

# README

This is a simple login system using: Nodejs, JWT auth, Express and React.

follow the instructions below:

1. Before we start, we need to install the following libraries with npm, yarn , whatever we choose:

## Run with npm:

- npm init -y
  - npm install express jsonwebtoken
  - nodemon index.js
2. Creating the app with Express.
  2. Listen port (5000 for example).
  3. Creating the JSON file containing all the users data.
    - username: Varchar
    - password: Varchar
    - isAdmin: takes true/false indicating whether the user is an admin or not
  5. Login Route { if the obtained infos are valid  $\Rightarrow$  Grant privileges (return users infos using express.json (if we don't use it, we cannot send nor receive json through express))  
  
else{ Error Message}.

In our login system this is done using the JWT.



## What is Token?

Tokens are pieces of data that carry just enough information to facilitate the process of determining a user's identity or authorizing a user to perform an action



What is an access Token ?

When a user logs in, the authorization server issues an access token, which is an artifact that client applications can use to make secure calls to an API server.



What is a refresh Token?

for security purposes, access tokens may be valid for a short amount of time. Once they expire, client applications can use a refresh token to "refresh" the access token. That is, a refresh token is a credential artifact that lets a client application get new access tokens without having to ask the user to log in again.



**for more infos** check out this article: <https://auth0.com/blog/refresh-tokens-what-are-they-and-when-to-use-them/>

**So in short:** Our system creates an access token at first, then when it expires, the system takes the refresh token to create another access token :)

6. Delete Route: the system checks if the user is authenticated by checking the access token, then it checks if {the user isAdmin= =True ⇒ ok } else {error}.
7. getId route: this function returns the id of the user authenticated, i only use this function to see if the authentication process is valid.

## Client REACT

1- install the necessary packages with npm:

npm install -g create-react-app

2- set the proxy to "http://localhost:5000/api/" ( our api port : ) )

3- in this directory, we can run:

npm start/ yarn start, open localhost:3000 in your browser