

LAPORAN MATA KULIAH
PEMROGAMAN BERBASIS FRAMEWORK
“ MODUL 11 ”



Nama : Ivan Crisnanda

NIM : 1741720024

Kelas : TI-3C

PROGRAM STUDI D-IV TEKNIK INFORMATIKA


JURUSAN TEKNOLOGI INFORMASI


POLITEKNIK NEGERI MALANG

2020

1. Setting Firebase Console

Penyedia proses masuk

Penyedia	Status
 Email/Sandi	<input checked="" type="checkbox"/> Aktifkan

Izinkan pengguna untuk mendaftar menggunakan alamat email dan sandi mereka. SDK kami juga menyediakan verifikasi alamat email, pemulihan sandi, dan sistem dasar perubahan alamat email. [Pelajari lebih lanjut](#) 

Link email (login tanpa sandi) ☐ Aktifkan

Batal **Simpan**

2. Setelah enabling authentication pilih menu Database dan pilih create database



3. Select Start in test mode

1 Amankan aturan untuk Cloud Firestore


2 Tetapkan lokasi Cloud Firestore

Setelah menentukan struktur data, Anda harus menulis aturan untuk mengamankan data Anda.
[Pelajari lebih lanjut](#)

☐ Mulai dalam mode produksi
Data Anda akan dijadikan pribadi secara default. Akses baca/tulis klien hanya akan diberikan sesuai yang ditetapkan oleh aturan keamanan Anda.

☒ Mulai dalam mode pengujian
Data Anda akan terbuka secara default untuk mengaktifkan penyiapan cepat. Akses baca/tulis klien akan ditolak setelah 30 hari jika aturan keamanan tidak diperbarui.

```
rules_version = '2';
service cloud.firestore {
  match /databases/{database}/documents {
    match /{document=**} {
      allow read, write: if
        request.time < timestamp.date(2020, 5, 30);
    }
  }
}
```

 Siapa saja yang memiliki referensi database Anda akan dapat membaca dan menulis ke database Anda selama 30 hari

Mengaktifkan Cloud Firestore akan mencegah Anda menggunakan Cloud Datastore dengan project ini, khususnya dari aplikasi App Engine yang terkait.

Batal Berikutnya


4. Pilih berikutnya, kemudian klik selesai

Buat database

Amankan aturan untuk Cloud Firestore

2 Tetapkan lokasi Cloud Firestore

Setelan lokasi Anda adalah tempat data Cloud Firestore akan disimpan.

 Setelah ditetapkan, Anda tidak lagi dapat mengubah setelan lokasi ini nanti. Selain itu, setelan lokasi ini akan menjadi lokasi untuk bucket Cloud Storage default Anda.

[Pelajari lebih lanjut](#)

Lokasi Cloud Firestore

nam5 (us-central)

Mengaktifkan Cloud Firestore akan mencegah Anda menggunakan Cloud Datastore dengan project ini, khususnya dari aplikasi App Engine yang terkait.

Batal Selesai

Setting react app dan firebase

1. Pilih setting untuk firebasenya firestore dan hosting

```
> Which Firebase CLI features do you want to set up for this folder? Press Space to select features, then Enter to confirm your choices.
( ) Database: Deploy Firebase Realtime Database Rules
(*) Firestore: Deploy rules and create indexes for Firestore
( ) Functions: Configure and deploy Cloud Functions
>(*) Hosting: Configure and deploy Firebase Hosting sites
( ) Storage: Deploy Cloud Storage security rules
( ) Emulators: Set up local emulators for Firebase features
```

2. Pilih build jangan pilih do not choose public

```
=== Project Setup

First, let's associate this project directory with a Firebase project.
You can create multiple project aliases by running firebase use --add,
but for now we'll just set up a default project.

? Please select an option: Use an existing project
? Select a default Firebase project for this directory: minggu11-4eace (minggu11)
i Using project minggu11-4eace (minggu11)

=== Firestore Setup

Firestore Security Rules allow you to define how and when to allow
requests. You can keep these rules in your project directory
and publish them with firebase deploy.

? What file should be used for Firestore Rules? firestore.rules

Firestore indexes allow you to perform complex queries while
maintaining performance that scales with the size of the result
set. You can keep index definitions in your project directory
and publish them with firebase deploy.

? What file should be used for Firestore indexes? firestore.indexes.json

=== Hosting Setup

Your public directory is the folder (relative to your project directory) that
will contain Hosting assets to be uploaded with firebase deploy. If you
have a build process for your assets, use your build's output directory.

? What do you want to use as your public directory? public
? Configure as a single-page app (rewrite all urls to /index.html)? Yes
? File public/index.html already exists. Overwrite? No
i Skipping write of public/index.html

i Writing configuration info to firebase.json...
i Writing project information to .firebaserc...
```

