

LAPORAN PRAKTIKUM
MATA KULIAH PEMEROGRAMAM BERBASIS FRAMEWORK



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PROGRAM STUDI D-IV TEKNIK INFORMATIKA

JURUSAN TEKNOLOGI INFORMASI

POLITEKNIK NEGERI MALANG


2020

1. Setting Fire Base

Login ke firebase console dan add a new project. Pilih authentication dan pilih tab menu Set up sign in method


Setelah enabling authentication pilih menu Database dan pilih create database

Pelajari lebih lanjut




Ketahui apakah Cloud Firestore tepat untuk Anda

[Bandingkan database](#)




Bagaimana cara memulainya?

[Lihat dokumen](#)




Berapa biaya Cloud Firestore?

[Lihat penetapan harga](#)



Apa yang bisa Cloud Firestore lakukan untuk saya?

[Pelajari lebih lanjut](#)




Introducing Cloud Firestore

Tonton nanti Bagikan

Cloud Firestore

Atau pilih Realtime Database



Realtime Database

Database asli Firebase. Seperti Cloud Firestore, mendukung sinkronisasi data real-time.

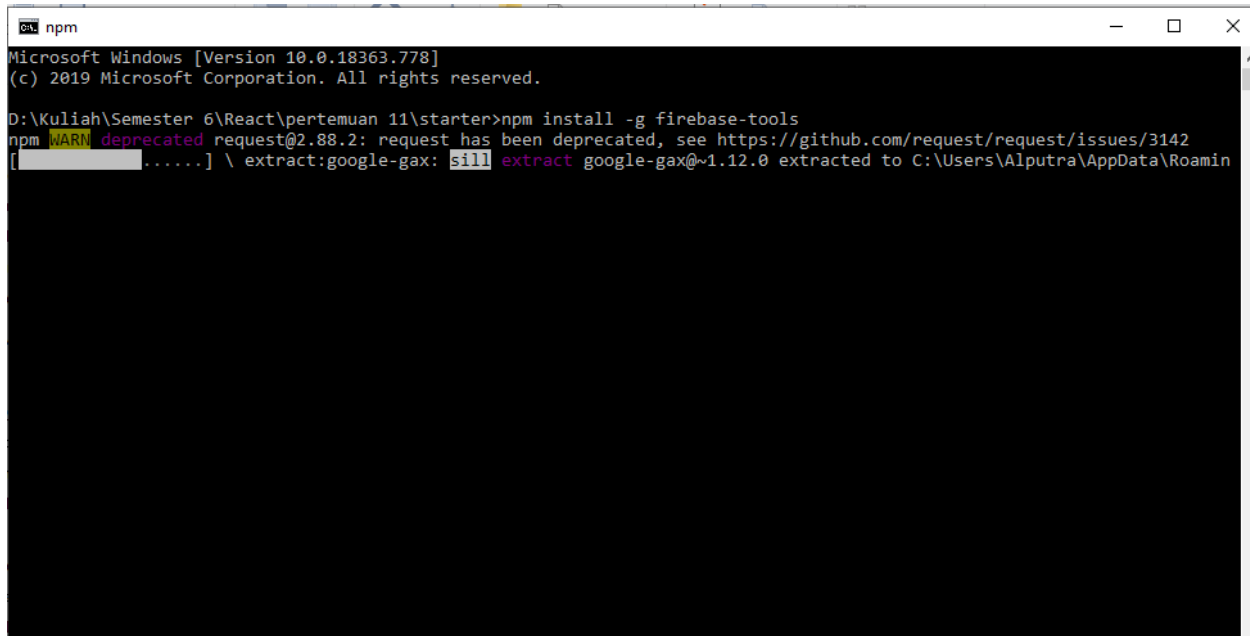
[Lihat dokumen](#)

[Pelajari lebih lanjut](#)

