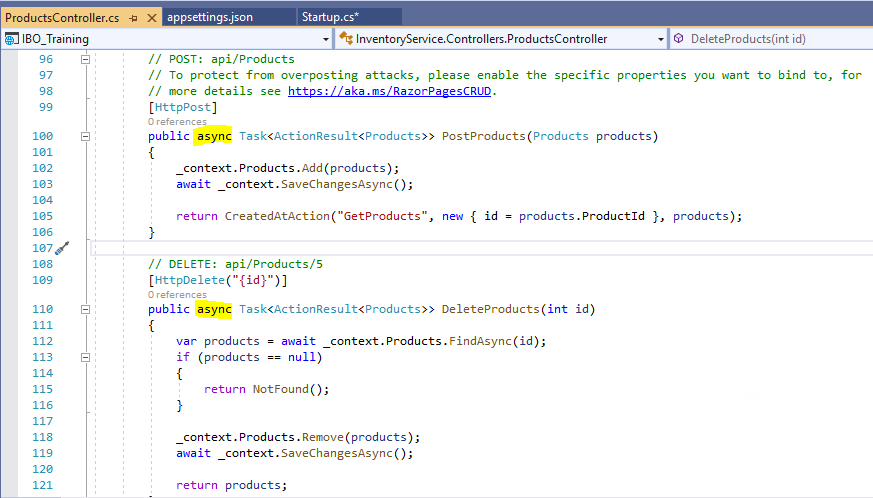
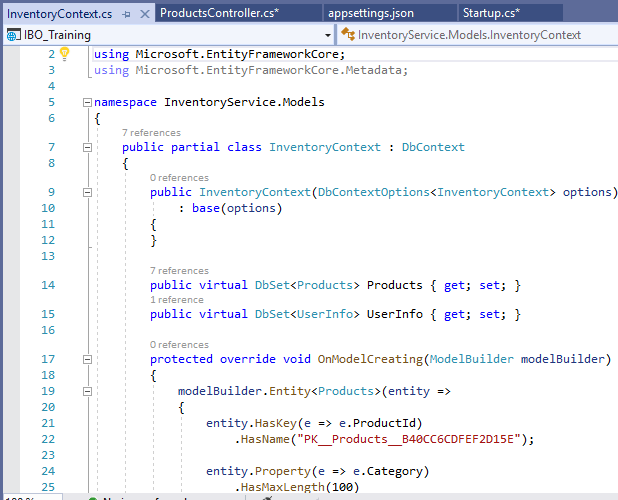
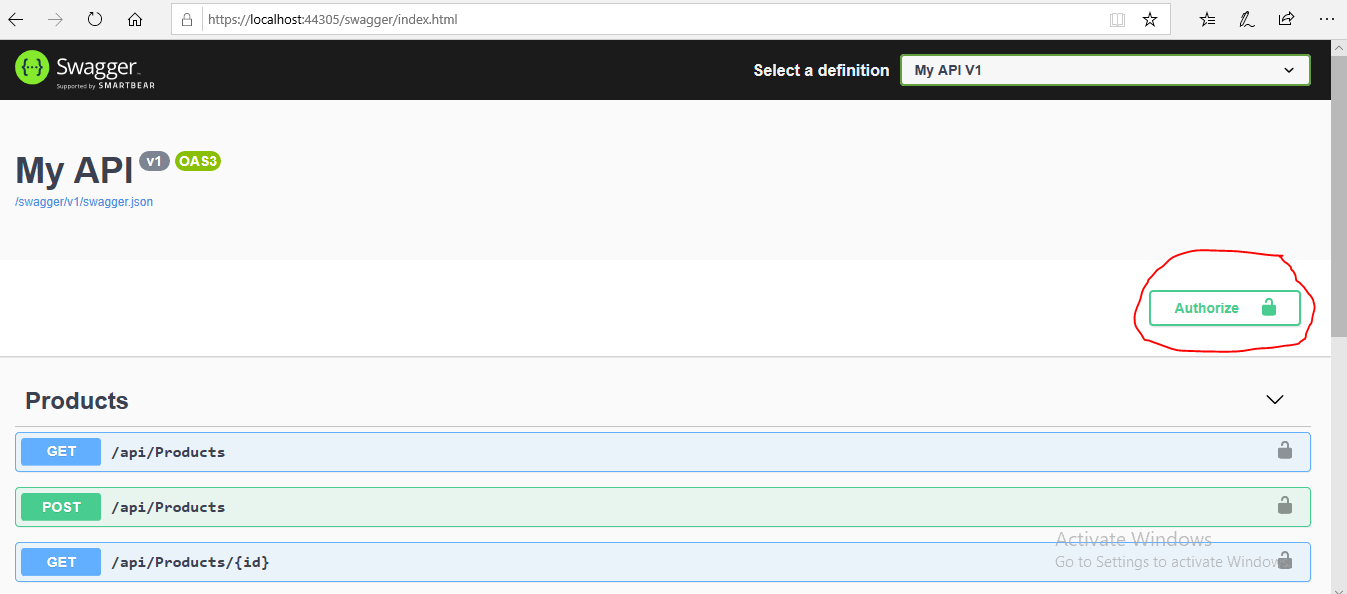
**Implemented CRUD REST API as Asynchronous APIs with version v1.0**