3. Untuk membangun firebase

```
minggu11@C1110: build$ npm run build
> react-scripts build

Creating an optimized production build...
Compiled successfully.

File sizes after gzip:

 39.38 KB  build\static\js\2.7bfde4fe.chunk.js
 770 B     build\static\js\runtime-main.f2e95820.js
 645 B     build\static\js\main.c5912f28.chunk.js
 556 B     build\static\css\main.d1b05096.chunk.css

The project was built assuming it is hosted at /.
You can control this with the homepage field in your package.json.

The build folder is ready to be deployed.
You may serve it with a static server:

  npm install -g serve
  serve -s build

Find out more about deployment here:

  bit.ly/CRA-deploy
```

Instalasi Redux

1. Install redux dan react redux, redux thunk

```
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@2.1.2 (node_modules\fsevents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@2.1.2: wanted {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.12 (node_modules\webpack-dev-server\node_modules\fsevents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.12: wanted {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.12 (node_modules\watchpack\node_modules\fsevents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.12: wanted {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.12 (node_modules\jest-haste-map\node_modules\fsevents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.12: wanted {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})

+ redux@4.0.5
added 2 packages from 1 contributor in 24.839s

npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@2.1.2: wanted {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.12 (node_modules\webpack-dev-server\node_modules\fsevents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.12: wanted {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.12 (node_modules\watchpack\node_modules\fsevents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.12: wanted {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.12 (node_modules\jest-haste-map\node_modules\fsevents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.12: wanted {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})

+ react-redux@7.2.0
added 2 packages from 2 contributors in 14.796s

npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@2.1.2 (node_modules\fsevents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@2.1.2: wanted {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.12 (node_modules\webpack-dev-server\node_modules\fsevents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.12: wanted {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.12 (node_modules\watchpack\node_modules\fsevents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.12: wanted {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.12 (node_modules\jest-haste-map\node_modules\fsevents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.12: wanted {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})

+ redux-thunk@2.3.0
added 1 package from 1 contributor in 26.388s
```


2. Install firebase

```
npm WARN Rollback Rolling back node-pre-gyp@0.14.0 failed (this is probably harmless): EPERM: operation
not permitted, rmdir 'D:\Kuliah\Semester 6\Framework\ReactJS\minggu11\node_modules\jest-haste-map\node_m
odules\fsevents'
npm WARN tsutils@3.17.1 requires a peer of typescript@>=2.8.0 || >= 3.2.0-dev || >= 3.3.0-dev || >= 3.4.
0-dev || >= 3.5.0-dev || >= 3.6.0-dev || >= 3.6.0-beta || >= 3.7.0-dev || >= 3.7.0-beta but none is inst
alled. You must install peer dependencies yourself.
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@2.1.2 (node_modules\fsevents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@2.1.2: wanted {"os":"dar
win","arch":"any"} (current: {"os":"win32","arch":"x64"})
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.12 (node_modules\webpack-dev-server\node_mo
dules\fsevents):npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.12:
wanted {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.12 (node_modules\watchpack\node_modules\fse
vents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.12: wanted {"os":"da
rwin","arch":"any"} (current: {"os":"win32","arch":"x64"})
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.12 (node_modules\jest-haste-map\node_module
s\fsevents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.12: wanted {"os":"da
rwin","arch":"any"} (current: {"os":"win32","arch":"x64"})
+ firebase@7.14.2
added 54 packages from 17 contributors and audited 931653 packages in 66.505s
```