Buat database

Buat Data Base dalam metode pengujian

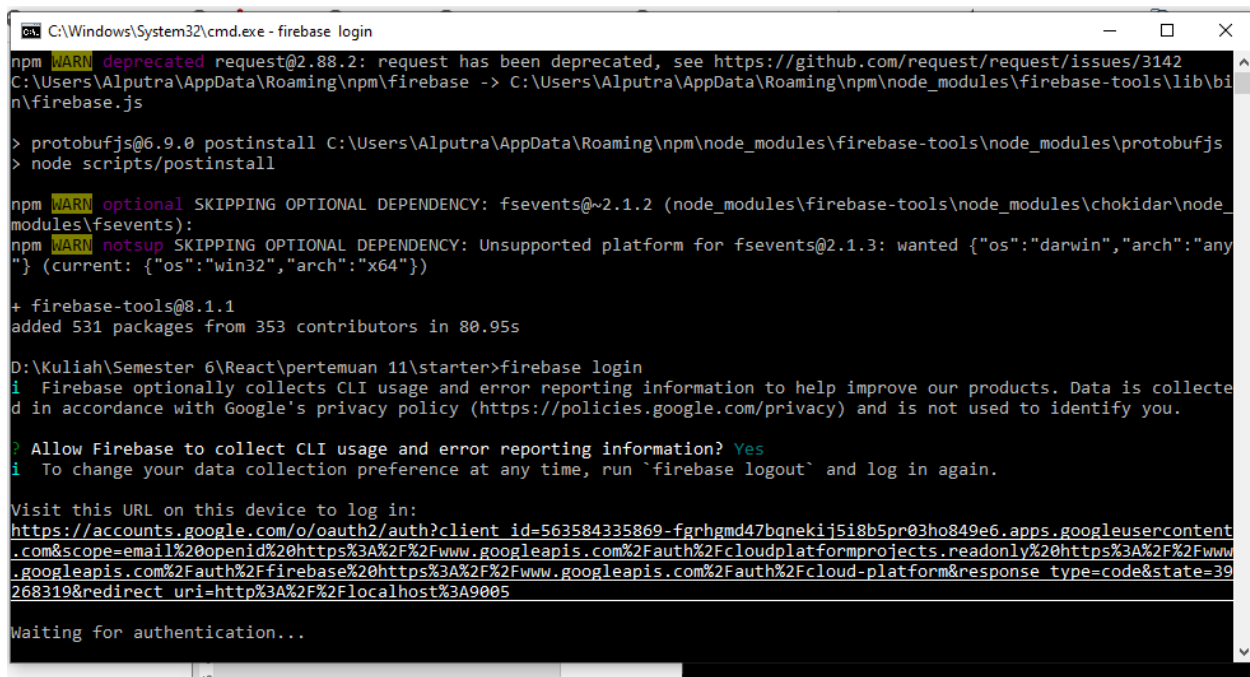
Saya menggunakan Tamplate Project kosongan yang sudah saya buat, saya memulai dengan menginstall firebase-tools di project react saya



```
npm
Microsoft Windows [Version 10.0.18363.778]
(c) 2019 Microsoft Corporation. All rights reserved.

D:\Kuliah\Semester 6\React\pertemuan 11\starter>npm install -g firebase-tools
npm WARN deprecated request@2.88.2: request has been deprecated, see https://github.com/request/request/issues/3142
[.....] \ extract:google-gax: sill extract google-gax@~1.12.0 extracted to C:\Users\Alputra\AppData\Roamin
```

