

TUGAS INDIVIDU

PEMROGRAMAN BERBASIS FRAMEWORK

**“Set up firebase for react, Integrasi react dengan firebas,
And Using react firebase auth”**



oleh:

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TI-3A

PROGRAM STUDI D-IV TEKNIK INFORMATIKA

JURUSAN TEKNOLOGI INFORMASI

POLITEKNIK NEGERI MALANG

2020

Praktikum

Langkah-langkah praktikum

1. Membuat project react baru
2. Lalu menghapus file pada folder **src** dan menggantikannya dengan file berikut yaitu **index.js ; Login.js ; Join.js ; Header.js ; routes.js ; styles.css**
3. Menginstall react router dom, seperti berikut:

```
PS E:\POLINEMA\Semester 6\PBF\28-TikaYulianti-TI3A-Firebase> npm install react-router-dom

npm WARN saveError ENOENT: no such file or directory, open 'E:\POLINEMA\Semester 6\PBF\28-TikaYulianti-TI3A-Firebase\package.json'
npm notice created a lockfile as package-lock.json. You should commit this file.
npm WARN enoent ENOENT: no such file or directory, open 'E:\POLINEMA\Semester 6\PBF\28-TikaYulianti-TI3A-Firebase\package.json'
npm WARN react-router-dom@5.1.2 requires a peer of react@>=15 but none is installed. You must install peer dependencies yourself.
npm WARN react-router@5.1.2 requires a peer of react@>=15 but none is installed. You must install peer dependencies yourself.
npm WARN mini-create-react-context@0.3.2 requires a peer of react@^0.14.0 || ^15.0.0 || ^16.0.0 but none is installed. You must install peer dependencies yourself.
npm WARN 28-TikaYulianti-TI3A-Firebase No description
npm WARN 28-TikaYulianti-TI3A-Firebase No repository field.
npm WARN 28-TikaYulianti-TI3A-Firebase No README data
npm WARN 28-TikaYulianti-TI3A-Firebase No license field.

+ react-router-dom@5.1.2
added 19 packages from 11 contributors and audited 52 packages in 7.985s
found 0 vulnerabilities

PS E:\POLINEMA\Semester 6\PBF\28-TikaYulianti-TI3A-Firebase> npm install --save firebase

> core-js@3.6.4 postinstall E:\POLINEMA\Semester 6\PBF\28-TikaYulianti-TI3A-Firebase\node_modules\core-js
> node -e "try{require('./postinstall')}catch(e){}"

Thank you for using core-js ( https://github.com/zloirock/core-js ) for polyfilling JavaScript standard library!
```

4. Membuat beberapa file baru didalam folder src

Index.js

```
modul10 > src > JS index.js > App
1  import React, { useState } from "react";
2  import ReactDOM from "react-dom";
3  import { Switch, BrowserRouter as Router, Route } from "react-router-dom";
4  import routes from "../routes.js";
5  import Header from "../Header";
6  import "../styles.css";
7  import * as firebase from "firebase";
8  import firebaseConfig from "../firebase.config";
9
10  firebase.initializeApp(firebaseConfig);
11
12  export const AuthContext = React.createContext(null);
13
14  function App(){
15    const [isLoggedIn, setLoggedIn] = useState(false);
16    return(
17      <AuthContext.Provider value={{ isLoggedIn, setLoggedIn}}>
18        <div className="App">
19          <Router>
20            <Header/>
21            <Switch>
22              {routes.map(route => (
23                <Route
24                  key={route.path}
25                  path={route.path}
26                  exact={route.exact}
27                  component={route.main}
28                />
29              ))}
30            </Switch>
31          </Router>
32        </div>
33      </AuthContext.Provider>
34    );
35  }
36
37
38  const rootElement = document.getElementById("root");
39  ReactDOM.render(<App/>, rootElement);
```

+

...

