TUGAS PERORANGAN/INDIVIDU

LAPORAN JOBSHEET MINGGU 12 FIREBASE LOGIN

Disusun Sebagai:

MATA KULIAH: PEMROGRAMAN BERBASIS FRAMEWORK

Oleh:

Moh. Khoirul Arifin/1741720051

TI-3B

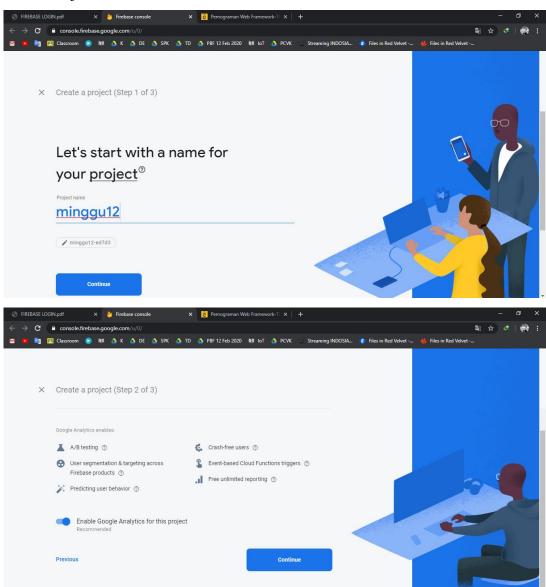


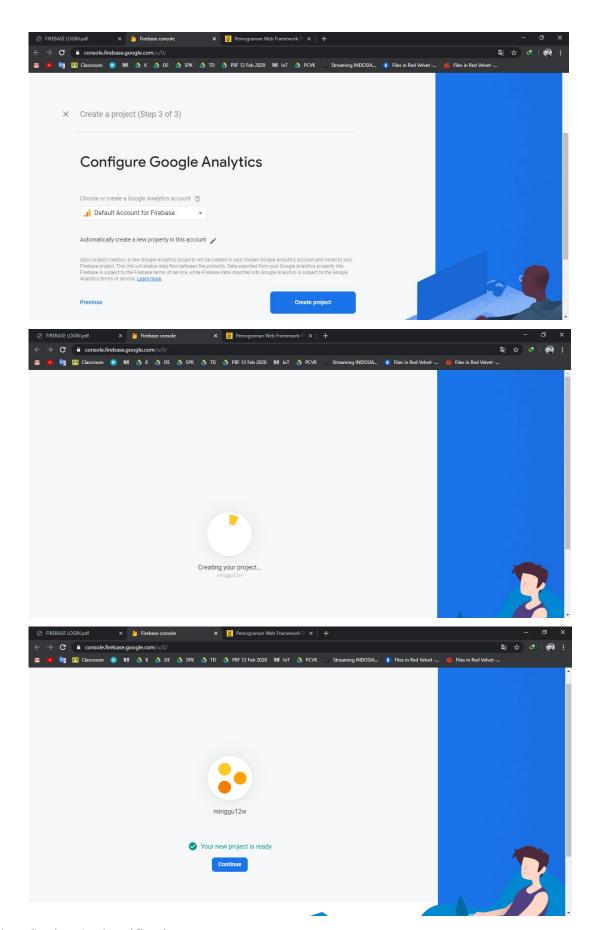
PROGRAM STUDI D-IV TEKNIK INFORMATIKA JURUSAN TEKNOLOGI INFORMASI POLITEKNIK NEGERI MALANG