3. Pilih UI library

```
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@2.1.2 (node_modules\fsevents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@2.1.2: wanted
{"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.12 (node_modules\webpack-dev-ser
ver\node_modules\fsevents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.12: wante
d {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.12 (node_modules\watchpack\node_
modules\fsevents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.12: wante
d {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.12 (node_modules\jest-haste-map\
node_modules\fsevents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.12: wante
d {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})
+ @material-ui/core@4.9.12
added 23 packages from 13 contributors and audited 931823 packages in 29.616s
```

4. Paste kan file public/index.html

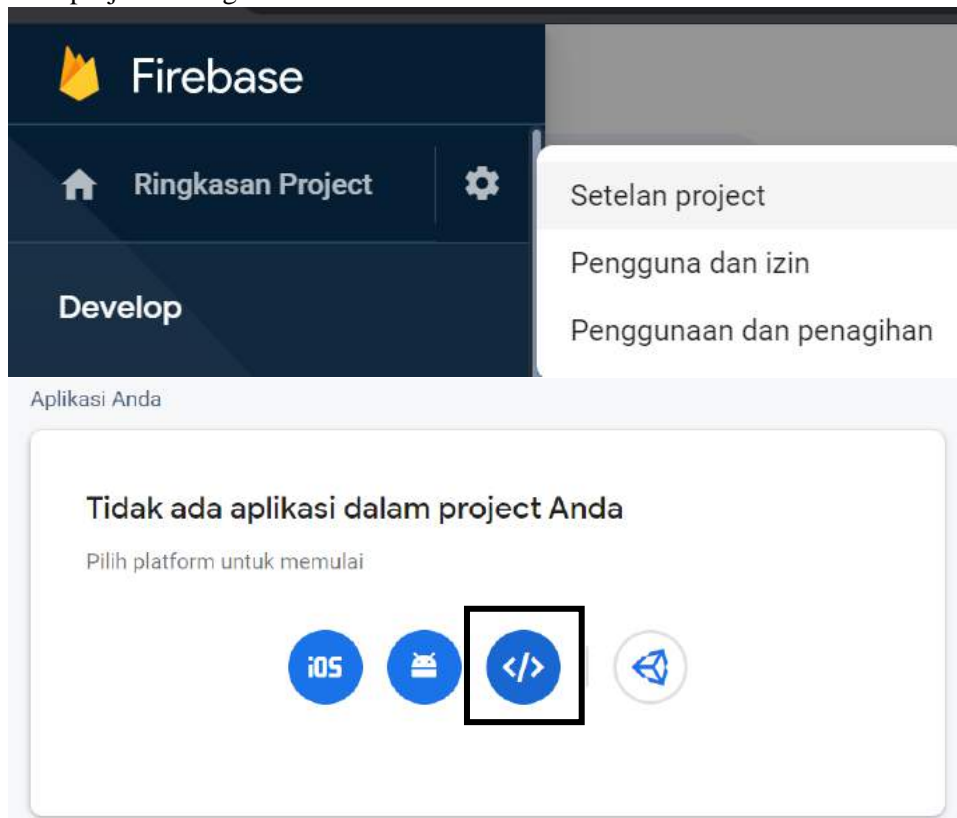
```
index.html X
public > index.html > html > head
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4 <meta charset="utf-8" />
5 <link rel="icon" href="%PUBLIC_URL%/favicon.ico" />
6 <link rel="stylesheet" href="https://font.googleapis.com/css?family=Roboto:300,400,500,700&display=swap" />
7 <meta name="viewport" content="width=device-width, initial-scale=1" />
8 <meta name="theme-color" content="#000000" />
```

5. Install material icon

```
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@2.1.2 (node_modules\fsevents):  
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@2.1.2: wanted  
{"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})  
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.12 (node_modules\webpack-dev-ser  
ver\node_modules\fsevents):  
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.12: wante  
d {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})  
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.12 (node_modules\watchpack\node_  
modules\fsevents):  
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.12: wante  
d {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})  
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.12 (node_modules\jest-haste-map\  
node_modules\fsevents):  
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.12: wante  
d {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})  
  
+ @material-ui/icons@4.9.1  
added 1 package from 1 contributor and audited 931826 packages in 21.689s
```

Setting firebase config

1. Pilih project setting




Nama aplikasi ?

firebase-login-app

☒ Siapkan juga **Firestore** untuk aplikasi ini. [Pelajari lebih lanjut](#)

Hosting juga dapat disiapkan nanti. Gratis untuk memulai kapan saja.

 minggu11-4eace (Belum ada penerapan) ▼

Daftarkan aplikasi

2. Pilih config

☐ Otomatis ? ☐ CDN ? ☒ Config ?

