >
                 Fotorama is what you all think it is! Snap your Pictures, Share them
with your Loved Ones, friends and families! Cherish your memories!
               </Typography>
               <Typography variant="h6">What Information do you store about
me?</Typography>
               <Typography >
                 Apart from the content that you post on Fotorama, nothing else.
               </Typography>
```

<Grid item xs={3} sm={1}>

```
<Typography variant="h6">What more can I do after logging in?</Typography>
               <Typography >
                 You can share your snaps, make friends, search posts based on Tags and
more!
               </Typography>
               <Typography variant="h6">How do I post?</Typography>
               <Typography >
                 Do you see that Share button on your Dashboard? Click it and find the
rest of the steps!
               </Typography>
               <Typography variant="h6">Are there any Microtransactions on
Fotorama?</Typography>
               <Typography >
                 Fotorama is free, and will always be. It doesn't have any kinds of
Microtransactions.
               </Typography>
               <Typography variant="h6">How to connect with people?</Typography>
               <Typography >
                 Do you see the Posts of different users? Do you like them? Then you can
befriend them with a simple click on their Profile Picture that leads you to their
Profile.
               </Typography>
               <Typography variant="h6">My question is not listed above. What do I
do?</Typography>
               <Typography >
                 Don't worry. Write us at help(at)fotorama(dot)com. We'll definitely ping
you within a day regarding your query.
               </Typography>
             </DialogContent>
           </Dialog>
       <Dialog className='dialog'</pre>
         aria-describedby="alert-dialog-description" onClose={this.handlePolicyModal}
open={this.state.openPolicy}>
         <DialogContent>
           <div className='paper'>
             <h2 id="transition-modal-title">Fotorama Privacy Policy</h2>
             <span dangerouslySetInnerHTML={template} />
           </div>
         </DialogContent>
       </Dialog>
     </Grid>
   )
```

```
}
export default withRouter(Footer);
```

GuestLinks/index.js:

```
import { Button } from "@material-ui/core"
import { Component } from "react"
import firebase from 'firebase/app'
import { withRouter } from "react-router";
class GuestLinks extends Component {
   constructor(props) {
      super(props)
       this.state = {
          isAuthenticated: false,
          user: null
       }
   }
   render() {
       return (
           <div className='sectionDesktop navButtons'>
               <Button component="a" href='/' >
                   Home
               </Button>
               <Button component="a" href='/ourstory'>
                   Our Story
               </Button>
           </div>
export default withRouter(GuestLinks);
```

Navbar/index.js:

```
import React, { Component } from 'react'
import { AppBar, Toolbar, IconButton, Typography, Drawer,InputBase } from
'@material-ui/core'
import useScrollTrigger from '@material-ui/core/useScrollTrigger'
import Logo from '../../logo.png'
import { Menu,Search } from '@material-ui/icons'
import firebase from 'firebase/app'
import { withRouter } from "react-router"
import GuestLinks from '../GuestLinks'
import SignInLinks from '../SignInLinks'
function ElevationScroll(props) {
  const { children, window } = props;
  const trigger = useScrollTrigger({
    disableHysteresis: true,
    threshold: 0,
    target: window ? window() : undefined,
  });
 return React.cloneElement(children, {
    elevation: trigger ? 4 : 0,
  });
class Navbar extends Component {
 constructor(props) {
    super(props)
    this.state = {
      isAuthenticated: false,
      user: null,
      isLoading: true,
      search: '',
    }
  }
   componentDidMount()
                         {
    firebase.auth().onAuthStateChanged((user)=>{
      if (user) {
        this.setState({
          isAuthenticated: true,
          user: user,
          isLoading: false,
        })
```

```
} else {
      this.setState({
        isAuthenticated: false,
        user: null,
        isLoading: false,
      })
    }
  })
handleSearchVal = (e) => {
  this.setState({
    search: e.target.value
  })
}
handleSearch = (e) => {
  if(this.state.search.length===0) return
  if (e.key === 'Enter') {
    this.props.history.push('/search/' + this.state.search)
   return
  }
}
toggleDrawer = () => {
  this.setState({
    ...this.state,
    leftDrawer: !this.state.leftDrawer
  })
};
handlePolicyModal = (event, reason) => {
  if (reason === 'clickaway') {
    return
  this.setState({
   ...this.state,
    openPolicy: !this.state.openPolicy,
  })
handleHelpModal = (event, reason) => {
  if (reason === 'clickaway') {
    return
  this.setState({
    ...this.state,
```

```
openHelp: !this.state.openHelp,
    })
  }
  render() {
    return (
      <div className='grow'>
        <ElevationScroll props={this.props}>
          <AppBar position="fixed">
            <Toolbar>
              {this.state.isAuthenticated ?
                <div>
                  <IconButton
                     edge="start"
                     className='menuButton'
                     onClick={this.toggleDrawer}
                     color="inherit"
                    aria-label="open drawer"
                    <Menu />
                  </IconButton>
                  <React.Fragment key="left">
                     <Drawer anchor="left" open={this.state.leftDrawer}</pre>
onClose={this.toggleDrawer}>
                       <SignInLinks toggleDarkMode={this.props.toggleDarkMode}/>
                     </Drawer>
                  </React.Fragment>
                </div>
                 : null}
              <img src={Logo} alt="Logo" className='iconDesktop' />
              <Typography href="/" component="a" className='title iconDesktop'</pre>
variant="h6" noWrap>
                Fotorama
              </Typography>
              <div className='grow' />
          <div className='search'>
            <div className='searchIcon'>
              <Search />
            </div>
            <InputBase</pre>
              placeholder="Search Fotorama..."
```

```
className='inputBase'
              inputProps={{ 'aria-label': 'search' }}
              onKeyUp={this.handleSearch}
              onChange={this.handleSearchVal}
            />
          </div>
              this.state.isLoading ? null :
              !this.state.isAuthenticated?
                <GuestLinks />:null
            </Toolbar>
          </AppBar>
        </ElevationScroll>
     </div>
export default withRouter(Navbar);
```

Policy/index.js:

```
import { Skeleton } from "@material-ui/lab"
import { Component } from "react"
import {    Card, CardActions, CardHeader, Avatar, IconButton, CardContent, Dialog, Paper,
CircularProgress, Tooltip, Zoom, Box, Menu, MenuItem, Link, Typography } from
'@material-ui/core'
import { MoreVert, Favorite, Delete, GetApp } from '@material-ui/icons'
import { withRouter } from 'react-router-dom'
import firebase from 'firebase'
class Post extends Component {
isMounted = false;
constructor(props) {
  super(props)
  this.state = {
     postID: this.props.id,
    byID: '',
     byAvatar: '',
     byDisplayName: '',
     isLoading: true,
     imageUrl: '',
     user: null,
    postContent: '',
     likes: [],
     timestamp: '',
     downloads: 0,
     isLiked: false,
     tags: [],
     deleted: false,
     isProfilePicModalOpen: false,
     isPhotoModalOpen: false,
     isLiking: false,
     isDownloading: false,
     menuAnchorEl: null,
async componentDidMount() {
  this. isMounted = true
  firebase.auth().onAuthStateChanged((user) => {
     if (user) {
       this.setState({
        user: user
       })
     } else {
       this.props.history.push('/')
```

