React + NodeJS + Firebase

# Register Firebase Account

Open that link to create a Firebase Account <https://firebase.google.com/>

Click “**Get Started”** and register with your Google Account

图形用户界面, 文本, 应用程序

描述已自动生成

You can also switch Language on the top-right corner.

图形用户界面, 文本, 应用程序, 聊天或短信

描述已自动生成

You can switch Language on the top-right corner.

# Create Firebase Projects

After register your account, you can see a Dashboard.

Click **“Add Project”** to create a Firebase Project.

图形用户界面, 应用程序

描述已自动生成

1. Type your project name

图形用户界面, 应用程序

中度可信度描述已自动生成

1. Continue

图形用户界面, 文本, 应用程序, 电子邮件

描述已自动生成

1. Select **Default Account for Firebase** and **Create Project**

图形用户界面, 文本, 应用程序, 电子邮件

描述已自动生成

1. Wait

应用程序

低可信度描述已自动生成

1. Project created completely.

图片包含 文本

描述已自动生成

# Add Firebase to App

1. Add Firebase to Web App

手机屏幕的截图

描述已自动生成

1. Set **“Nick Name”** and **register App**.

图形用户界面, 文本, 应用程序, 电子邮件

描述已自动生成

1. Copy the **firebaseConfig** in your TXT file. You will use it later.

图形用户界面, 文本, 应用程序

描述已自动生成

1. Continue to the console!

图形用户界面, 文本, 应用程序

描述已自动生成

# 4. Set User Authentication

1- In the top-left menu (Product categories), select **Build -> Authentication**

图形用户界面, 应用程序

描述已自动生成

2- Get Started

图形用户界面, 应用程序

中度可信度描述已自动生成

3- Click Sign-in Method

图片包含 日程表

描述已自动生成

4- There are many sign-in methods.

In this project, we used the easiest one – **Email/Password**

图形用户界面, 网站

描述已自动生成

1. Enable that method and save.

图形用户界面, 文本, 应用程序

描述已自动生成

1. Click **“Users”** in the menu, then **Add user.**

图形用户界面, 文本, 应用程序

描述已自动生成

1. Set the **email** and **password** in Authentication, then **Add User**

图形用户界面, 图示

中度可信度描述已自动生成

1. You can see that **User** is Added in Firebase Authentication

图形用户界面, 文本, 应用程序

描述已自动生成

# Check Firestore Database

1. In the top-left menu (Product categories), select **Build -> Firestore Database**

图形用户界面, 文本, 应用程序, 聊天或短信

描述已自动生成

1. Create database

图形用户界面, 文本, 应用程序, 聊天或短信

描述已自动生成

1. Set the Firebase location

I select **Europe-west2(London),** because that server is closest to where I live.

图形用户界面, 文本, 应用程序

描述已自动生成

1. Click **Next**

图形用户界面, 应用程序

描述已自动生成

1. Select Rules – **Start in Test mode**， then **Enable.**

图形用户界面, 应用程序

描述已自动生成

1. Firestore Database created successfully

图形用户界面, 文本, 应用程序

描述已自动生成

1. Pay attention to the **Security Rules!**

图形用户界面, 应用程序

描述已自动生成

If the date is expired, you cannot use that Firebase App anymore. You must ensure that **the effective date of Firebase App should be after the current date.** ust enYou can edit the effective date in the code.

图形用户界面, 文本, 应用程序

描述已自动生成

# Install and config React Project

1. Build the React Framework

Use VS Code to open a new folder then type

**npx create-react-app client**

VS Code will create a React Framework for this project.

1. **Copy, paste and replace** the 8 files in this project.

文本

中度可信度描述已自动生成

1. Set firebaseConfig.

In the firebase website, copy the String in **firebaseConfig**, and then paste it into the correspondent place in the JS file **fbconfig.js**

图形用户界面, 文本, 应用程序

描述已自动生成

文本

描述已自动生成

1. Install the dependency

Remember to instlal the dependency of Firebase, otherwise your program will not work. There are two ways to install the dependency

1. Type **npm install firebase** in the terminal, it will install the latest stable version in your project’s dependencies.

文本, 徽标

描述已自动生成

1. Change the file **package.json,** and add the latest stable version of firebase.

文本

描述已自动生成

# 7. Run this project and test

1. Run the project

After you finished Step 6, you can run this project and test the CRUD now.

Type **npm start**  in the terminal, the project will run at <http://localhost:3000/>

图形用户界面, 应用程序

描述已自动生成

1. Login

Login with the email/password you set in the step of Authentication.

图形用户界面, 图示

中度可信度描述已自动生成

1. Add Pallet

Add two pallets, set the Pallet name and weight.

图形用户界面, 文本, 应用程序

描述已自动生成

You can see they could be seen in the WebPages.

文本

描述已自动生成文本

中度可信度描述已自动生成

Go to Firestore Database, you can also see the collections has changed.

图形用户界面, 文本, 应用程序, 电子邮件

描述已自动生成

The new **collection** pallets was added, it has two **documents**, each document has the **creationTime, deliveredStatus, description, userID and weight**.

1. To be continued

Try to play this project for fun.

You can also edit the information, delete the pallet or set it as delivered.

The data in Firestore database will be changed as well, because the **React App is now closely connected with Firebase Datatabse.**

That is how the CRUD works in the full-stack application.