2020

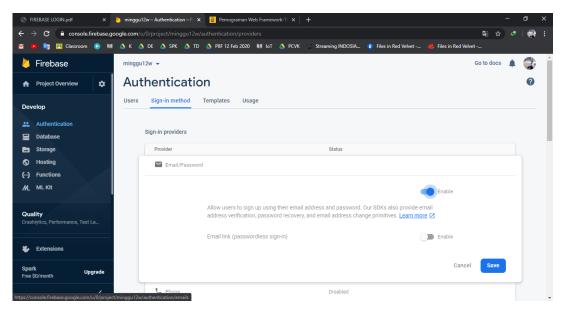
1. Setting Firebase Console

a. Create Project

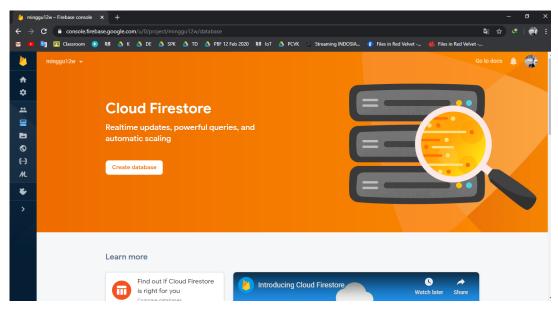




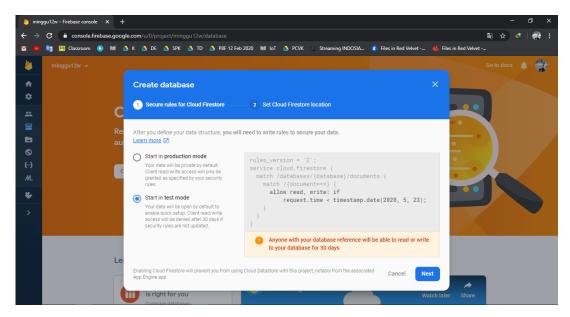
b. Setting Authentification



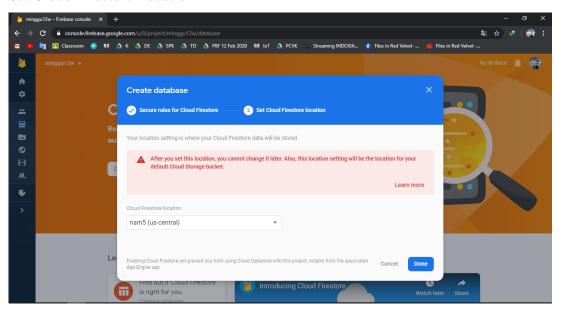
c. Create Database



d. Pilih Start in Test Mode



e. Set Cloud Firestore Location



2. Setting React app dan firebase

a. Membuat Aplikasi Baru

```
PS G:\Kuliah\Semester6\PemrogramanBerbasisFramework\mohkhoirularifin-minggu12> npx create-react-app praktikum

Creating a new React app in G:\Kuliah\Semester6\PemrogramanBerbasisFramework\mohkhoirularifin-minggu12\praktikum.

Installing packages. This might take a couple of minutes.

Installing react, react-dom, and react-scripts with cra-template...
```

b. Install Firebase

```
PS 6:\Kuliah\Semester6\PemrogramanBerbasisFramework\mohkhoirularifin-minggu12\praktikum> npm install -g firebase-tools npm MARI deprecated request@2.88.2: request has been deprecated, see https://github.com/request/request/issues/3142 C:\Users\KHOIRUL\AppData\Roaming\npm\node_modules\firebase-tools\lib\bin\firebase.js

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

```
PS G:\Kuliah\Semester6\PemrogramanBerbasisFramework\mohkhoirularifin-minggu12\praktikum> firebase login
i Firebase optionally collects CLI usage and error reporting information to help improve our products. Data is collected in accord
ance 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

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:
PS G:\Kuliah\Semester6\PemrogramanBerbasisFramework\mohkhoirularifin-minggu12\praktikum> firebase init
     ###
                                                   ## ## ## ##
                 ## ## ## ##
                                           ##
                 ######
                                          ## ## ##
                                                              ##
                                                                         ## ##
                              *** ******* ******** ***
                                                                ** ******* *******
```

c. Pilih firestore dan hosting

```
? Are you ready to proceed? Yes
? Which Firebase CLI features do you want to set up for this folder? Press Space to select features, then Enter to confirm your cho ices.

( ) 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
```

d. Pilih Use existing 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 arrow keys)

Use an existing project
Create a new project
Add Firebase to an existing Google Cloud Platform project
Don't set up a default project
```

e. Pilih Project yang telah dibuat pada firebase

```
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: (Use arrow keys)
> minggu12w (minggu12)
    pbfminggu11 (PBFMinggu11)
    uasmobile-19 (UASMobile)
```

f. Enter firestore.rules

```
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.

Public Should be used for Firestore Rules? (firestore.rules)
```

g. Enter firestore.index.jsos

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)

h. Enter public

```
=== 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)

i. Pilih y

```
? What do you want to use as your public directory? public
? Configure as a single-page app (rewrite all urls to /index.html)? (y/N) y
```

j. Pilih y untuk overwrite