```
})
const dbRef = firebase.firestore()
const postRef = dbRef.collection('posts').doc(this.state.postID)
const result = await postRef.get()
if (!result.exists) {
  this.setState({
    deleted: true
  })
  return
}
const data = await result.data()
await this.setState({
 byID: data.byID,
  imageUrl: data.imageUrl,
 postContent: data.postContent,
  likes: data.likes,
  timestamp: data.timestamp,
  downloads: data.downloads,
  tags: data.tags,
})
if (this.state.likes.includes(this.state.user.uid)) {
  this.setState({
    isLiked: true
  })
}
const userRef = dbRef.collection('users').doc(this.state.byID)
const userResult = await userRef.get()
if (!userResult.exists) {
  this.setState({
    deleted: true
  })
  return
}
const userData = await userResult.data()
this.setState({
  byDisplayName: userData.displayName,
 byAvatar: userData.photoURL,
  isLoading: false,
})
```

```
toggleLike = async () => {
  this.setState({
     isLiking: true,
  const dbRef = firebase.firestore()
  const postRef = dbRef.collection('posts').doc(this.state.postID)
  const postResult = await postRef.get()
  if (!postResult.exists) {
     this.setState({
       deleted: true,
     })
     return
  const postData = await postResult.data()
  if (this.state.isLiked) {
     await postRef.set({
       likes: postData.likes.filter((e) => e !== this.state.user.uid)
     }, { merge: true })
     this.setState({
       ...this.state,
       likes: postData.likes.filter((e) => e !== this.state.user.uid)
     })
     this.setState({
       isLiked: false
     })
   } else {
     await postRef.set({
       likes: [...postData.likes, this.state.user.uid]
     }, { merge: true })
     this.setState({
       ...this.state,
       likes: [...postData.likes, this.state.user.uid]
     })
     await Promise.all(this.state.tags.map(async tag => {
       const userTagRef =
dbRef.collection('users').doc(this.state.user.uid).collection('likedTags').doc(tag)
       const userTagResult = await userTagRef.get()
```

```
const userTagData = await userTagResult.data()
      if (!userTagResult.exists) {
        await userTagRef.set({
          value: 1
        })
        return
      await userTagRef.set({
        value: userTagData.value + 1
      })
    }))
    this.setState({
      isLiked: true
    })
  } this.setState({
    isLiking: false,
  })
}
downloadImage = async () => {
  this.setState({
    isDownloading: true
  })
  const dbRef = firebase.firestore()
  const postRef = dbRef.collection('posts').doc(this.state.postID)
  const postResult = await postRef.get()
  if (!postResult.exists) {
    this.props.history.push('/')
    return
  const postData = await postResult.data()
  await postRef.set({
    downloads: postData.downloads + 1
  }, { merge: true })
  var url = this.state.imageUrl.replace(/^data:image\/[^;]+/,
data:application/octet-stream')
  window.open(url)
  this.setState({
    isDownloading: false
  })
```

```
togglePhotoModal = () => {
  this.setState({
    ...this.state,
    isPhotoModalOpen: !this.state.isPhotoModalOpen,
  })
}
toggleProfilePicModal = () => {
  this.setState({
    ...this.state,
    isProfilePicModalOpen: !this.state.isProfilePicModalOpen,
  })
}
handleMenuOpen = (e) => {
  this.setState({
    ...this.state,
   menuAnchorEl: e.currentTarget
  })
}
handleMenuClose = () => {
  this.setState({
    ...this.state,
    menuAnchorEl: null
  })
}
getTime = (timestamp) => {
 if (this.state.isLoading) return ''
  let d = timestamp
  let currentTime = new Date().getTime()
 const monthNames = ["January", "February", "March", "April", "May", "June",
    "July", "August", "September", "October", "November", "December"
  1;
  const min = 60 * 1000
  const hour = 60 * min
  if (currentTime - d <= 15 * min) return 'Few mins ago'
  else if (currentTime - d <= 30 * min) return 'Half hour ago'
  else if (currentTime - d <= hour) return 'An hour ago'
  else if (currentTime - d <= 2 * hour) return '2 hours ago'
  else if (currentTime - d <= 4 * hour) return '4 hours ago'
  else if (currentTime - d <= 8 * hour) return '8 hours ago'
  else if (currentTime - d <= 12 * hour) return '12 hours ago'
```

```
else if (currentTime - d <= 24 * hour) return 'A day ago'
  d = new Date(d)
  return monthNames[d.getMonth()] + ' ' + d.getDate() + ', ' + d.getFullYear()
render() {
  if (this.state.isLoading)
     return <Skeleton type='rect' className='postPlaceholder' />
  if (this.state.deleted) {
     return (<Paper elevation={0} className='postPaper'>
      <Card variant='outlined' className='createPostCard'>
        <CardContent>
           This post has been deleted by the user or the user closed his/her Fotorama
Account or has been taken down due to violation of one or more Polcies under Fotorama
Healthy Post Guidelines.
        </CardContent>
      </Card>
     </Paper>)
  return (
    <Paper elevation={0} className='postPaper'>
       <Card variant='outlined' className='createPostCard'>
        <CardHeader
           avatar={
             <Tooltip TransitionComponent={Zoom} title="Open Avatar" aria-label="Open</pre>
Avatar" arrow>
               <Avatar alt={this.state.byDisplayName}</pre>
src={this.state.byAvatar.replace('s96-c', 's500-c')} onClick={this.toggleProfilePicModal}
/>
             </Tooltip>
           action={
             this.state.user.uid === this.state.byID ?
               <IconButton aria-label="settings" onClick={this.handleMenuOpen}>
                 <MoreVert />
               </IconButton>
               nul1
           title={
             <Tooltip TransitionComponent={Zoom} title="Open Profile" aria-label="Open
Profile" arrow>
               <Link color='textPrimary' href={'/profile/' + this.state.byID}>
                 {this.state.byDisplayName}
```

```
</Tooltip>
           subheader={this.getTime(this.state.timestamp)}
         />
         <CardContent>
           {this.state.postContent.split('\n').map((e) => { return {e} })}
         </CardContent>
           this.state.imageUrl.length !== 0
             <div>
               <img alt='Upload'</pre>
                 className='createPostCardImage'
                 src={this.state.imageUrl} onClick={this.togglePhotoModal}
               />
             </div>
             null
         <CardActions disableSpacing>
             this.state.isLiking
               <CircularProgress color='secondary' />
               <Box display='flex' alignItems='center'>
                 <Tooltip TransitionComponent={Zoom} title="Like Post" aria-label="Like
Photo" arrow>
                   <IconButton aria-label="Like Post" onClick={this.toggleLike}</pre>
color={this.state.isLiked ? 'secondary' : 'default'}>
                     <Favorite />
                   </IconButton>
                 </Tooltip>
                 {this.state.likes.length}
               </Box>
             this.state.isDownloading
               <CircularProgress color='secondary' />
               <Box display='flex' alignItems='center' style={{ marginLeft: 20 }}>
```

</Link>