Kemudian kita login ke firebase kita menggunakan akun kita masing-masing



```
C:\Windows\System32\cmd.exe - firebase login
npm WARN deprecated request@2.88.2: request has been deprecated, see https://github.com/request/request/issues/3142
C:\Users\Alputra\AppData\Roaming\npm\firebase -> C:\Users\Alputra\AppData\Roaming\npm\node_modules\firebase-tools\lib\bi
n\firebase.js

> protobufjs@6.9.0 postinstall C:\Users\Alputra\AppData\Roaming\npm\node_modules\firebase-tools\node_modules\protobufjs
> node scripts/postinstall

npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@~2.1.2 (node_modules\firebase-tools\node_modules\chokidar\node_
modules\fsevents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@2.1.3: wanted {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})

+ firebase-tools@8.1.1
added 531 packages from 353 contributors in 80.95s

D:\Kuliah\Semester 6\React\pertemuan 11\starter>firebase login
i Firebase optionally collects CLI usage and error reporting information to help improve our products. Data is collecte
d in accordance with Google's privacy policy (https://policies.google.com/privacy) and is not used to identify you.

? Allow Firebase to collect CLI usage and error reporting information? Yes
i To change your data collection preference at any time, run `firebase logout` and log in again.

Visit this URL on this device to log in:
https://accounts.google.com/o/oauth2/auth?client_id=563584335869-fgrhgm47bqnekij5i8b5pr03ho849e6.apps.googleusercontent.com&scope=email%20openid%20https%3A%2F%2Fwww.googleapis.com%2Fauth%2Fcloudplatformprojects.readonly%20https%3A%2F%2Fwww.googleapis.com%2Fauth%2Ffirebase%20https%3A%2F%2Fwww.googleapis.com%2Fauth%2Fcloud-platform&response_type=code&state=39268319&redirect_uri=http%3A%2F%2Flocalhost%3A9005

Waiting for authentication...
```

Browser akan terbuka dan kita akan di suruh memilih kaun mana yang akan kita gunakan

 Login dengan Google



Pilih akun

untuk melanjutkan ke **Firestore**



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Keluar



yuie 12
yuie12@gmail.com

Keluar




Kangen Kampung
kangkampung.id@gmail.com


Keluar




Gunakan akun yang lain

Dan jangan lupa di “allow” firebasenya







 Login dengan Google



Firestore CLI ingin mengakses Akun Google Anda

 novannanega@gmail.com

Ini akan mengizinkan **Firestore CLI**:

-  Menampilkan dan mengelola data Anda di layanan Google Cloud Platform 
-  Melihat dan mengelola semua data dan setelan Firestore 
-  View your Cloud Platform projects 

Pastikan Anda memercayai Firestore CLI

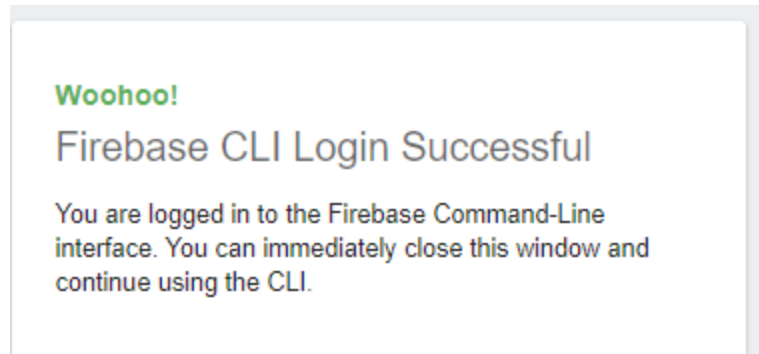
Anda mungkin membagikan info yang sensitif ke situs atau aplikasi ini. Pelajari cara Firestore CLI menangani data Anda dengan meninjau [persyaratan layanan](#) dan [kebijakan privasinya](#). Anda dapat melihat atau menghapus akses di [Akun Google](#) kapan saja.