```
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? (y/N) y
```

- + Firebase initialization complete!
- k. Ketik npm run Build

```
PS G:\Kuliah\Semester6\PemrogramanBerbasisFramework\mohkhoirularifin-minggu12\praktikum> npm run build
> praktikum@0.1.0 build G:\Kuliah\Semester6\PemrogramanBerbasisFramework\mohkhoirularifin-minggu12\praktikum
> react-scripts build
Creating an optimized production build...
Compiled successfully.
```

1. Ketik firebase serve

```
PS G:\Kuliah\Semester6\PemrogramanBerbasisFramework\mohkhoirularifin-minggu12\praktikum> firebase serve

=== Serving from 'G:\Kuliah\Semester6\PemrogramanBerbasisFramework\mohkhoirularifin-minggu12\praktikum'...

i hosting: Serving hosting files from: public
+ hosting: Local server: http://localhost:5000
```

3. Instalasi Redux

a. Install Redux dan react redux, redux thunk

```
PS G:\Kuliah\Semester6\PemrogramanBerbasisFramework\mohkhoirularifin-minggu12\praktikum> npm install redux

npm \underline{\textitis@3.17.1 requires a peer of typescript@>=2.8.0 || >= 3.2.0-dev || >= 3.4.0-dev || >= 3.4.0-dev || >= 3.6.0-dev || >= 3.5.0-dev || >= 3.5.0-dev || >= 3.5.0-dev || >= 3.7.0-dev || >= 3.7.0-beta but none is installed. You must install peer dependencies yourself.

npm \underline{\text{WARI}} optional SKIPPING OPTIONAL DEPENDENCY: fsevents@2.1.2 (node_modules\fsevents):

npm \underline{\text{WARI}} notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@2.1.2: wanted {"os":"darwin", "arch":"any"} (current is \underline{\text{Tos": "win32", "arch": "x64"})

npm \underline{\text{WARI}} optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.12 (node_modules\\underline{\text{webpack-dev-server\node_modules\fsevents}: npm \underline{\text{WARI}} notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.12: wanted {"os":"darwin", "arch":"any"} (current \underline{\text{WARI}} notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.12: wanted {"os":"darwin", "arch":"any"} (current \underline{\text{WARI}} notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.12: wanted {"os":"darwin", "arch":"any"} (current \underline{\text{WARI}} notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.12: wanted {"os":"darwin", "arch":"any"} (current \underline{\text{WARI}} notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.12: wanted {"os":"darwin", "arch":"any"} (current \underline{\text{WARI}} notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.12: wanted {"os":"darwin", "arch":"any"} (current \underline{\text{WARI}} notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.12: wanted {"os":"darwin", "arch":"any"} (current \underline{\text{WARI}} notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.12: wanted {"os":"darwin", "arch":"any"
```

```
PS G:\Kuliah\Semester6\PemrogramanBerbasisFramework\mohkhoirularifin-minggu12\praktikum> npm install react-redux

npm MARI tsutils@3.17.1 requires a peer of typescript@>=2.8.0 || >= 3.2.0-dev || >= 3.4.0-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 installed. You must install peer dependencies yourself.

npm MARI optional SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@2.1.2: wanted {"os":"darwin", "arch":"any"} (current
: {"os":"win32", "arch":"x64"})

npm WARI notsup SKIPPING OPTIONAL DEPENDENCY: Insupported platform for fsevents@1.2.12: wanted {"os":"darwin", "arch":"any"} (current

PS G:\Kuliah\Semester6\PemrogramanBerbasisFramework\mohkhoirularifin-minggu12\praktikum> npm install redux-thunk

npm WARI tsutils@3.17.1 requires a peer of typescript@>=2.8.0 || >= 3.2.0-dev || >= 3.3.0-dev || >= 3.4.0-dev || >= 3.6.0-dev || >= 3.6.0-dev || >= 3.6.0-dev || >= 3.7.0-dev || >= 3.7.0-beta but none is installed. You must install peer dependencies yourself.