```
<Tooltip TransitionComponent={Zoom} title="Download Image"
aria-label="Download Image" arrow>
                   <IconButton aria-label="Download Image" onClick={this.downloadImage} >
                     <GetApp />
                   </IconButton>
                 </Tooltip>
                 {this.state.downloads}
               </Box>
         </CardActions>
       </Card>
       <Dialog className='dialog'</pre>
         aria-labelledby='Profile Photo Dialog'
         aria-describedby='Profile Photo' onClose={this.toggleProfilePicModal}
open={this.state.isProfilePicModalOpen}>
         <img src={this.state.byAvatar.replace('s96-c', 's500-c')} alt='Profile' />
       </Dialog>
       <Dialog className='dialog'</pre>
         aria-labelledby='Photo Dialog'
         aria-describedby='Photo' onClose={this.togglePhotoModal}
open={this.state.isPhotoModalOpen}>
         <img src={this.state.imageUrl} alt='Upload' />
       </Dialog>
       <Menu
         anchorEl={this.state.menuAnchorEl}
         keepMounted
         open={Boolean(this.state.menuAnchorEl)}
         onClose={this.handleMenuClose}
         <MenuItem onClick={() => { this.props.deletePost(this.state.postID) }}><Delete</pre>
/>  Delete Post</MenuItem>
       </Menu>
     </Paper>
export default withRouter(Post);
```

SignInLinks/index.js:

```
import { Avatar, Dialog, DialogContent, DialogTitle, Divider, List, ListItem,
ListItemIcon, ListItemText, Typography,Box,IconButton } from "@material-ui/core"
import { AccountCircle, ExitToApp, GroupWork, Help, Home,Brightness4 } from
"@material-ui/icons"
import { Component } from "react"
import { withRouter } from 'react-router-dom'
import firebase from 'firebase/app'
import policy from '../policy'
var template = { __html: policy };
class SignInLinks extends Component {
 constructor(props) {
  super(props)
  this.state = {
     openPolicy: false,
     openHelp: false,
     isAuthenticated: false,
     user: null,
     isLoading: true,
    isModalOpen: false,
   }
componentDidMount()
   firebase.auth().onAuthStateChanged((user)=>{
     if (user) {
      user.photoURL.replace('s96-c','s500-c')
      this.setState({
        isAuthenticated: true,
        user: user,
        isLoading: false,
       })
     } else {
       this.props.history.push('/')
     }
   })
preventDefault = (event) => event.preventDefault();
handlePolicyModal = (event, reason) => {
  if (reason === 'clickaway') {
```

```
return
   }
   this.setState({
     ...this.state,
     openPolicy: !this.state.openPolicy,
   })
 }
 handleHelpModal = (event, reason) => {
   if (reason === 'clickaway') {
     return
   this.setState({
     ...this.state,
     openHelp: !this.state.openHelp,
   })
 }
 signOutMethod = async () => {
   await firebase.auth().signOut()
   this.props.history.push('/')
 }
 toggleModalOpen = () => {
   this.setState({
     ...this.state,
     isModalOpen: !this.state.isModalOpen
   })
 }
 render() {
   if(this.state.isLoading) return (null);
   return (
     <div className='list'>
       <List>
         <ListItem style={{display:'block'}}>
           <Box display='flex' alignItems='center' justifyContent='space-between'>
           <Avatar alt={this.state.user.displayName}</pre>
src={this.state.user.photoURL.replace('s96-c','s500-c')} className='drawerPhoto'
onClick={this.toggleModalOpen} />
           <IconButton onClick={()=>{this.props.toggleDarkMode()}}>
             <Brightness4/>
           </IconButton>
           </Box>
           <Typography variant="h6" >Hey There, <br/>
{this.state.user.displayName}</Typography>
```

```
</ListItem>
         <Divider />
         <ListItem button key="Home" component="a" href="/">
           <ListItemIcon> <Home /></ListItemIcon>
           <ListItemText primary="Home" />
         </ListItem>
         <Divider />
         <ListItem button key="Your Profile" component="a"</pre>
href={"/profile/"+this.state.user.uid}>
           <ListItemIcon> <AccountCircle /></ListItemIcon>
           <ListItemText primary="Your Profile" />
         </ListItem>
         <Divider />
        <ListItem button key="Our Story" component="a" href="/ourstory/">
           <ListItemIcon> <GroupWork /></ListItemIcon>
           <ListItemText primary="Our Story" />
         </ListItem>
         <ListItem button key="Help" onClick={this.handleHelpModal}>
           <ListItemIcon> <Help /></ListItemIcon>
           <ListItemText primary="Help" />
         </ListItem>
         <ListItem button key="Sign Out" onClick={this.signOutMethod}>
           <ListItemIcon> <ExitToApp /></ListItemIcon>
           <ListItemText primary="Sign Out" />
         </ListItem>
        <Divider />
         <ListItem key="Copyright">
           <ListItemText secondary="@ Copyright 2021 - Present" />
        </ListItem>
         <div>
           <ListItem onClick={this.handlePolicyModal} component="a" href="#" key="Privacy</pre>
Policy">
             <ListItemText secondary="Privacy Policy | Fotorama" />
           </ListItem>
           <Dialog className='dialog'</pre>
             aria-labelledby="alert-dialog-title"
             aria-describedby="alert-dialog-description" onClick={this.handleHelpModal}
open={this.state.openHelp}>
             <DialogTitle id="alert-dialog-title">Fotorama | Help & FAQ</DialogTitle>
             <DialogContent>
               <Typography variant="h6">What is Fotorama all about?</Typography>
               <Typography >
                 Fotorama is what you all think it is! Snap your Pictures, Share them
with your Loved Ones, friends and families! Cherish your memories!
               </Typography>
```

```
<Typography variant="h6">What Information do you store about
me?</Typography>
               <Typography >
                 Apart from the content that you post on Fotorama, nothing else.
               </Typography>
               <Typography variant="h6">What more can I do after logging in?</Typography>
               <Typography >
                 You can share your snaps, make friends, search posts based on Tags and
more!
               </Typography>
               <Typography variant="h6">How do I post?</Typography>
               <Typography >
                 Do you see that Share button on your Dashboard? Click it and find the
rest of the steps!
               </Typography>
               <Typography variant="h6">Are there any Microtransactions on
Fotorama?</Typography>
               <Typography >
                 Fotorama is free, and will always be. It doesn't have any kinds of
Microtransactions.
               </Typography>
               <Typography variant="h6">How to connect with people?</Typography>
               <Typography >
                 Do you see the Posts of different users? Do you like them? Then you can
befriend them with a simple click on their Profile Picture that leads you to their
Profile.
               </Typography>
               <Typography variant="h6">My question is not listed above. What do I
do?</Typography>
               <Typography >
                 Don't worry. Write us at help(at)fotorama(dot)com. We'll definitely ping
you within a day regarding your query.
               </Typography>
             </DialogContent>
           </Dialog>
           <Dialog className='dialog'</pre>
             aria-labelledby='Profile Photo Dialog'
             aria-describedby='Profile Photo' onClose={this.toggleModalOpen}
open={this.state.isModalOpen}>
               <img src={this.state.user.photoURL.replace('s96-c','s500-c')}</pre>
alt='Profile'/>
           </Dialog>
           <Dialog className='dialog'</pre>
             aria-describedby="alert-dialog-description" onClose={this.handlePolicyModal}
open={this.state.openPolicy}>
```

UserView/index.js:

```
import { Component } from "react";
import { withRouter } from 'react-router-dom'
import firebase from 'firebase'
import { Box, Avatar, Typography,Dialog,Card,Link} from '@material-ui/core'
import { Skeleton } from '@material-ui/lab'
class UserView extends Component {
constructor(props) {
  super(props)
  this.state = {
     id: this.props.id,
     displayName: '',
    photoURL: '',
     followers: 0,
     isLoading: true,
     isProfilePicModalOpen:false,
  }
}
async componentDidMount() {
  const dbRef = firebase.firestore()
  const userRef = dbRef.collection('users').doc(this.state.id)
  const followerRef =
dbRef.collection('users').doc(this.state.id).collection('followers')
  const userResult = await userRef.get()
  const followerResult = await followerRef.get()
  if (!userResult.exists) {
     this.props.history.push('/')
     return
   }
  const userData = userResult.data()
  const followerData = followerResult.docs
  this.setState({
     ...this.state,
     displayName: userData.displayName,
     photoURL: userData.photoURL,
     followers: followerData.length,
     isLoading: false,
  })
```

```
toggleProfilePicModal = () => {
  this.setState({
     ...this.state,
     isProfilePicModalOpen: !this.state.isProfilePicModalOpen
  })
render() {
  if (this.state.isLoading)
     return (
       <Skeleton type='rect' className='userViewPlaceholder' />
  return (
     <Link href={'/profile/'+this.state.id} className='userViewLink'>
     <Card variant='outlined' style={ {marginTop: 10, marginBottom: 10}}>
     <Box display='flex' justifyContent='space-between' alignItems='center'</pre>
style={{padding: 10}}>
        <Box display='flex' alignItems = 'center'>
         <Avatar alt={this.state.displayName} src={this.state.photoURL.replace('s96-c',</pre>
's500-c')} onClick={this.toggleProfilePicModal} />
         <Typography style={{marginLeft: 10}}>{this.state.displayName}</Typography>
        </Box>
         <Typography>{this.state.followers}
{this.state.followers===1?'Follower':'Followers'}</Typography>
       <Dialog
         aria-labelledby='Profile Photo Dialog'
         aria-describedby='Profile Photo' onClose={this.toggleProfilePicModal}
open={this.state.isProfilePicModalOpen}>
         <img src={this.state.photoURL.replace('s96-c', 's500-c')} alt='Profile' />
       </Dialog>
     </Box>
     </Card>
     </Link>
  )
}
export default withRouter(UserView);
```

Dashboard/index.js:

```
import { Component } from "react"
import { withRouter } from 'react-router-dom'
import { Grid} from '@material-ui/core'
import firebase from 'firebase'
import { Skeleton } from '@material-ui/lab'
import CreatePost from '../../components/CreatePost'
import Post from '../../components/Post'
import InfiniteScroll from 'react-infinite-scroll-component'
import index from '../../config/algoliaConfig'
class Dashboard extends Component {
constructor(props) {
  super(props)
   this.state = {
     user: null,
     isAuthenticated: false,
     posts: [],
     isUserDataLoading: true,
     isPostsLoading: true,
     lastTimeStamp: new Date().getTime(),
     hasMore: true,
   }
async componentDidMount() {
  firebase.auth().onAuthStateChanged(async (user) => {
     if (user) {
       const db = firebase.firestore()
       const ref = db.collection('users').doc(user.uid)
       const result = await ref.get()
       if (!result.exists) {
         await index.saveObjects([{objectID:user.uid,displayName:'Krunal
Rank',uid:user.uid}])
        await ref.set({
           displayName: user.displayName,
          photoURL: user.photoURL,
           followers: [],
           following: [],
         })
       this.setState({
```

```
user: user,
         isUserDataLoading: false,
         isAuthenticated: true
       })
     } else {
       this.props.history.push('/')
     return
  })
  const dbRef = firebase.firestore()
  const postRef = dbRef.collection('posts').orderBy('timestamp', 'desc').limit(1)
  const postResult = await postRef.get()
  const postRefs = await postResult.docs
  let posts = []
  let ts = 0
  await Promise.all(postRefs.map(async (e) => {
    const id = await e.id
    posts = [...posts, id]
    ts = e.data().timestamp
  }))
  this.setState({
     ...this.state,
    posts: posts,
     lastTimeStamp: ts,
     isPostsLoading: false,
  })
}
loadNewPosts = async () => {
  await this.setState({
    lastTimeStamp: new Date().getTime(),
    posts: [],
  const db = firebase.firestore()
  const postRef = db.collection('posts').where('timestamp', '<',</pre>
this.state.lastTimeStamp).orderBy('timestamp','desc').limit(10)
  const postResult = await postRef.get()
  const postRefs = await postResult.docs
  if(postRefs.length===0) {
     await this.setState({
       hasMore: false,
```

```
})
     return
  let posts = []
  let ts = 0
  await Promise.all(postRefs.map(async (e) => {
     const id = await e.id
    posts = [...posts, id]
     ts = e.data().timestamp
  }))
  this.setState({
     ...this.state,
    posts: posts,
     lastTimeStamp: ts
  })
}
loadMorePosts = async () => {
  if(this.state.isPostsLoading) return
  const db = firebase.firestore()
  const postRef = db.collection('posts').where('timestamp', '<',</pre>
this.state.lastTimeStamp).orderBy('timestamp','desc').limit(10)
  const postResult = await postRef.get()
  const postRefs = await postResult.docs
  let posts = []
  let ts = 0
  await Promise.all(postRefs.map(async (e) => {
    const id = await e.id
    posts = [...posts, id]
    ts = e.data().timestamp
  }))
  this.setState({
     ...this.state,
    posts: [...this.state.posts, ...posts],
     lastTimeStamp: ts
  })
deletePost = async (id) => {
  if (this.state.isPostsLoading) return
  const dbRef = firebase.firestore()
  const postRef = dbRef.collection('posts').doc(id)
  const postResult = await postRef.get()
```

```
const postData = postResult.data()
  this.setState({
    ...this.state,
   posts: this.state.posts.filter((e) => e !== id)
 })
 await Promise.all(postData.tags.map(async (tag) => {
    const tagRef = dbRef.collection('tags').doc(tag)
   const tagResult = await tagRef.get()
    const tagData = await tagResult.data()
    await tagRef.set({
     posts: tagData.posts.filter((e) => e !== id)
    })
 }))
 await postRef.delete()
render() {
 return (
    <Grid className='dashboard'>
      <Grid item xs={12}>
          this.state.isUserDataLoading ?
            <Skeleton variant="rect" className='dashboardCreatePostPlaceholder' />
            <CreatePost user={this.state.user} />
      </Grid>
      <InfiniteScroll</pre>
        dataLength={this.state.posts.length}
       next={this.loadMorePosts}
       hasMore={true}
        refreshFunction={this.loadNewPosts}
       pullDownToRefresh
       pullDownToRefreshThreshold={50}
       pullDownToRefreshContent={
          <h3 style={{ textAlign: 'center' }}>&#8595; Pull down to refresh</h3>
        releaseToRefreshContent={
          <h3 style={{ textAlign: 'center' }}>&#8593; Release to refresh</h3>
        {this.state.posts.map((id) => {
          return (
            <Grid item xs={12}>
              <Post key={id} deletePost={this.deletePost} id={id} />
```

Home/index.js:

```
import { Component } from "react"
import { Container, Button, Typography } from '@material-ui/core'
import Logo from '../../logo.png'
import GoogleLogo from '../../assets/google logo.png'
import firebase from 'firebase'
import Skeleton from '@material-ui/lab/Skeleton'
import { withRouter } from 'react-router-dom'
import Dashboard from '../Dashboard'
class Home extends Component {
constructor(props) {
  super(props)
  this.state = {
     isAuthenticated: false,
    user: false,
     isLoading: true,
  }
}
componentDidMount() {
  firebase.auth().onAuthStateChanged((user) => {
     if (user) {
       this.setState({
         isAuthenticated: true,
        user: user,
        isLoading: false
       })
     } else {
       this.setState({
        isAuthenticated: false,
        user: null,
        isLoading: false,
       })
     }
  })
signInMethod = async () => {
  const provider = new firebase.auth.GoogleAuthProvider()
  provider.addScope("profile")
  try {
     await firebase.auth().signInWithPopup(provider);
     const user = await firebase.auth().currentUser;
     if (!user) return;
```

```
this.setState({
       isAuthenticated: true,
      user: user,
      isLoading: false
     })
   } catch (err) {
     console.log(err);
  }
render() {
  if (this.state.isAuthenticated) return (<Dashboard />)
  if (this.state.isLoading)
     return (
      <Container className='home'>
         <Container className='homeCenter'>
           <Skeleton variant="circle" className='homeLogoPlaceholder' />
        </Container>
        <Container className='homeCenter'>
           <Skeleton variant="rect" className='homeTitlePlaceholder' />
        </Container>
        <Container className='homeCenter'>
           <Skeleton variant="rect" className='homeButtonPlaceholder' />
         </Container>
       </Container>
  return (
     <Container className='home'>
       <Container className='homeCenter'>
         <img src={Logo} alt="Logo" className='homeLogo' />
       </Container>
       <Container className='homeCenter'>
        <Typography variant='h3'>
           Fotorama
         </Typography>
       </Container>
       <Container className='homeCenter'>
         <Button onClick={this.signInMethod} className='signInButton' variant="contained"</pre>
color="primary">
           <img src={GoogleLogo} alt="GoogleLogo" className='homeGoogleLogo' />
           SIGN IN WITH GOOGLE
```

OurStory/index.js:

```
import React from "react";
import Button from "@material-ui/core/Button";
import Divider from "@material-ui/core/Divider";
import Container from "@material-ui/core/Container";
import Grid from "@material-ui/core/Grid";
import { Typography,Card } from "@material-ui/core";
import Logo from "../../logo.png";
import { withRouter } from 'react-router-dom'
class AboutUs extends React.Component {
constructor(props) {
  super(props)
  this.state = {
    leftDrawer: false,
render() {
  return (
    <Container className='home'>
    <Card variant='outlined' style={{padding:10}}>
      <Grid container >
        <Grid item xs={12} className='homeCenter'>
          <div className=''>
            <img alt="XPert Logo" className='homeLogo' src={Logo} />
             <div style={{ fontSize: 30,textAlign: 'center' }}>Fotorama</div>
          </div>
        </Grid>
        <Grid container xs={12} justify="start">
          <Grid item>
             <Typography variant="h6" align="left">The Company</Typography>
              Fotorama is an initiative to provide people throughout the world an
              opportunity to share their experiences in the most independent way
possible.
              The Posts available on the website are completely copyrighted by their
respective owners, as
              per the agreement in our Privacy Policy. For more details, please refer
the Privacy Policy | Fotorama.
              Fotorama started as a Social Media App in March, 2021 and is running
since, with the love
```

```
and wishes of the users.
            It started as a Project and minimal idea to allow users to reach each
other via their Posts
            but it has continuously grown since then.
        </Grid>
        <Grid item xs={12}>
          <Typography variant="h6" align="left">The Team</Typography>
          Krunal Rank, Founder and CEO, Fotorama
            </Grid>
        <Grid item xs={12}>
          <Typography variant="h6" align="left">Contact</Typography>
          Email: hola(at)fotorama(dot)com
           Phone: +91 701 650 7648
           Fax: +22 675 124 5
            Fotorama<br />
               NIT Surat, Surat<br />
               India<br />
               395007
            </Grid>
       </Grid>
     </Grid>
   </Card>
   </Container>
  );
}
export default withRouter(AboutUs);
```

Profile/index.js:

```
import { Component } from "react"
import { withRouter } from 'react-router-dom'
import {  Grid, Paper, Typography, Avatar, Dialog, Box, Button, CircularProgress, Tabs,
Tab, Card, Tooltip, Zoom } from '@material-ui/core'
import { ExitToApp, PersonAdd, PersonAddDisabled } from '@material-ui/icons'
import firebase from 'firebase'
import { Skeleton } from '@material-ui/lab'
import Post from '../../components/Post'
import UserView from '../../components/UserView'
import InfiniteScroll from 'react-infinite-scroll-component'
class Profile extends Component {
constructor(props) {
  super(props)
   this.state = {
     id: this.props.match.params.id,
     displayName: '',
    photoURL: '',
     followers: [],
     following: [],
     isFollower: true,
     isFollowing: false,
     isLoading: true,
     posts: [],
     isProfilePicModalOpen: false,
     currentUser: null,
     isFollowButtonClicked: false,
     lastTimeStamp: new Date().getTime(),
     tabValue: 0,
     isPostsLoading: true,
  }
}
async componentDidMount() {
  firebase.auth().onAuthStateChanged((user) => {
     if (user) {
       this.setState({
         currentUser: user
       })
     } else {
       this.props.history.push('/')
   })
```

```
const dbRef = firebase.firestore()
  const userRef = dbRef.collection('users').doc(this.state.id)
  const userResult = await userRef.get()
  if (!userResult.exists) {
     this.props.history.push('/')
     return
   }
  const userData = userResult.data()
  this.setState({
     ...this.state,
     displayName: userData.displayName,
     photoURL: userData.photoURL,
  })
  const currentUserID = this.state.currentUser.uid
  if (currentUserID !== this.state.id) {
     const followerRef =
dbRef.collection('users').doc(currentUserID).collection('followers').doc(this.state.id)
     const followingRef =
dbRef.collection('users').doc(currentUserID).collection('following').doc(this.state.id)
     const followerResult = await followerRef.get()
     const followingResult = await followingRef.get()
     if (followerResult.exists) {
       this.setState({
         ...this.state,
        isFollower: true
       })
     if (followingResult.exists) {
       this.setState({
         ...this.state,
        isFollowing: true,
       })
     }
   }
   const followerResult = await
dbRef.collection('users').doc(this.state.id).collection('followers').get()
```