Copy-paste skrip ini ke bagian bawah tag <body> Anda, tetapi sebelum Anda menggunakan layanan Firebase apa pun:

```
const firebaseConfig = {
  apiKey: "AIzaSyBR0JZ4yLAAoDw1PvM-BMKb1X9MxjIyS1g",
  authDomain: "minggu11-4eace.firebaseio.com",
  databaseURL: "https://minggu11-4eace.firebaseio.com",
  projectId: "minggu11-4eace",
  storageBucket: "minggu11-4eace.appspot.com",
  messagingSenderId: "485037033252",
  appId: "1:485037033252:web:538edfd8c7e28fd3e7d5b1",
  measurementId: "G-8DYZBDKX1D"
};
```

3. Edit firebase/firebase.js

```
JS firebase.js x
src > firebase > JS firebase.js > ...
1 import firebase from "firebase/app";
2 import "firebase/auth";
3 import "firebase/firestore";
4
5 const firebaseConfig = {
6   apiKey: "AIzaSyBR0JZ4yLAAoDw1PvM-BMKb1X9MxjIyS1g",
7   authDomain: "minggu11-4eace.firebaseio.com",
8   databaseURL: "https://minggu11-4eace.firebaseio.com",
9   projectId: "minggu11-4eace",
10  storageBucket: "minggu11-4eace.appspot.com",
11  messagingSenderId: "485037033252",
12  appId: "1:485037033252:web:538edfd8c7e28fd3e7d5b1",
13  measurementId: "G-8DYZBDKX1D"
14 };
15
16 export const myFirebase = firebase.initializeApp(firebaseConfig);
17 const baseDb = myFirebase.firestore();
18 export const db = baseDb;
```


4. Edit actions/Auth.js

```
JS auth.js ×
src > actions > JS auth.js > [?] logoutUser > <function> > catch() callback
1  import { myFirebase } from "../firebase/firebase";
2
3  export const LOGIN_REQUEST = "LOGIN_REQUEST";
4  export const LOGIN_SUCCESS = "LOGIN_SUCCESS";
5  export const LOGIN_FAILURE = "LOGIN_FAILURE";
6
7  export const LOGOUT_REQUEST = "LOGOUT_REQUEST";
8  export const LOGOUT_SUCCESS = "LOGOUT_SUCCESS";
9  export const LOGOUT_FAILURE = "LOGOUT_FAILURE";
10
11 export const VERIFY_REQUEST = "VERIFY_REQUEST";
12 export const VERIFY_SUCCESS = "VERIFY_SUCCESS";
13
```

5. User requesting to login actions/Auth.js

```
14 const requestLogin = () => {
15   return {
16     type: LOGIN_REQUEST
17   };
18 };
19
20 const receiveLogin = user => {
21   return {
22     type: LOGIN_SUCCESS,
23     user
24   };
25 };
26
27 const loginError = () => {
28   return {
29     type: LOGIN_FAILURE
30   };
31 };
```

