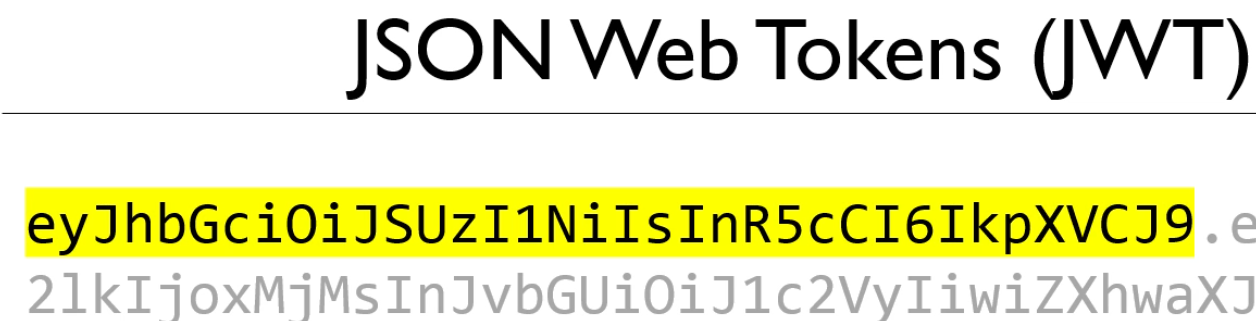


A period indicates a full stop

The 2 periods break the code into 3 parts

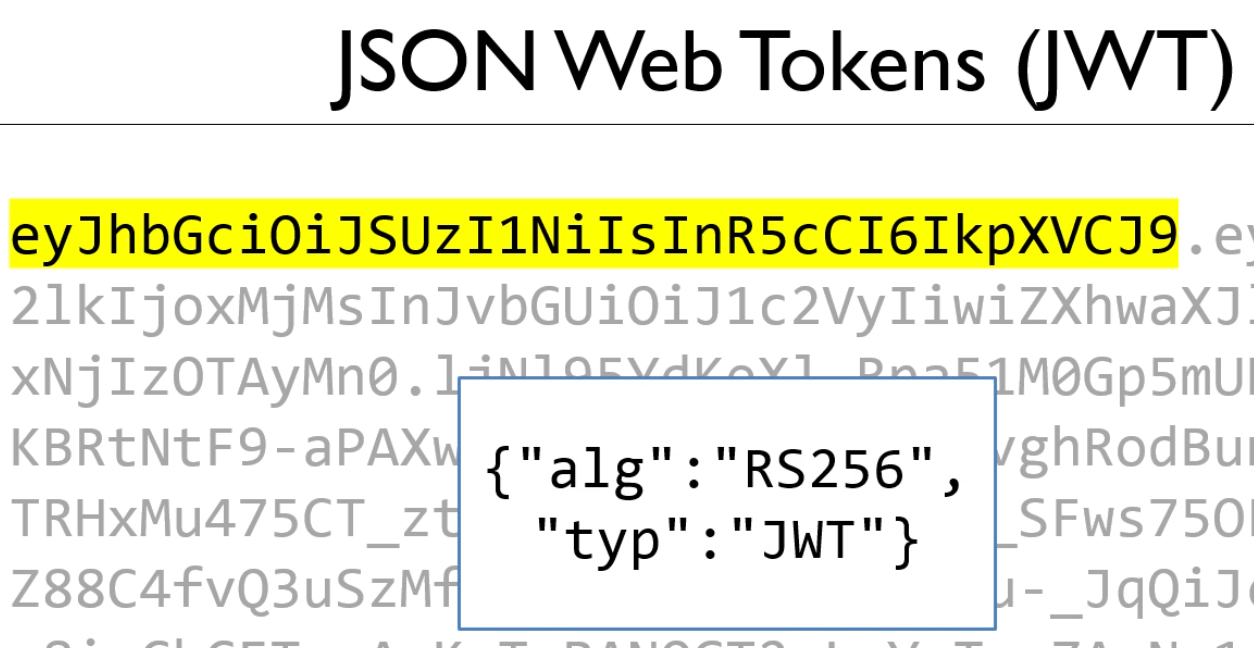


Part 1 base64 json string



Translates to the below:

This is the Header:





This is Part 2 decoded

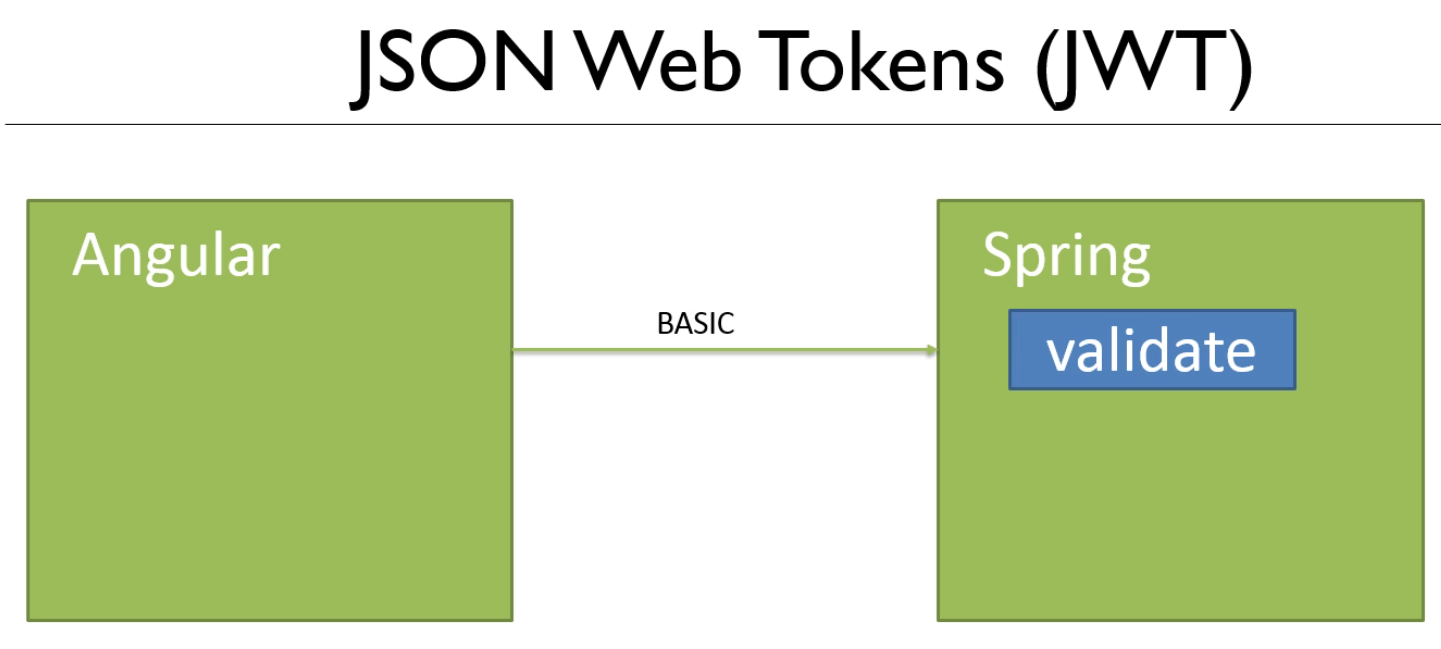
Payload of the Token – users id, role and expiration (developer information)