```
let followers = []
  followerResult.docs.forEach((doc) => {
     followers = [...followers, doc.id]
  })
  await this.setState({
     followers: followers
  })
  const followingResult = await
dbRef.collection('users').doc(this.state.id).collection('following').get()
  let following = []
  followingResult.docs.forEach((doc) => {
     following = [...following, doc.id]
  })
  await this.setState({
     following: following
  })
  await this.setState({
     ...this.state,
     isLoading: false,
  })
  const postRef = dbRef.collection('posts').where('byID', '==',
this.state.id).where('timestamp', '<', this.state.lastTimeStamp).orderBy('timestamp',
'desc').limit(1)
  const postResult = await postRef.get()
  const postRefs = await postResult.docs
  let posts = []
  let ts = 0
  await Promise.all(postRefs.map(async (e) => {
    const id = await e.id
    posts = [...posts, id]
     ts = e.data().timestamp
  }))
  await this.setState({
     ...this.state,
     posts: posts,
     lastTimeStamp: ts,
     isPostsLoading: false
  })
```

```
loadNewPosts = async () => {
  await this.setState({
     lastTimeStamp: new Date().getTime(),
     posts: [],
  })
  const db = firebase.firestore()
  const postRef = db.collection('posts').where('byID', '==',
this.state.id).where('timestamp', '<', this.state.lastTimeStamp).orderBy('timestamp',
desc').limit(10)
  const postResult = await postRef.get()
  const postRefs = await postResult.docs
  if (postRefs.length === 0) {
     await this.setState({
      hasMore: false,
     })
     return
  }
  let posts = []
  let ts = 0
  await Promise.all(postRefs.map(async (e) => {
    const id = await e.id
    posts = [...posts, id]
     ts = e.data().timestamp
  }))
  this.setState({
     ...this.state,
    posts: posts,
     lastTimeStamp: ts
  })
}
loadMorePosts = async () => {
  const db = firebase.firestore()
  const postRef = db.collection('posts').where('byID', '==',
this.state.id).where('timestamp', '<', this.state.lastTimeStamp).orderBy('timestamp',
'desc').limit(10)
  const postResult = await postRef.get()
  const postRefs = await postResult.docs
  let posts = []
  let ts = 0
```

```
await Promise.all(postRefs.map(async (e) => {
     const id = await e.id
    posts = [...posts, id]
     ts = e.data().timestamp
  }))
  this.setState({
     ...this.state,
     posts: [...this.state.posts, ...posts],
     lastTimeStamp: ts
  })
}
deletePost = async (id) => {
  if (this.state.isPostsLoading) return
  const dbRef = firebase.firestore()
  const postRef = dbRef.collection('posts').doc(id)
  const postResult = await postRef.get()
  const postData = postResult.data()
  this.setState({
     ...this.state,
    posts: this.state.posts.filter((e) => e !== id)
  })
  await Promise.all(postData.tags.map(async (tag) => {
     const tagRef = dbRef.collection('tags').doc(tag)
     const tagResult = await tagRef.get()
     const tagData = await tagResult.data()
     await tagRef.set({
      posts: tagData.posts.filter((e) => e !== id)
     })
  }))
  await postRef.delete()
followPerson = async () => {
  this.setState({
     ...this.state,
     isFollowButtonClicked: true
  })
  const dbRef = firebase.firestore()
  const currentUserID = this.state.currentUser.uid
  const followingRef =
dbRef.collection('users').doc(currentUserID).collection('following').doc(this.state.id)
```

```
const followerRef =
dbRef.collection('users').doc(this.state.id).collection('followers').doc(currentUserID)
  await followingRef.set({
    value: 1
   })
  await followerRef.set({
    value: 1
  })
  this.setState({
     ...this.state,
     isFollowing: true,
     followers: [...this.state.followers, this.state.currentUser.uid],
     isFollowButtonClicked: false
  })
unfollowPerson = async () => {
  this.setState({
     ...this.state,
     isFollowButtonClicked: true
  })
  const dbRef = firebase.firestore()
  const currentUserID = this.state.currentUser.uid
  const followingRef =
dbRef.collection('users').doc(currentUserID).collection('following').doc(this.state.id)
  const followerRef =
dbRef.collection('users').doc(this.state.id).collection('followers').doc(currentUserID)
  await followingRef.delete()
  await followerRef.delete()
  this.setState({
     ...this.state,
     isFollowing: false,
     followers: this.state.followers.filter((e) => e !== this.state.currentUser.uid),
     isFollowButtonClicked: false
   })
signOutMethod = async () => {
  await firebase.auth().signOut()
   this.props.history.push('/')
```

```
handleTabChange = (event, value) => {
  this.setState({
     ...this.state,
     tabValue: value
   })
 toggleProfilePicModal = () => {
   this.setState({
     ...this.state,
     isProfilePicModalOpen: !this.state.isProfilePicModalOpen
  })
render() {
  if (this.state.isLoading)
     return (
       <Grid className='profile'>
        <Grid item xs={12}>
           <Skeleton type='rect' className='profilePlaceholder' />
        </Grid>
       </Grid>
     )
  return (
     <Grid className='profile'>
       <Grid item xs={12}>
        <Paper elevation={0}>
           <Grid className='profileTop'>
             <Box display='flex' justifyContent='center'>
               <Avatar alt={this.state.displayName}</pre>
src={this.state.photoURL.replace('s96-c', 's500-c')} className='profilePhoto'
onClick={this.toggleProfilePicModal} />
             </Box>
             <Box display='flex' justifyContent='center'>
               <Typography variant='h4'>{this.state.displayName}</Typography>
             </Box>
               this.state.id === this.state.currentUser.uid
                 <Box display='flex' justifyContent='center' alignItems='center'>
                   <Tooltip TransitionComponent={Zoom} title="Sign Out" aria-label="Sign
Out" arrow>
```

```
<Button onClick={this.signOutMethod} variant="contained"</pre>
color="secondary">
                        <ExitToApp />Sign Out
                     </Button>
                   </Tooltip>
                 </Box>
                 <Box display='flex' justifyContent='center' alignItems='center'>
                      this.state.isFollowButtonClicked
                        <CircularProgress color='secondary' />
                        this.state.isFollowing
                          <Tooltip TransitionComponent={Zoom} title="Follow Person"</pre>
aria-label="Unfollow Person" arrow>
                            <Button onClick={this.unfollowPerson} variant="contained"</pre>
color="secondary">
                              <PersonAddDisabled />Unfollow
                            </Button>
                          </Tooltip>
                          <Tooltip TransitionComponent={Zoom} title="Follow Person"
aria-label="Follow Person" arrow>
                            <Button onClick={this.followPerson} variant="contained"</pre>
color="secondary">
                              <PersonAdd />Follow
                            </Button>
                          </Tooltip>
                 </Box>
             <Tabs
               value={this.state.tabValue}
               onChange={this.handleTabChange}
               indicatorColor="secondary"
               textColor="secondary"
               centered
               <Tab label="Posts" />
               <Tab label="Followers" />
               <Tab label="Following" />
             </Tabs>
           </Grid>
```

