

USER AUTHENTICATION

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Building a user authentication and sign up page in

① Django

② react

using REST API

INTRODUCTION

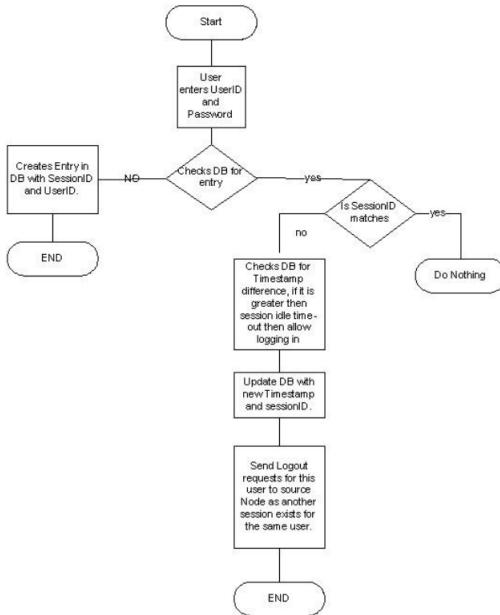
We have to create a user authentication web page that

- ① accepts username and password and give access to data
- ② sign up new users

for that we have to store the users name and password in a secure library and check it every time we try access the data. We have to create an interface for web page using React and the framework to check using Django REST API

Currently one of the existing algorithm uses SESSIONS Collective data is stored as sessions and to access it we use a cookie with session ID which is stored in browser ext time the client makes a request, that cookie is included in the request and the server searches for a session that matches the cookie's session ID. If there's a match, then the backend proceeds to process the request. When the user logs out, another request has to be made to the server so that the relevant session data is destroyed, along with the cookie in the browser's storage.

- 1 Session authentication is stateful when a user logs in, data gets stored either in memory or a database.
- 2 Data stored in unique cookies and sent
But
- 3 cookies are tied to a particular domain
- 4 cookies are recorded



Example images from the IBM

PROPOSED METHODOLOGY

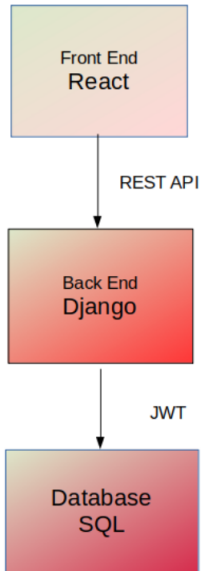
To do the User Authentication we use

- 1 Django REST API
- 2 React
- 3 Tokens

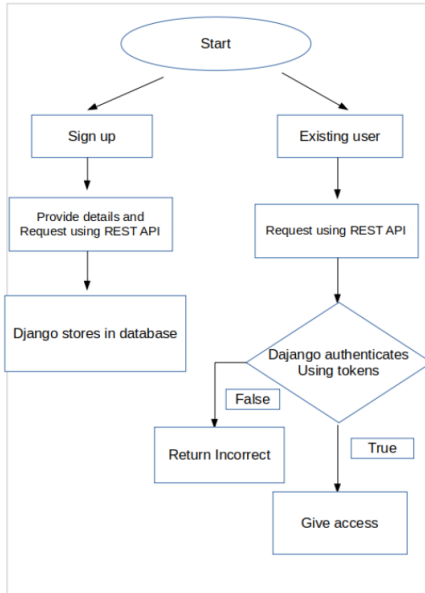
ADVANTAGES OF TOKEN OVER SESSIONS

- ① Tokens are stateless: no record kept on the server of which users are logged in, how many tokens have been issued etc
- ② Tokens are more secure: tokens are generated by means of a complex encryption process which, when reversed and decrypted, authenticates the user

PROPOSED ARCHITECTURE



PROPOSED ALGORITHM



RESULT

We get a web page where we can

- ① Login in securely and access data
- ② Sign up in case of new user

CONCLUSION

A User Authentication and Sign up page is created using Django REST API(as back end) and React(as front end).