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# All You Need To Know About JWT In Express JS

Lesson 9 of 9

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JWT is a JSON Web Token that is used to transfer data to someone over the internet with [encryption](#). This helps to maintain the secrecy between the two parties.

## What Is JSON Web Token?

- JSON Web Token (JWT) is an open standard that provides a compressed and independent method for secure data transfer among parties as a [JSON](#) object



method for secure data transfer among parties as a [JSON](#) object.

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## Tutorial Playlist



## JSON Web Token Structure

JWTs contain three sections that are separated by dots (.), which are as follows:

- Header: The header typically consists of two parts, and JWT is the type of token that uses a signing algorithm, such as HMAC, SHA256 or RSA.

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- Signature: A signature is a cryptographic algorithm used to verify the integrity of the JSON payload. To create a signature, you must sign the encoded header, encoded Payload, secret, and [algorithm](#) indicated in the header and mark that.







## JWT Use Cases



- Authorization - This is the most common structure for using JWT. When registered, the user can access routes, services, and resources authorized with that token by including the JWT in subsequent requests.
- Information Exchange - With the help of JSON Web Tokens, you can securely transmit information between parties.

## Demonstration

You will create an express js project in which you will add JWT. The steps are as follows:

- Step 1: Create an Express JWT folder and open that folder in the editor vscode
  - Step 2: Open the terminal and write the command "npm init -y" this will create a JSON file
- 
- ```
npm init -y
```
- Step 3: Now you are installing [Express js](#), for that write a command "npm install express"
- 
- ```
npm install express
```
- Step 4: Here, you are installing JWT in this Express folder. For that. write a command "npm install jsonwebtoken"
- 
- ```
npm install jsonwebtoken
```
- Step 5: Create a file index.js in which you are going to write all the code
  - Step 6: Now, you must go ahead and import Express js and JWT modules into your application
- 
- ```
npm install express jsonwebtoken
```
- Step 7: Here, you are using app.get() method to create a JSON string with the message
- 
- ```
npm install express jsonwebtoken
```
- Step 8: Now, you are going to include the app.post(), and in that method, you are adding verifyToken, and request and response values.
- 
- ```
npm install express jsonwebtoken
```

The verify() method will take the request token as input and verifies whether it is correct. Here,

you have used `verify()` method to print an error message, and if it works, you will print a message on the screen that the post method created.

- Step 9: Now, you must create another Post Method for the specified URL to route the user login



JWT then generates a JSON Web Token for the user using the `sign()` method and returns the token as a JSON string.

- Step 10: After that, you must define the `verifyToken()` that will help you with the token verification process.



Here we have used the `bearerHeader` variable that contains the token passed in the request header's authorization field. Also, we are adding an if condition that checks whether the token exists in the authorization field. If not, we are sending an error status to the user.

- Step 11: Finally, you must create a Server to listen to port 3000.



- Step 12: Now, go ahead and run this file and write "node ."



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## Next Steps

Hope this JWT express tutorial has provided you with a foundational grasp of Express JS.

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If you have any specific queries for us, please let us know. Please share any recommendations or questions about using JWT Express in the comments section below, and our experts will answer them.

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