```
</Paper>
       </Grid>
       <Grid>
           this.state.tabValue === 0
             this.state.isPostsLoading
               <Grid item xs={12} style={{ marginTop: 20 }}>
                 <Skeleton type='rect' className='profilePlaceholder' />
               </Grid>
               this.state.posts.length === 0
                 <Card variant='outlined' style={{ marginTop: 20 }}>
                   <Typography style={{ textAlign: 'center' }} variant='h4'> No
Posts</Typography>
                 </Card>
                 <InfiniteScroll</pre>
                   dataLength={this.state.posts.length}
                   next={this.loadMorePosts}
                   hasMore={true}
                   refreshFunction={this.loadNewPosts}
                   pullDownToRefresh
                   pullDownToRefreshThreshold={50}
                   pullDownToRefreshContent={
                     <h3 style={{ textAlign: 'center' }}>&#8595; Pull down to
refresh</h3>
                   releaseToRefreshContent={
                     <h3 style={{ textAlign: 'center' }}>&#8593; Release to refresh</h3>
                   {this.state.posts.map((id) => {
                     return (
                       <Grid item xs={12}>
                         <Post key={id} deletePost={this.deletePost} id={id} />
                       </Grid>
                     )
                   }) }
                 </InfiniteScroll>
             this.state.tabValue === 1
```

```
this.state.isLoading
                 <Grid item xs={12} style={{ marginTop: 20 }}>
                   <Skeleton type='rect' className='profilePlaceholder' />
                 </Grid>
                 this.state.followers.length === 0
                   <Card variant='outlined' style={{ marginTop: 20 }}>
                     <Typography style={{ textAlign: 'center' }} variant='h4'> No
Followers</Typography>
                   </Card>
                   this.state.followers.map((follower) => {
                     return (
                       <Grid item xs={12}>
                         <UserView id={follower} />
                       </Grid>
                     )
                   })
               this.state.isLoading
                 <Grid item xs={12} style={{ marginTop: 20 }}>
                   <Skeleton type='rect' className='profilePlaceholder' />
                 </Grid>
                 this.state.following.length === 0
                   <Card variant='outlined' style={{ marginTop: 20 }}>
                     <Typography style={{ textAlign: 'center' }} variant='h4'> No
Following</Typography>
                   </Card>
                   this.state.following.map((follower) => {
                     return (
                       <Grid item xs={12}>
                         <UserView id={follower} />
                       </Grid>
                     )
                   })
       </Grid>
```

SearchView/index.js:

```
import { Component } from "react";
import { withRouter } from 'react-router-dom'
import { Grid, Paper, Box, Typography, Tabs, Tab, Card } from '@material-ui/core'
import { Skeleton } from '@material-ui/lab'
import firebase from 'firebase'
import algoliasearch from 'algoliasearch'
import UserView from '../../components/UserView'
import Post from '../../components/Post'
import InfiniteScroll from 'react-infinite-scroll-component'
import index from '../../config/algoliaConfig'
class SearchView extends Component {
constructor(props) {
  super(props)
   this.state = {
     search: this.props.match.params.id,
     isPostLoading: true,
     isAccountLoading: true,
     isLoading: true,
     posts: [],
    accounts: [],
     postLoadLength: 10,
     accountLoadLength: 10,
     tabValue: 0,
  }
}
async componentDidMount() {
  if (this.state.search.length >= 25) {
     this.props.history.push('/')
     return
   }
  const response = await index.search(this.state.search)
  const hits = response.hits
  let accounts = []
  hits.forEach((h) => {
     accounts.push(h.uid)
   })
   this.setState({
     ...this.state,
     accounts: accounts,
     isAccountLoading: false,
  })
```

```
const dbRef = firebase.firestore()
  const tagRef = dbRef.collection('tags').doc(this.state.search)
  const tagResult = await tagRef.get()
  if (tagResult.exists) {
     const tagData = tagResult.data()
     await tagRef.set({
       search: tagData.search?tagData.search:0+1
     }, {merge:true})
     let posts = []
     tagData.posts.forEach((id) => {
       posts.push(id)
     })
     this.setState({
       ...this.state,
       isPostLoading: false,
      posts: posts
     })
   }
  this.setState({
     isLoading: false,
  })
async componentWillReceiveProps(nextProps) {
  if (nextProps.match.params.id === this.state.search) return
  this.setState({
     search: nextProps.match.params.id,
     isLoading: true,
  })
  if (this.state.search.length >= 25) {
     this.props.history.push('/')
     return
  const response = await index.search(this.state.search)
  const hits = response.hits
  let accounts = []
  hits.forEach((h) => {
     accounts.push(h.uid)
  })
   this.setState({
     ...this.state,
```

```
accounts: accounts,
    isAccountLoading: false,
  })
  const dbRef = firebase.firestore()
  const tagRef = dbRef.collection('tags').doc(this.state.search)
  const tagResult = await tagRef.get()
  if (tagResult.exists) {
    const tagData = tagResult.data()
    await tagRef.set({
      search: tagData.search?tagData.search:0+1
    }, {merge:true})
    let posts = []
    tagData.posts.forEach((id) => {
      posts.push(id)
    this.setState({
      ...this.state,
      isPostLoading: false,
      posts: posts
    })
  }
  this.setState({
    isLoading: false,
  })
}
handleTabChange = (event, value) => {
  this.setState({
    ...this.state,
    tabValue: value
  })
}
loadMorePosts = () => {
  this.setState({
    ...this.state,
    postLoadLength: Math.min(this.state.postLoadLength + 10, this.state.posts.length)
  })
loadMoreAccounts = () => {
```

```
this.setState({
     ...this.state,
     accountLoadLength: Math.min(this.state.accountLoadLength + 10,
this.state.accounts.length)
  })
}
render() {
  if (this.state.isLoading)
     return (
      <Grid className='profile'>
        <Grid item xs={12}>
           <Skeleton type='rect' className='profilePlaceholder' />
        </Grid>
       </Grid>
     )
  return (
     <Grid className='profile'>
       <Grid item xs={12}>
        <Paper elevation={0}>
           <Grid item xs={12}>
             <Tabs
               value={this.state.tabValue}
               onChange={this.handleTabChange}
               indicatorColor="secondary"
               textColor="secondary"
               centered
               <Tab label="Posts" />
               <Tab label="Users" />
             </Tabs>
           </Grid>
         </Paper>
       </Grid>
       <Grid item xs={12}>
           this.state.tabValue === 0
             this.state.posts.length === 0
             <Card variant='outlined' style={{ marginTop: 20 }}>
```

```
<Typography style={{ textAlign: 'center' }} variant='h4'> No Matching
Posts</Typography>
             </Card>
             <InfiniteScroll</pre>
               dataLength={this.state.posts.length}
               next={this.loadMorePosts}
               hasMore={true}
               {this.state.posts.slice(0, this.state.postLoadLength).map((id) => {
                 return (
                   <Grid item xs={12}>
                     <Post key={id} deletePost={this.deletePost} id={id} />
                   </Grid>
               }) }
             </InfiniteScroll>
             this.state.accounts.length === 0
               <Card variant='outlined' style={{ marginTop: 20 }}>
                 <Typography style={{ textAlign: 'center' }} variant='h4'> No Matching
Users</Typography>
               </Card>
               <InfiniteScroll</pre>
                 dataLength={this.state.posts.length}
                 next={this.loadMorePosts}
                 hasMore={true}
                 {this.state.accounts.slice(0,
this.state.accountLoadLength).map((account) => {
                   return (
                     <Grid item xs={12}>
                       <UserView id={account} />
                     </Grid>
                 }) }
               </InfiniteScroll>
       </Grid>
     </Grid>
```