npm MARI optional SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@2.1.2: wanted {"os":"darwin", "arch":"any"} (current
: {"os":"win32", "arch":"x64"})

npm MARI notsup SKIPPING OPTIONAL DEPENDENCY: Insupported platform for fsevents@2.1.2: wanted {"os":"darwin", "arch":"any"} (current
: {"os":"win32", "arch":"x64"})

npm MARI optional SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.12: wanted {"os":"darwin", "arch":"any"} (current
: {"os":"win32", "arch":"x64"})

npm MARI 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 || >= 3.5.0-dev || >= 3.6.0-beta || >= 3.
```

b. Install firebase

```
PS G:\Kuliah\Semester6\PemrogramanBerbasisFramework\mohkhoirularifin-minggu12\praktikum> npm install firebase

> protobufjs@6.9.0 postinstall G:\Kuliah\Semester6\PemrogramanBerbasisFramework\mohkhoirularifin-minggu12\praktikum\node_modules\protobufjs

> node scripts/postinstall

npm _MARN 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 || >= 3.7.0-dev || >= 3
```

c. Pilih UI library

```
PS G:\Kuliah\Semester6\PemrogramanBerbasisFramework\mohkhoirularifin-minggu12\praktikum> npm install @material-ui/core npm WARN deprecated popper.js@1.16.1: You can find the new Popper v2 at @popperjs/core, this package is dedicated to the legacy v1 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 || >= 3.5.0-dev || >= 3.6.0-dev || >= 3.7.0-beta but none is installed. 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":"darwin","arch":"any"} (current : {"os":"win32", "arch":"%64"})
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.12 (node_modules\webpack-dev-server\node_modules\fsevents):
```

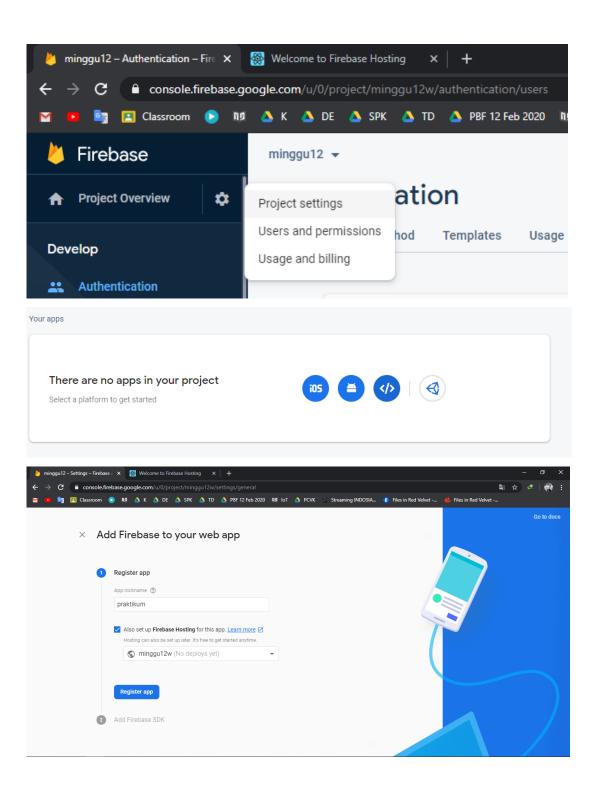
d. Paste kan file public/index.html

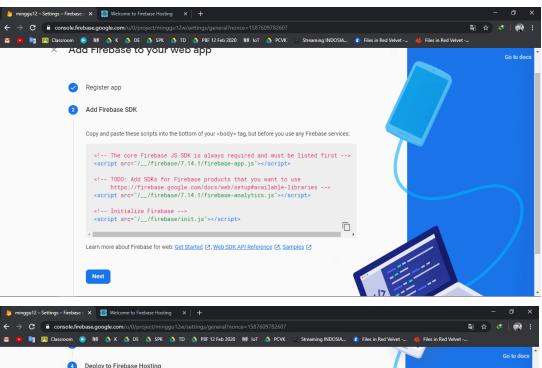
e. Install material icon

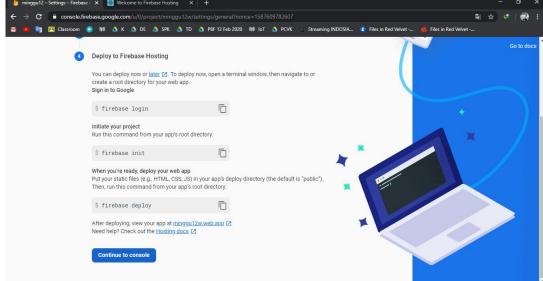
```
PS G:\Kuliah\Semester6\PemrogramanBerbasisFramework\mohkhoirularifin-minggu12\praktikum> npm install @material-ui/icons
npm MARN tsutils@3.17.1 requires a peer of typescript@>=2.8.0 || >= 3.2.0-dev || >= 3.3.0-dev || >= 3.4.0-dev || >= 3.5.0-dev || >= 3.5.0-dev || >= 3.5.0-dev || >= 3.5.0-dev || >= 3.6.0-beta || >= 3.7.0-dev || >= 3
```

4. Setting Firebase config

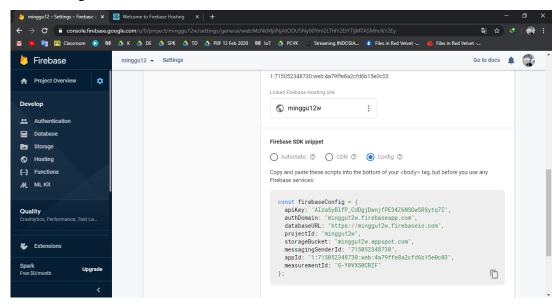
a. Pilih project setting







b. Pilih config



c. Edit firebase/firebase.js