6. Edit loginUser()

```
1 import { myFirebase } from "../firebase/firebase";
2
3 export const LOGIN_REQUEST = "LOGIN_REQUEST";
4 export const LOGIN_SUCCESS = "LOGIN_SUCCESS";
5 export const LOGIN_FAILURE = "LOGIN_FAILURE";
6
7 export const LOGOUT_REQUEST = "LOGOUT_REQUEST";
8 export const LOGOUT_SUCCESS = "LOGOUT_SUCCESS";
9 export const LOGOUT_FAILURE = "LOGOUT_FAILURE";
10
11 export const VERIFY_REQUEST = "VERIFY_REQUEST";
12 export const VERIFY_SUCCESS = "VERIFY_SUCCESS";
13
14 const requestLogin = () => {
15   return {
16     type: LOGIN_REQUEST
17   };
18 };
19
20 const receiveLogin = user => {
21   return {
22     type: LOGIN_SUCCESS,
23     user
24   };
25 };
26
27 const loginError = () => {
28   return {
29     type: LOGIN_FAILURE
30   };
31 };
32
33 const requestLogout = () => {
34   return {
35     type: LOGOUT_REQUEST
36   };
37 };
38
39 const receiveLogout = () => {
40   return {
41     type: LOGOUT_SUCCESS
42   };
43 };
44 const logoutError = () => {
45   return {
46     type: LOGOUT_FAILURE
47   };
48 };
49 const verifyRequest = () => {
50   return {
51     type: VERIFY_REQUEST
52   };
53 };
54
55 const verifySuccess = () => {
56   return {
57     type: VERIFY_SUCCESS
58   };
59 };
60
61 export const loginUser = (email, password) => dispatch => {
62   dispatch(requestLogin());
63   myFirebase
64     .auth()
65     .signInWithEmailAndPassword(email, password)
66     .then(user => {
67       dispatch(receiveLogin(user));
68     })
69     .catch(error => {
70       //Do something with the error if you want!
71       dispatch(loginError());
72     });
73 };
74
75 export const logoutUser = () => dispatch => {
76   dispatch(requestLogout());
77   myFirebase
78     .auth()
79     .signOut()
80     .then(() => {
81       dispatch(receiveLogout());
82     })
83     .catch(error => {
84       //Do something with the error if you want!
85       dispatch(logoutError());
86     });
87 };
88
89 export const verifyAuth = () => dispatch => {
90   dispatch(verifyRequest());
91   myFirebase.auth().onAuthStateChanged(user => {
92     if (user !== null) {
93       dispatch(receiveLogin(user));
94     }
95     dispatch(verifySuccess());
96   });
97 };
```

Setting reducer

1. Buka reducers/auth.js

```
JS auth.js ×
src > reducers > JS auth.js > ...
1  import {
2    LOGIN_REQUEST,
3    LOGIN_SUCCESS,
4    LOGIN_FAILURE,
5    LOGOUT_REQUEST,
6    LOGOUT_SUCCESS,
7    LOGOUT_FAILURE,
8    VERIFY_REQUEST,
9    VERIFY_SUCCESS
10 } from "../actions/auth";
11
12 export default (
13   state = {
14     isLoggedIn: false,
15     isLoggingOut: false,
16     isVerifying: false,
17     loginError: false,
18     logoutError: false,
19     isAuthenticated: false,
20     user: {}
21   },
22   action
23 ) => {
24   switch (action.type) {
25     case LOGIN_REQUEST:
26       return {
27         ...state,
28         isLoggedIn: true,
29         loginError: false
30       };
31     case LOGIN_SUCCESS:
32       return {
33         ...state,
34         isLoggedIn: false,
35         isAuthenticated: true,
36         user: action.user
37       };
38     case LOGIN_FAILURE:
39       return {
40         ...state,
41         isLoggedIn: false,
42         isAuthenticated: false,
43         loginError: true
44       };
45     case LOGOUT_REQUEST:
46       return {
47         ...state,
48         isLoggingOut: true,
49         logoutError: false
50       };
51     case LOGOUT_SUCCESS:
52       return {
53         ...state,
54         isLoggingOut: false,
55         isAuthenticated: false,
56         user: {}
57       };
58     case LOGOUT_FAILURE:
59       return {
60         ...state,
61         isLoggingOut: false,
62         logoutError: true
63       };
64     case VERIFY_REQUEST:
65       return {
66         ...state,
67         isVerifying: true,
68         verifyingError: false
69       };
70     case VERIFY_SUCCESS:
71       return {
72         ...state,
73         isVerifying: false
74       };
75     default:
76       return state;
77   }
78 };

```

2. Edit reducers/index.js

```
JS index.js ×
src > reducers > JS index.js > ...
  1 import { combineReducers } from "redux";
  2 import auth from "../auth";
  3 export default combineReducers({ auth });
```