Using Part1 and Part2 with an algorithm creates a nontranslateable Part 3

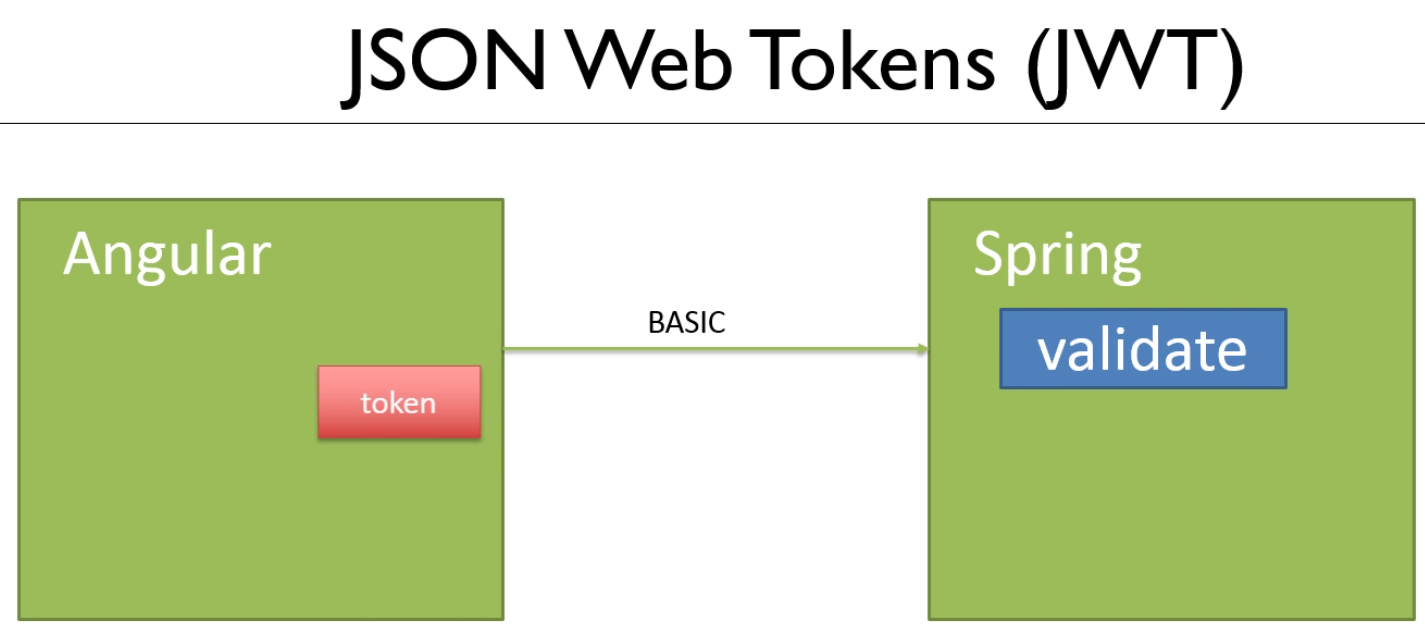


The secret key and Part 3 is a key pair

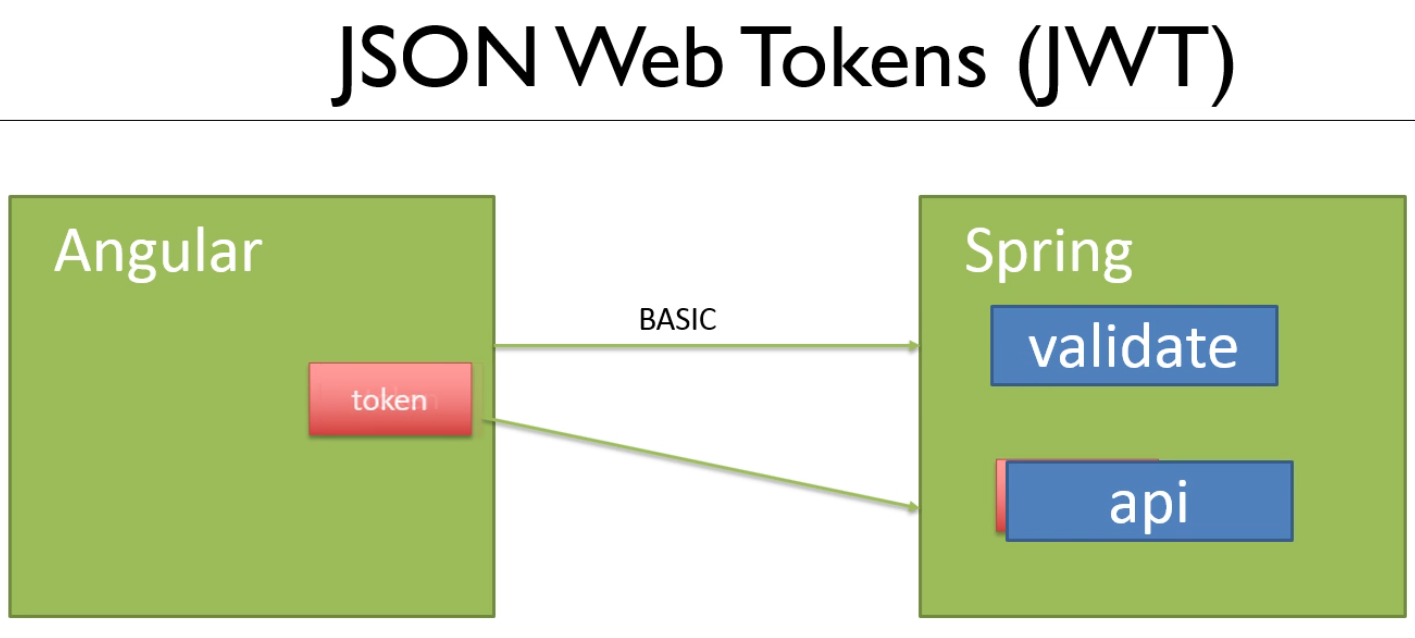
Now step one is



Step 2 is generate a token and send it to the client



Step 3 the client sends the token back



Let us prepare Spring Boot for JWT:

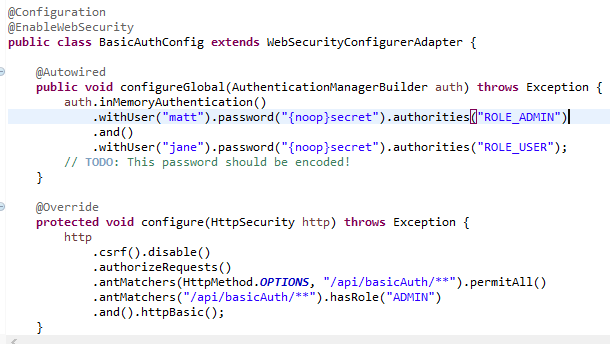
Right now only GETs work for the Authentication: PUTs and POSTs will return a 403 forbidden

Cross site Request Forgery (CSRF) is possible now so, we have to fix this

Now, remove the CSRF protection

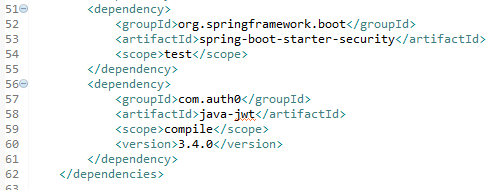


Create roles



We need an external library to generate validate tokens

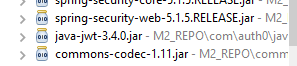
In the pom.xml file add the java-jwt dependency