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Login.js

```
JS index.js JS Login.js JS Join.js JS Header.js JS routes.js # styles.css JS firebase.config
modul10 > src > JS Login.js > [e] Login > [e] handleForm
1 import React, { useState, useContext } from "react";
2 import { AuthContext } from "../index";
3 import * as firebase from "firebase";
4
5 const Login = () => {
6   ...const [email, setEmail] = useState("");
7   ...const [password, setPassword] = useState("");
8   ...const [error, setErrors] = useState("");
9
10  ...const Auth = useContext(AuthContext);
11  ...const handleForm = e => {
12    ...e.preventDefault();
13    ...firebase
14    ...console.log(Auth);
15    ...Auth.setLoggedIn(true);
16  };
17
18  ...return (
19    ...<div>
20      ...<h1>
21        ...Login</h1>
22      ...<form onSubmit={e => handleForm(e)}>
23        ...<input
24          ...value={email}
25          ...onChange={e => setEmail(e.target.value)}
26          ...name="email"
27          ...placeholder="email"
28        .../>
29        ...<input
30          ...onChange={e => setPassword(e.target.value)}
31          ...name="password"
32          ...value={password}
33          ...type="password"
34          ...placeholder="password"
35        .../>
36        ...<hr />
37        ...<button class="googleBtn" type="button">
38          ...
42          ...Login With Google
43        ...</button>
44        ...<button type="submit">Login</button>
45        ...<span>{error}</span>
46      ...</form>
47    ...</div>
48  ...);
49  ...};
50
51  export default Login;
```

Join.js

```
JS index.js JS Login.js JS Join.js JS Header.js JS routes.js # styles.css JS firebase.conf
modul10 > src > JS Join.js > Join
1 import React, { useState, useContext } from "react";
2 import { AuthContext } from "../index";
3 import * as firebase from "firebase";
4
5 const Join = () => {
6   ...const [email, setEmail] = useState("");
7   ...const [password, setPassword] = useState("");
8   ...const [error, setErrors] = useState("");
9
10  ...const Auth = useContext(AuthContext);
11  ...const handleForm = e => {
12    ...e.preventDefault();
13    ...console.log(Auth);
14    ...Auth.setLoggedIn(true);
15  };
16
17  ...return()
18  ...<div>
19    ...<h1>Join</h1>
20    ...<form onSubmit={e => handleForm(e)}>
21      ...<input
22        ...value={email}
23        ...onChange={e => setEmail(e.target.value)}
24        ...name="email"
25        ...type="email"
26        ...placeholder="email"
27      />
28      ...<input
29        ...onChange={e => setPassword(e.target.value)}
30        ...name="password"
31        ...value={password}
32        ...type="password"
33        ...placeholder="password"
34      />
35      ...<hr />
36      ...<button class="googleBtn" type="button">
37        ...
41      ...Join With Google
42    ...</button>
43    ...<button type="submit">Login</button>
44    ...<span>{error}</span>
45  ...</form>
46  ...</div>
47  ...</div>
48  ...</div>
49  ...</div>
50  ...</div>
51  export default Join;
```

Header.js

```
modul10 > src > JS Header.js > [⌕] default
1  import React from "react";
2  import routes from "../routes";
3  import { Link } from "react-router-dom";
4
5  const Header = () => {
6    <ul className="nav">
7      <{routes.map((route, i) => {
8        <li key={i}>
9          <Link to={route.path}>{route.name}</Link>
10         </li>
11       </>
12     </ul>
13   };
14
15   export default Header;
```

routes.js

```
modul10 > src > JS routes.js > [⌕] default
1  import React from "react";
2  import Login from "../Login";
3  import Join from "../Join";
4
5  const routes = [
6    { name: "Join", path: "/", exact: true, main: () => <Join /> },
7    { name: "Login", path: "/login", exact: true, main: () => <Login /> }
8  ];
9
10
11 export default routes;
```