3. ConfigureStore.js

```
JS configureStore.js ×
src > JS configureStore.js > ...
  1 import { applyMiddleware, createStore } from "redux";
  2 import thunkMiddleware from "redux-thunk";
  3
  4 import { verifyAuth } from "../actions/auth";
  5 import rootReducer from "../reducers";
  6
  7 export default function configureStore(persistedState) {
  8   const store = createStore(
  9     rootReducer,
 10     persistedState,
 11     applyMiddleware(thunkMiddleware)
 12   );
 13   store.dispatch(verifyAuth());
 14   return store;
 15 }
```

4. Root.js

```
JS root.js ×
src > JS root.js > [⌘] default
  1 import React from "react";
  2 import { Provider } from "react-redux";
  3 import { BrowserRouter as Router } from "react-router-dom";
  4 import App from "../App";
  5 import configureStore from "../configureStore";
  6 const store = configureStore();
  7 function Root() {
  8   return (
  9     <Provider store={store}>
 10       <Router>
 11         <App />
 12       </Router>
 13     </Provider>
 14   );
 15 }
 16 export default Root;
```

5. Index.js

```
JS index.js  X
src > JS index.js
1  import React from "react";
2  import ReactDOM from "react-dom";
3  import Root from "./Root";
4  import * as serviceWorker from "./serviceWorker";
5  ReactDOM.render(<Root />, document.getElementById("root"));
6  // If you want your app to work offline and load faster, you can change
7  // unregister() to register() below. Note this comes with some pitfalls.
8  // Learn more about service workers: https://bit.ly/CRA-PWA
9  serviceWorker.unregister();
```

6. App.js

```
JS App.js  X
src > JS App.js > [E] default
1  import React from "react";
2  import { Route, Switch } from "react-router-dom";
3  import { connect } from "react-redux";
4  import ProtectedRoute from "./components/ProtectedRoute";
5  import Home from "./components/Home";
6  import Login from "./components/Login";
7  function App(props) {
8    const { isAuthenticated, isVerifying } = props;
9    return (
10     <Switch>
11     <ProtectedRoute
12     exact
13     path="/"
14     component={Home}
15     isAuthenticated={isAuthenticated}
16     isVerifying={isVerifying}
17     />
18     <Route path="/login" component={Login} />
19     </Switch>
20   );
21 }
22 function mapStateToProps(state) {
23   return {
24     isAuthenticated: state.auth.isAuthenticated,
25     isVerifying: state.auth.isVerifying
26   };
27 }
28 export default connect(mapStateToProps)(App);
```


7. components/login.js

```
JS Login.js X
src > components > JS Login.js > styles > paper
1 import React, { Component } from "react";
2 import { connect } from "react-redux";
3 import { Redirect } from "react-router-dom";
4 import { loginUser } from "../actions/auth";
5 import { withStyles } from "@material-ui/styles";
6
7 import Avatar from "@material-ui/core/Avatar";
8 import Button from "@material-ui/core/Button";
9 import TextField from "@material-ui/core/TextField";
10 import LockOutlinedIcon from "@material-ui/icons/LockOutlined";
11 import Typography from "@material-ui/core/Typography";
12 import Paper from "@material-ui/core/Paper";
13 import Container from "@material-ui/core/Container";
14
15 const styles = () => ({
16   "@global": {
17     body: {
18       backgroundColor: "#fff"
19     }
20   },
21   paper: {
22     marginTop: 100,
23     display: "flex",
24     padding: 20,
25     flexDirection: "column",
26     alignItems: "center"
27   },
28   avatar: {
29     marginLeft: "auto",
30     marginRight: "auto",
31     backgroundColor: "#f50057"
32   },
33   form: {
34     marginTop: 1
35   },
36   errorText: {
37     color: "#f50057",
38     marginBottom: 5,
39     textAlign: "center"
40   }
41 });
42
43 class Login extends Component {
44   state = { email: "", password: "" };
45   handleEmailChange = ({ target }) => {
46     this.setState({ email: target.value });
47   };
48   handlePasswordChange = ({ target }) => {
49     this.setState({ password: target.value });
50   };
51
52   handleSubmit = () => {
53     const { dispatch } = this.props;
54     const { email, password } = this.state;
55     dispatch(loginUser(email, password));
56   };
57
58   render() {
59     const { classes, loginError, isAuthenticated } = this.props;
60     if (isAuthenticated) {
61       return <Redirect to="/" />;
62     } else {
63       return (
64         <Container component="main" maxWidth="xs">
65           <Paper className={classes.paper}>
66             <Avatar className={classes.avatar}>
67               <LockOutlinedIcon />
68             </Avatar>
69             <Typography component="h1" variant="h5">
70               Sign in
71             </Typography>
72             <TextField
73               variant="outlined"