```
export default withRouter(SearchView);
```

utils/compress.js

```
// From https://developer.mozilla.org/en-US/docs/Web/API/HTMLCanvasElement/toBlob, needed
if (!HTMLCanvasElement.prototype.toBlob) {
  Object.defineProperty(HTMLCanvasElement.prototype, 'toBlob', {
       value: function(callback, type, quality) {
          var binStr = atob(this.toDataURL(type, quality).split(',')[1]),
               len = binStr.length,
               arr = new Uint8Array(len);
           for (var i = 0; i < len; i++) {
               arr[i] = binStr.charCodeAt(i);
           }
           callback(new Blob([arr], {type: type || 'image/png'}));
       }
   });
window.URL = window.URL || window.webkitURL;
// Modified from https://stackoverflow.com/a/32490603, cc by-sa 3.0
// -2 = not jpeg, -1 = no data, 1..8 = orientations
function getExifOrientation(file, callback) {
   // Suggestion from
http://code.flickr.net/2012/06/01/parsing-exif-client-side-using-javascript-2/:
  if (file.slice) {
       file = file.slice(0, 131072);
  } else if (file.webkitSlice) {
       file = file.webkitSlice(0, 131072);
  var reader = new FileReader();
  reader.onload = function(e) {
      var view = new DataView(e.target.result);
       if (view.getUint16(0, false) != 0xFFD8) {
          callback(-2);
          return;
      var length = view.byteLength, offset = 2;
      while (offset < length) {</pre>
           var marker = view.getUint16(offset, false);
          offset += 2;
          if (marker == 0xFFE1) {
               if (view.getUint32(offset += 2, false) != 0x45786966) {
```

```
callback(-1);
                   return;
               }
               var little = view.getUint16(offset += 6, false) == 0x4949;
               offset += view.getUint32(offset + 4, little);
               var tags = view.getUint16(offset, little);
               offset += 2;
               for (var i = 0; i < tags; i++)
                   if (view.getUint16(offset + (i * 12), little) == 0 \times 0112) {
                       callback(view.getUint16(offset + (i * 12) + 8, little));
                       return:
                   }
           }
           else if ((marker & 0xFF00) != 0xFF00) break;
           else offset += view.getUint16(offset, false);
       }
       callback (-1);
  };
   reader.readAsArrayBuffer(file);
// Derived from https://stackoverflow.com/a/40867559, cc by-sa
function imgToCanvasWithOrientation(img, rawWidth, rawHeight, orientation) {
  var canvas = document.createElement('canvas');
  if (orientation > 4) {
      canvas.width = rawHeight;
       canvas.height = rawWidth;
   } else {
      canvas.width = rawWidth;
       canvas.height = rawHeight;
  }
  if (orientation > 1) {
       console.log("EXIF orientation = " + orientation + ", rotating picture");
   }
  var ctx = canvas.getContext('2d');
  switch (orientation) {
       case 2: ctx.transform(-1, 0, 0, 1, rawWidth, 0); break;
       case 3: ctx.transform(-1, 0, 0, -1, rawWidth, rawHeight); break;
       case 4: ctx.transform(1, 0, 0, -1, 0, rawHeight); break;
       case 5: ctx.transform(0, 1, 1, 0, 0, 0); break;
       case 6: ctx.transform(0, 1, -1, 0, rawHeight, 0); break;
       case 7: ctx.transform(0, -1, -1, 0, rawHeight, rawWidth); break;
       case 8: ctx.transform(0, -1, 1, 0, 0, rawWidth); break;
```

```
ctx.drawImage(img, 0, 0, rawWidth, rawHeight);
  return canvas;
function reduceFileSize(file, acceptFileSize, maxWidth, maxHeight, quality, callback) {
  if (file.size <= acceptFileSize) {</pre>
      callback(file);
       return;
  var img = new Image();
  img.onerror = function() {
      URL.revokeObjectURL(this.src);
      callback(file);
  };
  img.onload = function() {
      URL.revokeObjectURL(this.src);
      getExifOrientation(file, function(orientation) {
          var w = img.width, h = img.height;
          var scale = (orientation > 4 ?
               Math.min(maxHeight / w, maxWidth / h, 1) :
               Math.min(maxWidth / w, maxHeight / h, 1));
           h = Math.round(h * scale);
           w = Math.round(w * scale);
           var canvas = imgToCanvasWithOrientation(img, w, h, orientation);
           canvas.toBlob(function(blob) {
               callback(blob);
           }, 'image/jpeg', quality);
       });
  };
  img.src = URL.createObjectURL(file);
export default reduceFileSize
```

App.js:

```
import './App.css';
import React, { useState } from 'react';
import { BrowserRouter, Switch, Route, NotFoundRoute } from 'react-router-dom';
import useMediaQuery from '@material-ui/core/useMediaQuery';
import { createMuiTheme, ThemeProvider } from '@material-ui/core/styles';
import { CssBaseline } from '@material-ui/core';
import Navbar from './components/Navbar';
import Footer from './components/Footer'
import Home from './routes/Home';
import Profile from './routes/Profile';
import OurStory from './routes/OurStory';
import SearchView from './routes/SearchView';
import './App.scss';
import { StylesProvider } from '@material-ui/core/styles';
function App() {
const lightTheme = createMuiTheme({
  palette: {
    type: 'light'
  },
})
const darkTheme = createMuiTheme({
  palette: {
     type: 'dark'
  },
})
const [themeState, setTheme] = useState(lightTheme);
const [themeString, setThemeString] = useState('light');
const toggleDarkMode = () => {
  if (themeString === 'light') {
     setThemeString('dark')
     setTheme (darkTheme)
   }else{
     setThemeString('light')
     setTheme(lightTheme)
return (
```

```
<BrowserRouter>
    <ThemeProvider theme={themeState}>
      <CssBaseline />
      <StylesProvider injectFirst>
        <Navbar toggleDarkMode={toggleDarkMode} />
        <Switch>
          <Route exact path='/' component={Home} />
          <Route exact path='/search/:id' render={(props) => <SearchView {...props} />}
          <Route path='/profile/:id' render={(props) => <Profile {...props} />} />
          <Route path='/ourstory' component={OurStory} />
          <Route component={Home} />
        </Switch>
        <Footer />
      </StylesProvider>
    </ThemeProvider>
  </BrowserRouter>
);
export default App;
```

Index.js:

```
import React from 'react'
import ReactDOM from 'react-dom'
import './index.css'
import App from './App'
import registerServiceWorker from './registerServiceWorker'
import firebase from 'firebase'
import firebaseConfig from './config/firebaseConfig'

firebase.initializeApp(firebaseConfig)
firebase.auth().setPersistence(firebase.auth.Auth.Persistence.SESSION);
firebase.firestore().enablePersistence()
ReactDOM.render(
<app />,
document.getElementById('root')
);
registerServiceWorker();
```

Screenshots:



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