styles.css

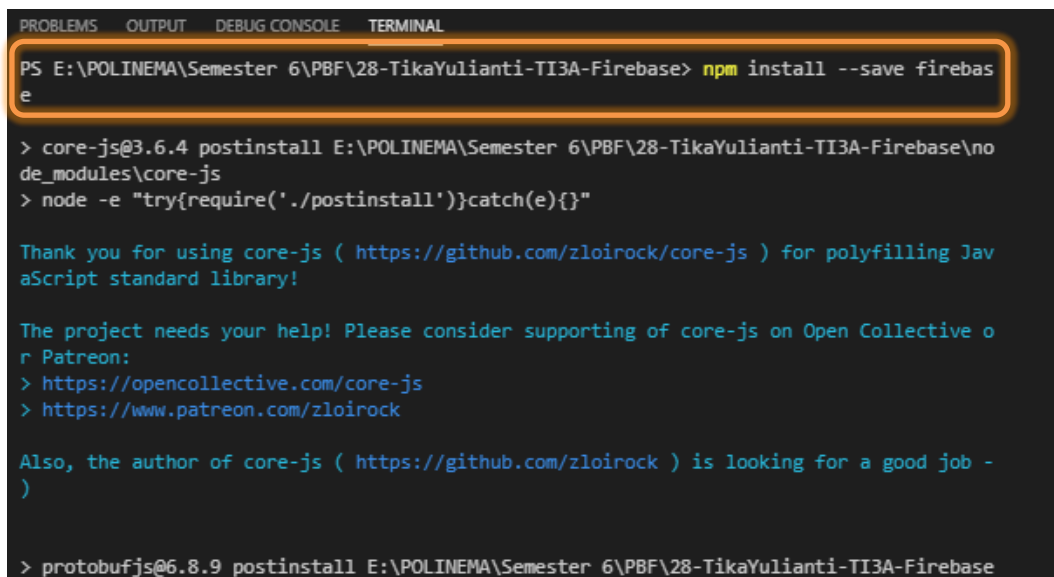
```
modul10 > src > # styles.css > .nav li
1  .App{
2    ...font-family: sans-serif;
3    ...padding: 50px;
4  }
5
6  h1{
7    ...margin: 0 0 25px 0;
8    ...text-align: left;
9  }
10
11 form{
12   ...display: flex;
13   ...flex-direction: column;
14 }
15
16 input{
17   ...max-width: 450px;
18   ...width: auto;
19   ...border: none;
20   ...margin: 0 0 25px 0;
21   ...box-shadow: 0 1px 3px 0 rgba(0, 0, 0, 0.12), 0 1px 2px 0 rgba(0, 0, 0, 0.24);
22   ...transition: all 0.3s cubic-bezier(0.25, 0.8, 0.25, 1);
23   ...padding: 10px;
24 }
25
26 button{
27   ...width: 125px;
28   ...box-shadow: 0 1px 3px 0 rgba(0, 0, 0, 0.12), 0 1px 2px 0 rgba(0, 0, 0, 0.24); ;
29   ...border: none;
30   ...padding: 7px;
31   ...text-align: center;
32   ...cursor: pointer;
33 }
34
35 button[type="submit"]{
36   ...background-color: #4c566a;
37   ...color: white;
38   ...font-size: 14px;
39   ...font-weight: 900;
40   ...border-radius: 5px;
```

```

41     ...text-transform: uppercase;
42     ...padding: 15px;
43 }
44
45 .googleBtn{
46     ...width: 225px;
47     ...margin: 0 0 50px 0;
48     ...display: flex;
49     ...justify-content: center;
50     ...font-size: 16px;
51 }
52
53 .googleBtn img{
54     ...width: 16px;
55     ...height: 16px;
56     ...padding: 0;
57     ...margin: 0 5px;
58     ...vertical-align: middle;
59 }
60
61 .nav{
62     ...display: flex;
63     ...text-decoration: none;
64     ...list-style-type: none;
65     ...justify-content: flex-start;
66     ...margin: 0 0 50px 0;
67     ...padding: 0;
68 }
69
70 .nav li{
71     ...margin: 0 10px;
72 }

