

# **Laporan**

## **“Login Firebase”**

Disusun sebagai

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**PROGRAM STUDI D-IV TEKNIK INFORMATIKA**

**JURUSAN TEKNIK INFORMASI**

**POLITEKNIK NEGERI MALANG**

**2020**

## 1. Enable login email

Email/Password

☒ Enable

Allow users to sign up using their email address and password. Our SDKs also provide email address verification, password recovery, and email address change primitives. [Learn more](#)

Email link (passwordless sign-in) ☐ Enable

Cancel Save

## 2. Buat database

**Create database**

1 Secure rules for Cloud Firestore 2 Set Cloud Firestore location

After you define your data structure, you will need to write rules to secure your data. [Learn more](#)

☒ **Start in production mode**  
Your data will be private by default. Client read/write access will only be granted as specified by your security rules.

☐ **Start in test mode**  
Your data will be open by default to enable quick setup. Client read/write access will be denied after 30 days if security rules are not updated.

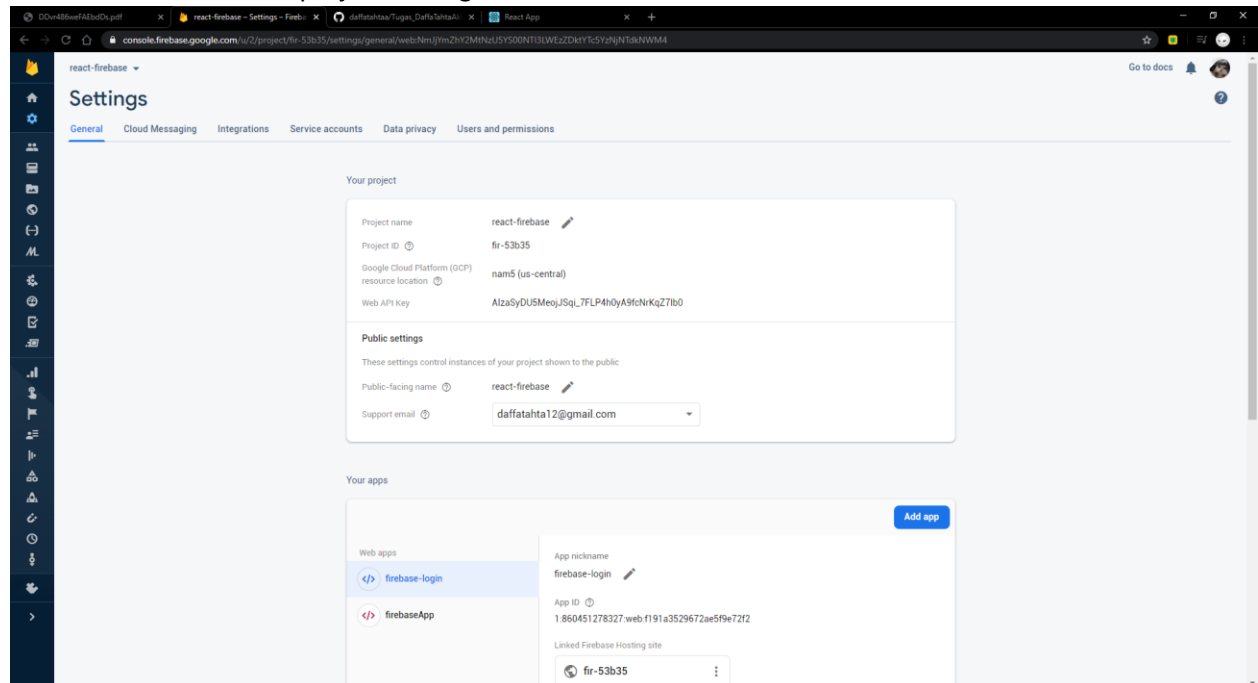
```
rules_version = '2';
service cloud.firestore {
  match /databases/{database}/documents {
    match /{document=**} {
      allow read, write: if false;
    }
  }
}
```