[Pelajari risikonya](#)

Batal

Izinkan

Apabila berhasil mentyambungkan aka nada tampilan seperti ini yang menandakan project anda telah tersambung



Dan kita cek juga di bagian terminal akan terdapat tampilan seperti ini

```
C:\Windows\System32\cmd.exe
> protobufjs@6.9.0 postinstall C:\Users\Alputra\AppData\Roaming\npm\node_modules\firebase-tools\node_modules\protobufjs
> node scripts/postinstall

npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@~2.1.2 (node_modules\firebase-tools\node_modules\chokidar\node_modules\fs
modules\fsevents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@2.1.3: wanted {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"})

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D:\Kuliah\Semester 6\React\pertemuan 11\starter>firebase login
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? Allow Firebase to collect CLI usage and error reporting information? Yes
i To change your data collection preference at any time, run 'firebase logout' and log in again.

Visit this URL on this device to log in:
https://accounts.google.com/o/oauth2/auth?client_id=563584335869-fgrhgm47bqnekij5i8b5pr03ho849e6.apps.googleusercontent.com&scope=email%20openid%20https%3A%2F%2Fwww.googleapis.com%2Fauth%2Fcloudplatformprojects.readonly%20https%3A%2F%2Fwww.googleapis.com%2Fauth%2Ffirebase%20https%3A%2F%2Fwww.googleapis.com%2Fauth%2Fcloud-platform&response_type=code&state=39268319&redirect_uri=http%3A%2F%2Flocalhost%3A9005

Waiting for authentication...
+ Success! Logged in as nova.#####ga@gmail.com
D:\Kuliah\Semester 6\React\pertemuan 11\starter>
```

Dan jangan lupa firebase init dan setting firebasenya


```
D:\Kuliah\Semester 6\React\pertemuan 11\starter>npm run build

> starter@0.1.0 build D:\Kuliah\Semester 6\React\pertemuan 11\starter
> react-scripts build

Creating an optimized production build...
Compiled successfully.

File sizes after gzip:

 39.84 KB  build\static\js\2.b1620f7f.chunk.js
 773 B     build\static\js\runtime-main.eaf72a32.js
 631 B     build\static\js\main.44db3576.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.
```

Kemudian Buat firebase/firebase.js

Ambil firebase config anda sendiri” di firebase console anda


[Link ke situs Firebase Hosting](#)

Firebase SDK snippet

☐ CDN  ☒ Config 

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

```
const firebaseConfig = {
  apiKey: "AIzaSyDj4iLohn3D1US79bk7Sc-PIb5b1c2g4hk",
  authDomain: "tugaskampus1-16cd5.firebaseio.com",
  databaseURL: "https://tugaskampus1-16cd5.firebaseio.com",
  projectId: "tugaskampus1-16cd5",
  storageBucket: "tugaskampus1-16cd5.appspot.com",
  messagingSenderId: "869186910796",
  appId: "1:869186910796:web:011c5b534c1894498f92e9",
  measurementId: "G-3FN27WPPEZ"
};
```



[Hapus aplikasi ini](#)

Dan berikan import firebase , dan jangan lupa export

```
import firebase from "firebase/app";
import "firebase/auth";
import "firebase/firestore";
const firebaseConfig = {
  apiKey: "AIzaSyDj4iLohn3D1US79bk7Sc-PIb5b1c2g4hk",
  authDomain: "tugaskampus1-16cd5.firebaseio.com",
  databaseURL: "https://tugaskampus1-16cd5.firebaseio.com",
  projectId: "tugaskampus1-16cd5",
  storageBucket: "tugaskampus1-16cd5.appspot.com",
  messagingSenderId: "869186910796",
  appId: "1:869186910796:web:011c5b534c1894498f92e9",
  measurementId: "G-3FN27WPPEZ"
};
//
// firebase.analytics();
export const myFirebase = firebase.initializeApp(firebaseConfig);
const baseDb = myFirebase.firestore();
export const db = baseDb;
```