```

5. Kemudian membuka <https://console.firebase.google.com/> dan membuat project baru pada firebase dengan nama **PBFModul10**
6. Melakukan perintah **npm install --save firebase** pada cmd directory project react seperti berikut:



```

PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL
PS E:\POLINEMA\Semester 6\PBF\28-TikaYulianti-TI3A-Firebase> npm install --save firebase
> core-js@3.6.4 postinstall E:\POLINEMA\Semester 6\PBF\28-TikaYulianti-TI3A-Firebase\node_modules\core-js
> node -e "try{require('./postinstall')}catch(e){}"

Thank you for using core-js ( https://github.com/zloirock/core-js ) for polyfilling JavaScript standard library!

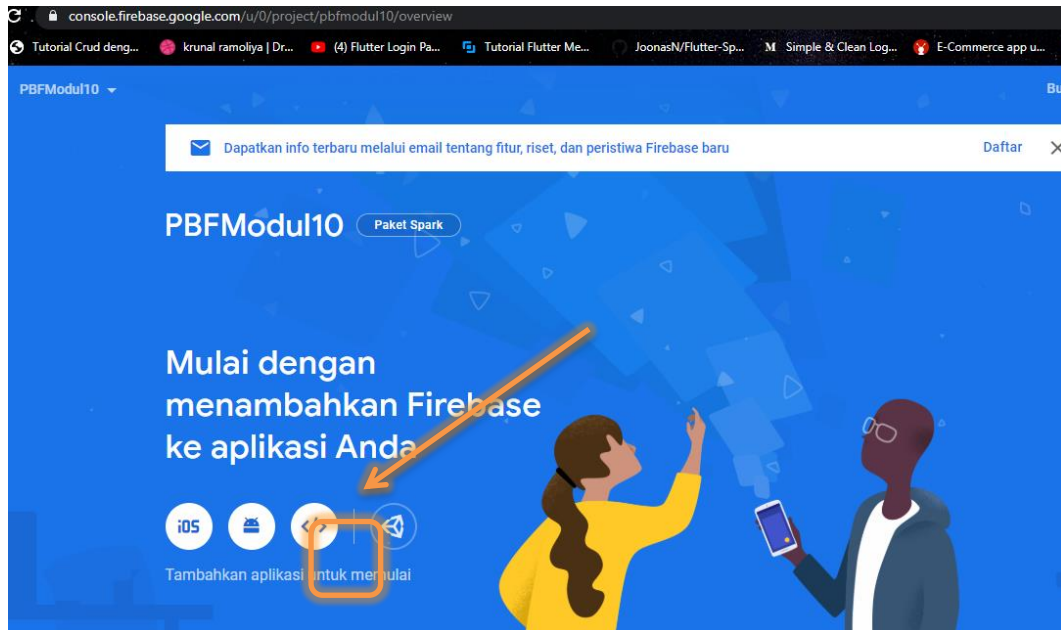
The project needs your help! Please consider supporting of core-js on Open Collective or Patreon:
> https://opencollective.com/core-js
> https://www.patreon.com/zloirock

Also, the author of core-js ( https://github.com/zloirock ) is looking for a good job - )

> protobufjs@6.8.9 postinstall E:\POLINEMA\Semester 6\PBF\28-TikaYulianti-TI3A-Firebase

```


7. Setelah itu melakukan setting pada project firebase agar saling terhubung dengan project react. Memilih web pada setting get started



8. Setelah itu akan mendapatkan script konfigurasi yang akan menghubungkan dengan project react



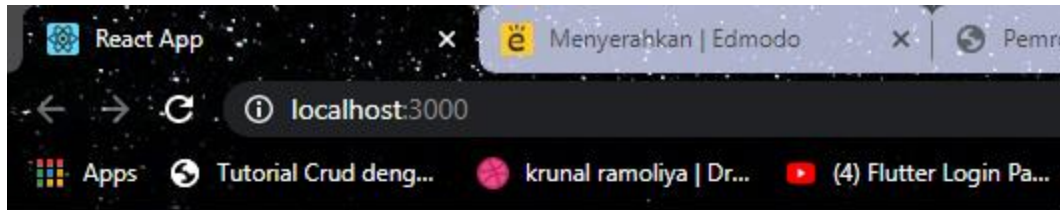
9. Membuat file baru di dalam **src** dengan nama **firebase.config.js**, lalu menyalin script firebase diatas ke dalam file **firebase.config.js**

```
modul10 > src > JS firebase.config.js > default
1  export default{
2    ...apiKey: "AIZA5yAjoKv48BUB6Ty9K8uCu8xPikKTjuJmYR8",
3    ...authDomain: "pbfmodul10.firebaseio.com",
4    ...databaseURL: "https://pbfmodul10.firebaseio.com",
5    ...projectId: "pbfmodul10",
6    ...storageBucket: "pbfmodul10.appspot.com",
7    ...messagingSenderId: "434602694382",
8    ...appId: "1:434602694382:web:4135eced8a547f148945ff",
9    ...measurementId: "G-EJGT0D6J4F"
10 }
```