**i All third party reads and writes will be denied**

Enabling Cloud Firestore will prevent you from using Cloud Datastore with this project, notably from the associated App Engine app

Cancel Next

3. Create new react app
4. Install
  - a. Npm install -g firebase-tools
  - b. Firebase login
  - c. Firebase init
5. Setting untuk firebase dan hosting
  - a. Pilih build
  - b. Lalu pilih overwrite
6. Install redux
  - a. React-router-dom
  - b. React-redux
  - c. Redux-thunk
  - d. Npm I firebase
  - e. Npm I @material-ui/core
7. Install material icon  
Npm I @material-ui-icons
8. Setting firebase config
  - a. Pilih project setting
  - b. Ke bagian </>
  - c. Masukkan app nickname
  - d. Centang hosting
  - e. Click next lalu masuk ke project setting



f. Masuk ke bagian your apps

Your apps

Add app

Web apps

- firebase-login
- firebaseApp

App nickname  
firebase-login

App ID  
1:860451278327:web:f191a3529672ae5f9e72f2

Linked Firebase Hosting site  
fir-53b35

Firestore SDK snippet

☐ Automatic ☐ CDN ☒ Config

Copy and paste these scripts into the bottom of your <body> tag, but before you use any Firebase services:

```
const firebaseConfig = {
  apiKey: "AIzaSyDU5MeojJSqi_7FLP4h0yA9fcNrKqZ71b0",
  authDomain: "fir-53b35.firebaseio.com",
  databaseURL: "https://fir-53b35.firebaseio.com",
  projectId: "fir-53b35",
  storageBucket: "fir-53b35.appspot.com",
  messagingSenderId: "860451278327",
  appId: "1:860451278327:web:f191a3529672ae5f9e72f2",
  measurementId: "G-NT4V8DMRR0"
};
```

g. Ke bagian config

h. Copy dan paste di firebase.js

```

1 import firebase from "firebase/app";
2 import "firebase/auth";
3 import "firebase/firestore";
4
5 const firebaseConfig = {
6   apiKey: "AIzaSyDU5MeojJSqi_7FLP4h0yA9fcNrKqZ71b0",
7   authDomain: "fir-53b35.firebaseio.com",
8   databaseURL: "https://fir-53b35.firebaseio.com",
9   projectId: "fir-53b35",
0   storageBucket: "fir-53b35.appspot.com",
1   messagingSenderId: "860451278327",
2   appId: "1:860451278327:web:f191a3529672ae5f9e72f2",
3   measurementId: "G-NT4V8DMRR0",
4 };
5
6 export const myFirebase = firebase.initializeApp(firebaseConfig);
7 const baseDb = myFirebase.firestore();
8 export const db = baseDb;
9

```

#### 9. Edit file actions/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());
  });
};

```

#### 10. Edit reducers/index.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;
    }
  };
};

```

## 11. Setting redux plumbing

### 12. Pilih src folder called configureStore.js

```

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;
}

```

### 13. Pilih dan edit foldersrc dan root

```

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;

```

### 14. Edit folder src/index.js

```

import React from "react";
import ReactDOM from "react-dom";
import Root from "./root";
import "./index.css";

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();

```

### 15. Buat 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);
```

### 16. Buatlah file dan simpan component/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"
        fullWidthname="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));

```

#### 17. 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 { isLoggedIn, 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>
        {isLoggedIn && <p>Logging Out....</p>}
        {logoutError && <p>Error logging out</p>}
      </div>
    );
  }
}

function mapStateToProps(state) {
  return {
    isLoggedIn: state.auth.isLoggedIn,
    logoutError: state.auth.logoutError,
  };
}

export default connect (mapStateToProps) (Home);

```

#### 18. Run



19. Link github:

[https://github.com/daffatahtaa/Tugas\\_DaffaTahtaAkbar\\_1741720152\\_PBF/tree/master/LoginFIrebase/login-firebase](https://github.com/daffatahtaa/Tugas_DaffaTahtaAkbar_1741720152_PBF/tree/master/LoginFIrebase/login-firebase)