Kemuadi action/auth.js

```
import { myFirebase } from "../firebase/firebase";

export const LOGIN_REQUEST = "LOGIN_REQUEST";
export const LOGIN_SUCCESS = "LOGIN_SUCCESS";
export const LOGIN_FAILURE = "LOGIN_FAILURE";

export const LOGOUT_REQUEST = "LOGOUT_REQUEST";
export const LOGOUT_SUCCESS = "LOGOUT_SUCCESS";
export const LOGOUT_FAILURE = "LOGOUT_FAILURE";

export const VERIFY_REQUEST = "VERIFY_REQUEST";
export const VERIFY_SUCCESS = "VERIFY_SUCCESS";

const requestLogin = () => {
  return {
    type: LOGIN_REQUEST
  };
};

const receiveLogin = user => {
```

```
        return {
            type: LOGIN_SUCCESS,
            user
        };
    };
};

const loginError = () => {
    return {
        type: LOGIN_FAILURE
    };
};

const requestLogout = () => {
    return {
        type: LOGOUT_REQUEST
    };
};

const receiveLogout = () => {
    return {
        type: LOGOUT_SUCCESS
    };
};

const logoutError = () => {
    return {
        type: LOGOUT_FAILURE
    };
};

const verifyRequest = () => {
    return {
        type: VERIFY_REQUEST
    };
};

const verifySuccess = () => {
    return {
        type: VERIFY_SUCCESS
    };
};

export const loginUser = (email, password) => dispatch => {
    dispatch(requestLogin());
    myFirebase
```

```

    .auth()
    .signInWithEmailAndPassword(email, password)
    .then(user => {
      dispatch(receiveLogin(user));
    })
    .catch(error => {
      //Do something with the error if you want!
      dispatch(loginError());
    });
  });

export const logoutUser = () => dispatch => {
  dispatch(requestLogout());
  myFirebase
    .auth()
    .signOut()
    .then(() => {
      dispatch(receiveLogout());
    })
    .catch(error => {
      //Do something with the error if you want!
      dispatch(logoutError());
    });
};

export const verifyAuth = () => dispatch => {
  dispatch(verifyRequest());
  myFirebase.auth().onAuthStateChanged(user => {
    if (user !== null) {
      dispatch(receiveLogin(user));
    }
    dispatch(verifySuccess());
  });
};
};

```

Kemudian kita edit reducernya

Reducerst/auth.js

```

import {
  LOGIN_REQUEST,
  LOGIN_SUCCESS,
  LOGIN_FAILURE,
  LOGOUT_REQUEST,
  LOGOUT_SUCCESS,

```

```
    LOGOUT_FAILURE,  
    VERIFY_REQUEST,  
    VERIFY_SUCCESS  
  } from "../actions/auth";  
  
export default (  
  state = {  
    isLoggingIn: false,  
    isLoggingOut: false,  
    isVerifying: false,  
    loginError: false,  
    logoutError: false,  
    isAuthenticated: false,  
    user: {}  
  },  
  action  
) => {  
  switch (action.type) {  
    case LOGIN_REQUEST:  
    return {  
      ...state,  
      isLoggingIn: true,  
      loginError: false  
    };  
    case LOGIN_SUCCESS:  
    return {  
      ...state,  
      isLoggingIn: false,  
      isAuthenticated: true,  
      user: action.user  
    };  
    case LOGIN_FAILURE:  
    return {  
      ...state,  
      isLoggingIn: false,  
      isAuthenticated: false,  
      loginError: true  
    };  
    case LOGOUT_REQUEST:  
    return {  
      ...state,  
      isLoggingOut: true,  
      logoutError: false  
    };  
    case LOGOUT_SUCCESS:
```

```

    return {
      ...state,
      isLoggingOut: false,
      isAuthenticated: false,
      user: {}
    };
    case LOGOUT_FAILURE:
    return {
      ...state,
      isLoggingOut: false,
      logoutError: true
    };
    case VERIFY_REQUEST:
    return {
      ...state,
      isVerifying: true,
      verifyingError: false
    };
    case VERIFY_SUCCESS:
    return {
      ...state,
      isVerifying: false
    };
    default:
    return state;
  }
};

```

Edit juga reducers/index.js

```

import { combineReducers } from "redux";
import auth from "./auth";
export default combineReducers({ auth });