10. Melakukan inisialisasi firebase config dengan menambahkan code kedalam file **index.js** seperti berikut:

```
JS index.js X JS Login.js JS Join.js JS Header.js JS routes.js
modul10 > src > JS index.js > App
1  import React, { useState } from "react";
2  import ReactDOM from "react-dom";
3  import { Switch, BrowserRouter as Router, Route } from "react-router-dom";
4  import routes from "../routes.js";
5  import Header from "../Header";
6  import "../styles.css";
7  import * as firebase from "firebase";
8  import firebaseConfig from "../firebase.config";
9
10  firebase.initializeApp(firebaseConfig);
11
12  export const AuthContext = React.createContext(null);
13
```

11. Menjalankan project untuk mengecek error dan memastikan project telah terhubung pada firebase



Is logged in? false

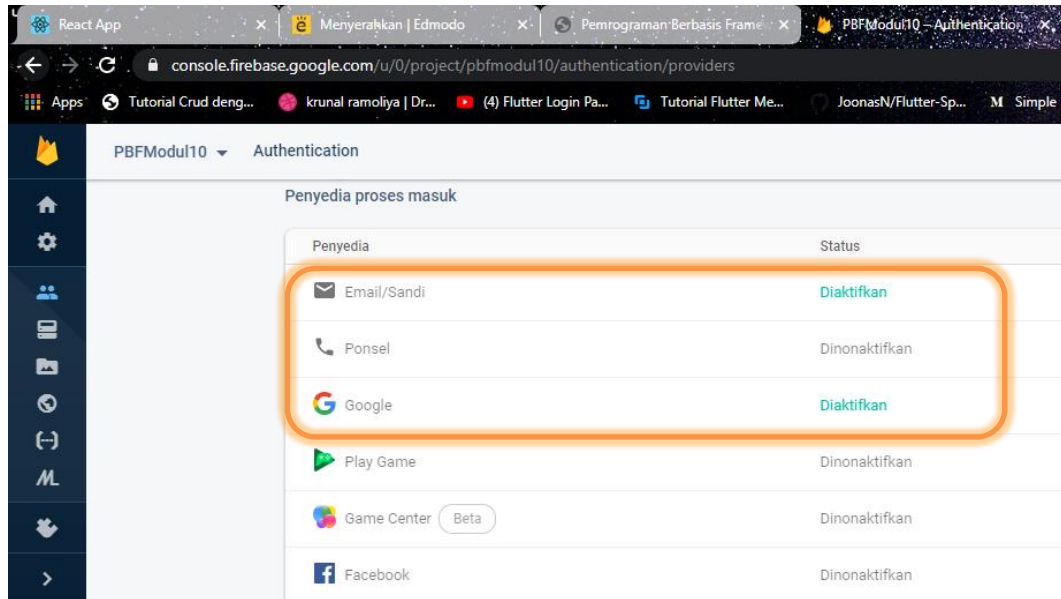
[Join](#) [Login](#)

Join

 Join With Google

LOGIN

12. Mengaktifkan authentication email dan google pada firebase console



13. Melakukan edit pada file **Join.js** untuk membuat email dan password user.

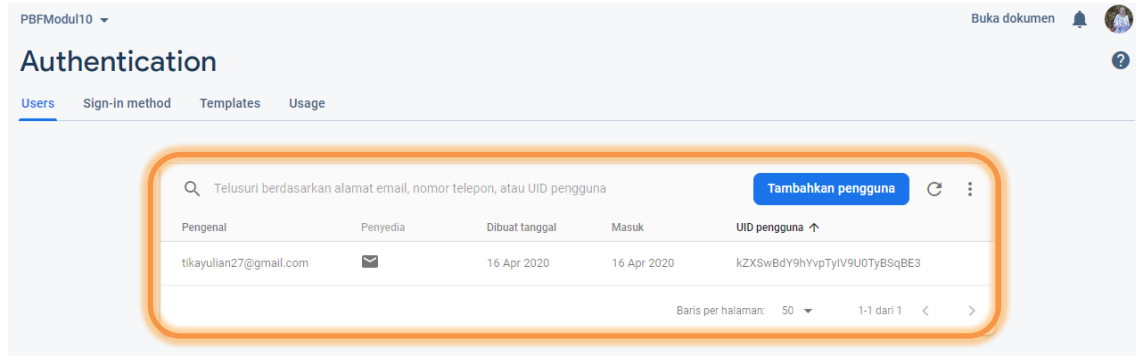
Pertama mengimport dahulu objek firebase agar bisa digunakan pada **Join.js** dengan code seperti berikut:

```
modul10 > src > JS Join.js > [e] Join > [e] handleForm > [e] catch() callback
1 import React, { useState, useContext } from "react";
2 import { AuthContext } from "../index";
3 import * as firebase from "firebase";
4
```