```

```

73         margin="normal"
74         fullWidth
75         id="email"
76         label="Email Address"
77         name="email"
78         onChange={this.handleEmailChange}
79       />
80       <TextField
81         variant="outlined"
82         margin="normal"
83         fullWidth
84         name="password"
85         label="Password"
86         type="password"
87         id="password"
88         onChange={this.handlePasswordChange}
89       />
90       {loginError && (
91         <Typography component="p" className={classes.e
92           Incorrect email or password.
93         </Typography>
94       )}
95       <Button
96         type="button"
97         fullWidth
98         variant="contained"
99         color="primary"
100        className={classes.submit}
101        onClick={this.handleSubmit}
102      >
103        Sign In
104      </Button>
105    </Paper>
106  </Container>
107  );
108  }
109  }
110  }
111  }
112  }
113  function mapStateToProps(state) {
114    return {
115      isLoggingIn: state.auth.isLoggingIn,
116      loginError: state.auth.loginError,
117      isAuthenticated: state.auth.isAuthenticated
118    };
119  }
120  }
121  export default withStyles(styles)(connect(mapStateToProps)(Login));

```

8. components/home.js

```

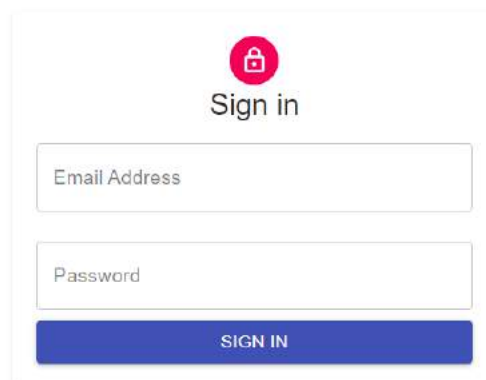
JS Home.js x
src > components > JS Home.js > ...
1  import React, { Component } from "react";
2  import { connect } from "react-redux";
3  import { logoutUser } from "../actions/auth";
4  class Home extends Component {
5    handleLogout = () => {
6      const { dispatch } = this.props;
7      dispatch(logoutUser());
8    }; render() {
9      const { isLoggingOut, logoutError } = this.props;
10     return (
11       <div>
12         <h1>This is your app's protected area.</h1>
13         <p>Any routes here will also be protected</p>
14         <button onClick={this.handleLogout}>Logout</button>
15         {isLoggingOut && <p>Logging Out....</p>}
16         {logoutError && <p>Error logging out</p>}
17       </div>
18     );
19   }
20 }
21 function mapStateToProps(state) {
22   return {
23     isLoggingOut: state.auth.isLoggingOut,
24     logoutError: state.auth.logoutError
25   };
26 }
27 export default connect(mapStateToProps)(Home);

```

9. components/protectedRoute.js

```
JS ProtectedRoute.js X
src > components > JS ProtectedRoute.js > ...
1  import React from "react";
2  import { Route, Redirect } from "react-router-dom";
3  const ProtectedRoute = ({
4    component: Component,
5    isAuthenticated,
6    isVerifying,
7    ...rest
8  }) => (
9    <Route
10     {...rest}
11     render={props =>
12       isVerifying ? (
13         <div />
14       ) : isAuthenticated ? (
15         <Component {...props} />
16       ) : (
17         <Redirect
18           to={{
19             pathname: "/login",
20             state: { from: props.location }
21           }}
22         />
23       )
24     />
25   );
26   export default ProtectedRoute;
```

10. Masuk ke firebase console kemudian add user, Kemudian npm start dan masukkan username dan password



Sign in

Email Address

Password

SIGN IN

11. Jika berhasil, akan masuk ke halaman beranda

This is your app's protected area.

Any routes here will also be protected

Logout