```
import firebase from "firebase/app";
import "firebase/auth";
import "firebase/firestore";
const firebaseConfig = {
    //Your Config Values
   apiKey: "AIzaSyBlfP CdDgjDwnjfPE34Z6NSGwSRSytq7I",
   authDomain: "minggu12w.firebaseapp.com",
   databaseURL: "https://minggu12w.firebaseio.com",
   projectId: "minggu12w",
   storageBucket: "minggu12w.appspot.com",
   messagingSenderId: "715052348730",
   appId: "1:715052348730:web:4a79ffe8a2cfd6b15e0c03",
   measurementId: "G-Y0VXS0CRZF"
};
export const myFirebase = firebase.initializeApp(firebaseConfig);
const baseDb = myFirebase.firestore();
export const db = baseDb;
```

d. Edit actions/auth.js

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

5. Setting Reducer

a. Buka reducers/auth.js

```
import {
    LOGIN REQUEST,
    LOGIN_SUCCESS,
    LOGIN_FAILURE,
    LOGOUT_REQUEST,
    LOGOUT_SUCCESS,
    LOGOUT_FAILURE,
    VERIFY REQUEST,
    VERIFY SUCCESS
} from "../actions/";
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 {
               <u>...</u>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;
    }
};
```

b. Edit reducers/index.js

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

- 6. Setting Redux plumbing
 - a. Pilih src folder called configureStore.js dan edit

```
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;
}
```

b. Pilih dan edit folder src dan root.js

c. Pilih dan edit folder 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"));
serviceWorker.unregister();
```

d. Buat lah coding 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);
```

e. Buatlah file dan simpan 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 = () \Rightarrow ({
    "@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">
```

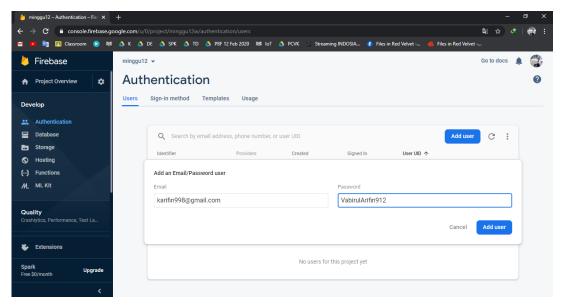
```
Sign in
                         </Typography>
                         <TextField
                             variant="outlined"
                             margin="normal"
                             fullWidth
                             id="email"
                             label="Email 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}
                             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));
```

f. Buka component/Home.js

```
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>
                Any routes here will also be protected
                <button
onClick={this.handleLogout}>Logout</button>
                {isLoggingOut && Logging Out....}
                {logoutError && Error logging out}
            </div>
       );
    }
}
function mapStateToProps(state) {
   return {
        isLoggingOut: state.auth.isLoggingOut,
        logoutError: state.auth.logoutError
    };
}
export default connect(mapStateToProps) (Home);
```

g. Masuk ke firebase console kemudian add user



Pilih npm start kemudian masukkan username dan password
 Hasil masih eror pak, mohon maaf