

Security/Authentication for web application

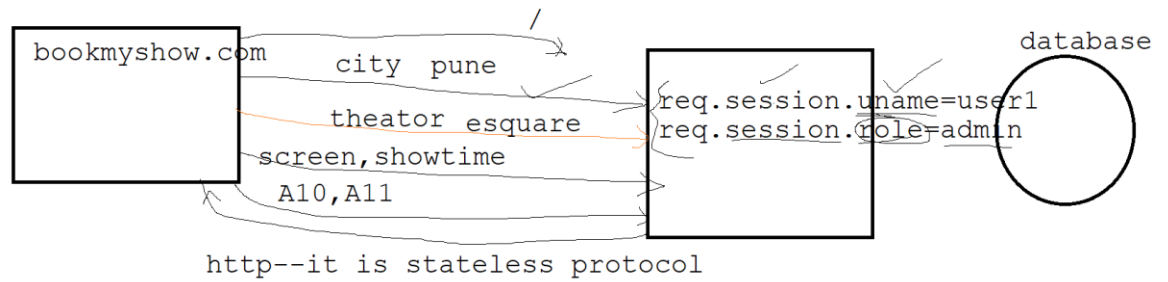
1. cookie – It gets saved on client machine, it is a text file of max size 4kb,
Any user can see the cookies, so it is not secure way to store the data throughout the session.
When you send the url to server, all the cookies associated with the url will be sent to the server, and with every response it will come to client machine
2. session---It is object stored in the server. any number of keys, and value pair you may add in the session
Usually, when you login to any application your session starts,
And it will remain available may be based on time or till the time you logout or till the time you close the browser window.
3. token(JWT token, nft token)
In web service the standard says that do not store any user data on the server, so we should not use sessions.
Hence after validation, the server generates a token and the token will have some validity period.
Within that period, if you are sending any request, then you need to add Authorization header in the request object.
Authorization: “bearer”+<token>, web service will check the validity of token , and if valid it will send the response, otherwise ask for relogin

To use Express session

1. download express-session library
`npm i express-session --save`
2. import it in your application
`const session=require("express-session")`
3. setup the session

```
app.use(session({
  // it store the secret key , which is used for encryption / decryption of session data
  secret:'mysecretkey',
  //forces the session to be saved back to session storage
  resave:true,
  //forces a session that is uninitialized to be saved in the store
  uninitialized: true
}))
```
4. set the values in the session
`req.session.username='user1'`
5. to get the value from the session
`var name=req.session.username;`
6. to destroy the session

```
req.session.destroy(function(){
  console.log("session destroyed")})
```



Folder structure for express js

db	all database related files will be stored in db
views	all ejs views are stored in this folder
public	all static files like css, js
routes	all routing urls related function files will be this folder
model	all models are classes, you may have created for storing data
package.json	It's a json file to store all dependencies, and its version
node_modules	this folder will be created automatically, when you will install all dependencies

To install all dependencies from package.json

npm install

In webservice following request are handled

get	read data	/products , /products/product/10
post	add data	/products/:id
put	update data	/products/:id
delete	delete data	/products/:id

To test webservice

<https://www.postman.com/downloads/>