Run a Maven build Goal -> eclipse: eclipse

Refresh the project

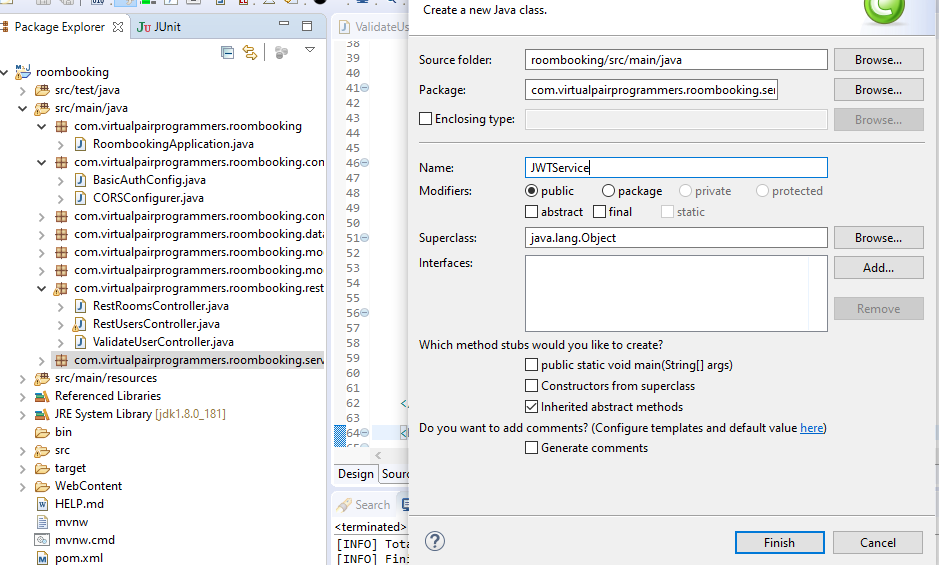
Check for the dependency

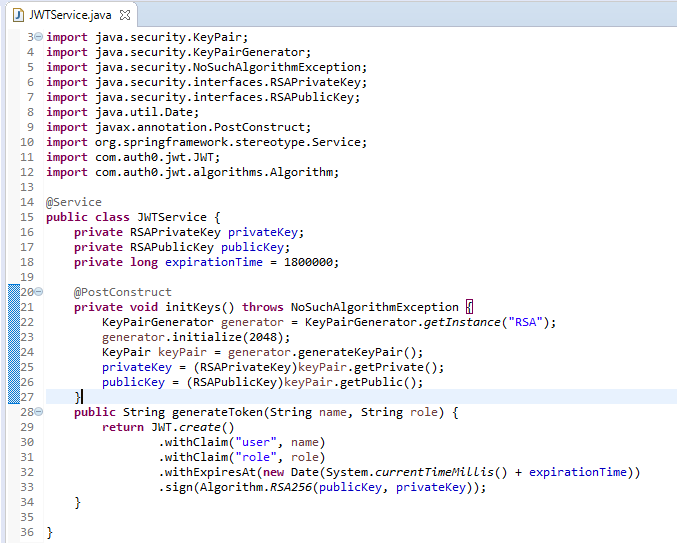


And it is there in the References

**Generate a JWT:**

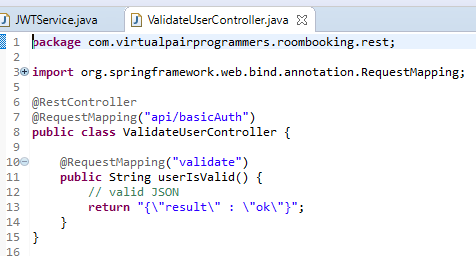
Create a JWTService to generate tokens:

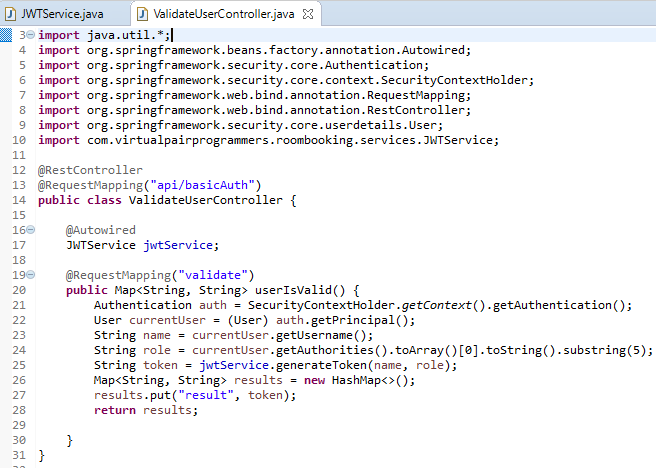




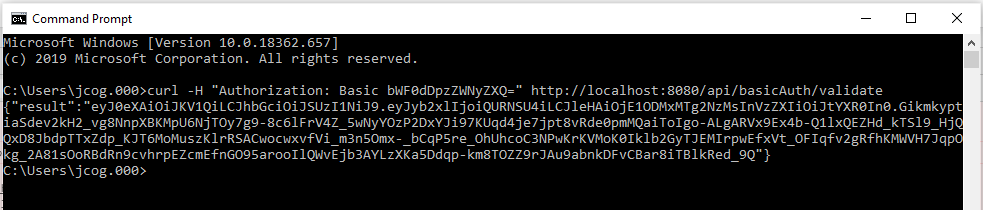
Generating the Payload Data:

Let us change the userIsValid to return a Token:



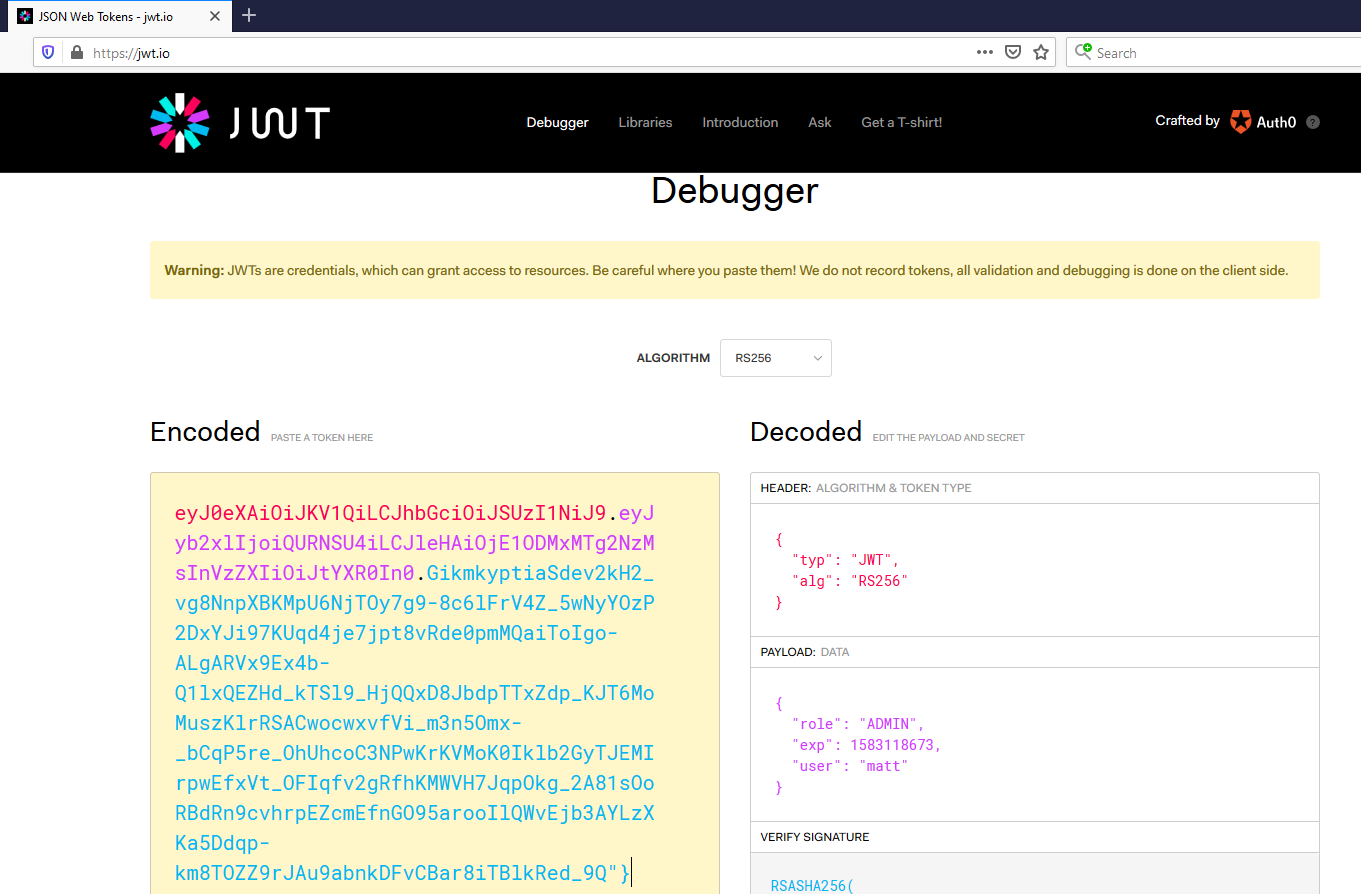


Now, let us test whether we get the token in curl and the browser:



eyJ0eXAiOiJKV1QiLCJhbGciOiJSUzI1NiJ9.eyJyb2xlIjoiQURNSU4iLCJleHAiOjE1ODMxMTg2NzMsInVzZXIiOiJtYXR0In0.GikmkyptiaSdev2kH2\_vg8NnpXBKMpU6NjTOy7g9-8c6lFrV4Z\_5wNyYOzP2DxYJi97KUqd4je7jpt8vRde0pmMQaiToIgo-ALgARVx9Ex4b-Q1lxQEZHd\_kTSl9\_HjQQxD8JbdpTTxZdp\_KJT6MoMuszKlrRSACwocwxvfVi\_m3n5Omx-\_bCqP5re\_OhUhcoC3NPwKrKVMoK0Iklb2GyTJEMIrpwEfxVt\_OFIqfv2gRfhKMWVH7JqpOkg\_2A81sOoRBdRn9cvhrpEZcmEfnGO95arooIlQWvEjb3AYLzXKa5Ddqp-km8TOZZ9rJAu9abnkDFvCBar8iTBlkRed\_9Q

Using a JWT debugger we can see the role, and user name are correct for matt, ADMIN



In the browser under validate, you see the token in the RESPONSE