```

kemudian setting redux plumbing

pilih file configureStore.js di dalam src

```

import { applyMiddleware, createStore } from "redux";
import thunkMiddleware from "redux-thunk";
import { verifyAuth } from "../actions/auth";
import rootReducer from "../reducers";

```

```
export default function configureStore(persistedState) {
  const store = createStore(
    rootReducer,
    persistedState,
    applyMiddleware(thunkMiddleware)
  );
  store.dispatch(verifyAuth());
  return store;
}
```

Edit juga bagian root.js

```
import React from "react";
import { Provider } from "react-redux";
import { BrowserRouter as Router } from "react-router-dom";
import App from "./App";
import configureStore from "./configureStore";

const store = configureStore();

function Root() {
  return (
    <Provider store={store}>
      <Router>
        <App />
      </Router>
    </Provider>
  );
}

export default Root;
```

edit data src/index.js

```
import React from "react";
import ReactDOM from "react-dom";
import Root from "./root";
import * as serviceWorker from "./serviceWorker";

ReactDOM.render(<Root />, document.getElementById("root"));
// If you want your app to work offline and load faster, you can change
// unregister() to register() below. Note this comes with some pitfalls.
// Learn more about service workers: https://bit.ly/CRA-PWA
serviceWorker.unregister();
```

Edit App.js

```
import React from "react";
import { Route, Switch } from "react-router-dom";
import { connect } from "react-redux";
import ProtectedRoute from "../components/ProtectedRoute";
import Home from "../components/Home";
import Login from "../components/Login";

function App(props) {
  const { isAuthenticated, isVerifying } = props;
  return (
    <Switch>
      <ProtectedRoute
        exact
        path="/"
        component={Home}
        isAuthenticated={isAuthenticated}
        isVerifying={isVerifying}
      />
      <Route path="/login" component={Login} />
    </Switch>
  );
}

function mapStateToProps(state) {
  return {
    isAuthenticated: state.auth.isAuthenticated,
    isVerifying: state.auth.isVerifying
  };
}

export default connect(mapStateToProps)(App);
```

kemudian kita buat tampilan login nya , di components/login.js

```
import React, { Component } from "react";
import { connect } from "react-redux";
import { Redirect } from "react-router-dom";
import { loginUser } from "../actions/auth";
import { withStyles } from "@material-ui/styles";
import Avatar from "@material-ui/core/Avatar";
import Button from "@material-ui/core/Button";
import TextField from "@material-ui/core/TextField";
```

```
import LockOutlinedIcon from "@material-ui/icons/LockOutlined";
import Typography from "@material-ui/core/Typography";
import Paper from "@material-ui/core/Paper";
import Container from "@material-ui/core/Container";
```

```
const styles = () => ({
  "@global": {
    body: {
      backgroundColor: "#fff"
    }
  },
  paper: {
    marginTop: 100,
    display: "flex",
    padding: 20,
    flexDirection: "column",
    alignItems: "center"
  },
  avatar: {
    marginLeft: "auto",
    marginRight: "auto",
    backgroundColor: "#f50057"
  },
  form: {
    marginTop: 1
  },
  errorText: {
    color: "#f50057",
    marginBottom: 5,
    textAlign: "center"
  }
});
```

```
class Login extends Component {
  state = { email: "", password: "" };
  handleEmailChange = ({ target }) => {
    this.setState({ email: target.value });
  };
  handlePasswordChange = ({ target }) => {
    this.setState({ password: target.value });
  };
  handleSubmit = () => {
    const { dispatch } = this.props;
    const { email, password } = this.state;
    dispatch(loginUser(email, password));
  };
}
```



```
};
render() {
  const { classes, loginError, isAuthenticated } = this.props;
  if (isAuthenticated) {
    return <Redirect to="/" />;
  } else {
    return (
      <Container component="main" maxWidth="xs">
        <Paper className={classes.paper}>
          <Avatar className={classes.avatar}>
            <LockOutlinedIcon />
          </Avatar>
          <Typography component="h1" variant="h5">
            Sign in
          </Typography>
          <TextField
            variant="outlined"
            margin="normal"
            fullWidth
            id="email"
            label="Email Address"
            name="email"
            onChange={this.handleEmailChange}
          />
          <TextField
            variant="outlined"
            margin="normal"
            fullWidth
            name="password"
            label="Password"
            type="password"
            id="password"
            onChange={this.handlePasswordChange}
          />
          {loginError && (
            <Typography component="p" className={classes.errorText}>
              Incorrect email or password.
            </Typography>
          )}
          <Button
            type="button"
            fullWidth
            variant="contained"
            color="primary"
            className={classes.submit}
          />
        </Paper>
      </Container>
    );
  }
}
```

```

onClick={this.handleSubmit}
>
Sign In
</Button>
</Paper>
</Container>
);
}
}
}

function mapStateToProps(state) {
  return {
    isLoggingIn: state.auth.isLoggingIn,
    loginError: state.auth.loginError,
    isAuthenticated: state.auth.isAuthenticated
  };
}
export default withStyles(styles)(connect(mapStateToProps)(Login));