Lalu mengedit method **auth** seperti code berikut:

```
10 const Auth = useContext(AuthContext);
11 const handleForm = e => {
12   e.preventDefault();
13   firebase
14     .auth()
15     .createUserWithEmailAndPassword(email, password)
16     .then(res => {
17       if (res.user) Auth.setLoggedIn(true);
18     })
19     .catch(e => {
20       setErrors(e.message);
21     });
22   // e.preventDefault();
23   // console.log(Auth);
24   // Auth.setLoggedIn(true);
25 };
26
```

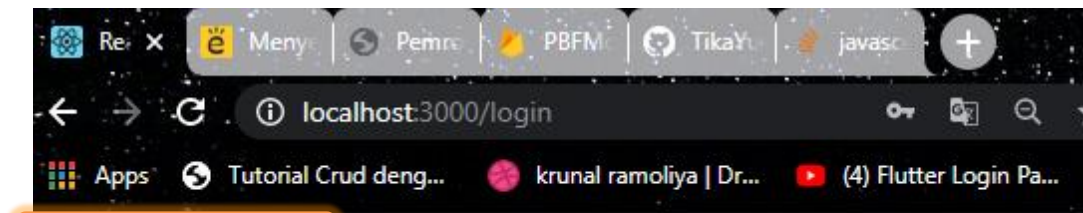
14. Mengisikan email dan password pada aplikasi lalu klik **join**. Kemudian mengecek pada firebase, maka user yang telah join akan tersimpan dalam firebase



15. Melakukan edit pada file **Login.js** agar user dapat login dengan akun yang telah dibuat. Pertama mengimport dahulu objek firebase agar bisa digunakan pada **Login.js** dengan code seperti berikut:

```
JS index.js JS Login.js X JS Join.js JS Header.js JS routes.js
modul10 > src > JS Login.js > Login > handleForm
1 import React, { useState, useContext } from "react";
2 import { AuthContext } from "../index";
3 import * as firebase from "firebase";
4
5 const Login = () => {
6   ...const [email, setEmail] = useState("");
7   ...const [password, setPassword] = useState("");
8   ...const [error, setErrors] = useState("");
9
10   ...const Auth = useContext(AuthContext);
11   ...const handleForm = e => {
12     ...e.preventDefault();
13     ...firebase
14     ...auth()
15     ...signInWithEmailAndPassword(email, password)
16     ...then(res => {
17       ...if (res.user) Auth.setLoggedIn(true);
18     })
19     ...catch(e => {
20       ...setErrors(e.message);
21     });
22     ...// console.log(Auth);
23     ...// Auth.setLoggedIn(true);
24   };
25 }
```

16. Mencoba aplikasi dengan cara klik login kemudian masukkan email dan password yang telah didaftarkan, kemudian perhatikan keterangan login pada pojok kiri atas dengan perubahan kondisi dari **false** menjadi **true** yang menandakan anda telah berhasil login.



[Join](#) [Login](#)

Login

tikayulian27@gmail.com

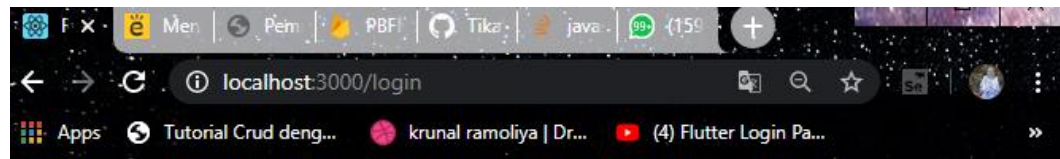
 Login With Google

LOGIN

Soal Latihan Praktikum

1. Membuat laporan Modul 10
2. Pada button join with google belum terdapat aksi, silahkan tambahkan function agar dapat mendaftar dengan cara klik button tersebut lalu memilih akun gmail yang akan dipakai.

Jawaban:



Is logged in? false

[Join](#) [Login](#)

Login