```

buat juga file home.js nya

```

import React, { Component } from "react";
import { connect } from "react-redux";
import { logoutUser } from "../actions/auth";

class Home extends Component {
  handleLogout = () => {
    const { dispatch } = this.props;
    dispatch(logoutUser());
  };
  render() {
    const { isLoggingOut, logoutError } = this.props; return (
      <div>
        <h1>This is your app's protected area.</h1>
        <p>Any routes here will also be protected</p>
        <button onClick={this.handleLogout}>Logout</button>
        {isLoggingOut && <p>Logging Out....</p>}
        {logoutError && <p>Error logging out</p>}
      </div>
    );
  }
}

function mapStateToProps(state) {
  return {

```

```

isLoggingOut: state.auth.isLoggingOut,
logoutError: state.auth.logoutError
};
}export default connect(mapStateToProps)(Home);

```

Dan buat file dalam folder components dengan nama protectedroute.js

```

import React from "react";
import { Route, Redirect } from "react-router-dom";

const ProtectedRoute = ({
  component: Component,
  isAuthenticated,
  isVerifying,
  ...rest
}) => (
  <Route
    {...rest}
    render={props =>
      isVerifying ? (
        <div />
      ) : isAuthenticated ? (
        <Component {...props} />
      ) : (
        <Redirect
          to={{
            pathname: "/login",
            state: { from: props.location }
          }}
        />
      )
    }
  />
);
export default ProtectedRoute;

```

Start project

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL

Compiled successfully!




You can now view my-app in the browser.

  Local:      http://localhost:3000
  On Your Network: http://192.168.27.2:3000


Note that the development build is not optimized.
To create a production build, use npm run build.

█
```

Kemudian tambah atau cek user di firebase anda
Di authentication

Telusuri berdasarkan alamat email, nomor telepon, atau UID pengguna					Tambahkan pengguna		
Pengenal	Penyedia	Dibuat tanggal	Masuk	UID pengguna ↑			
rewqui21@gmail.com		17 Apr 2020	17 Apr 2020	AYeusrpEkzTG9xIainVSXUgF7Yo1			
hmtryit@gmail.com		17 Apr 2020	17 Apr 2020	h2UfIKiz7gSNAyq7sNRlVcwq89j2			
alputra354@gmail.com		17 Apr 2020	25 Apr 2020	sjU2xS25iqMEqfvVdxhMdWhXJtp2			
Baris per halaman: 50					1-3 dari 3	<	>

Dan coba masukkan di web login
Apablia login salah



Sign in

Email Address

alputssfa354@gmail.com

Password

...

Incorrect email or password.

SIGN IN

Dan apabila login anda benar , akan masuk kehalaman home