****

**Used Entity Framework Core ORM to work with Database:**



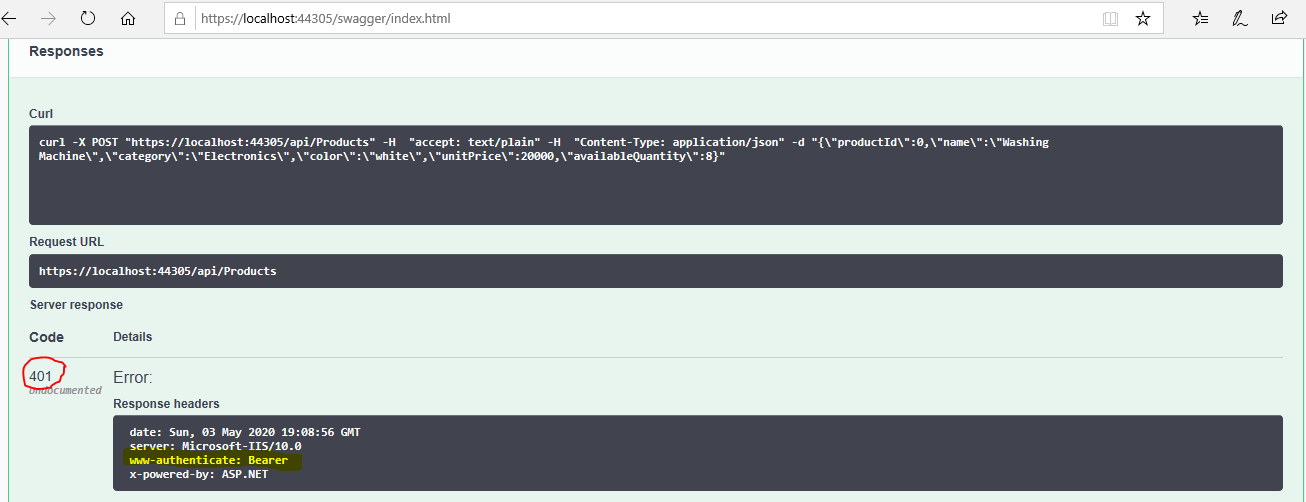
**Enabled Swagger with Authentication for performing CRUD operation:**



**JWT Authentication for Microservices in .NET**

The tokens that I used are [JSON Web Tokens](https://tools.ietf.org/html/rfc7519)(JWT, which is “a compact, URL-safe means of representing claims to be transferred between two parties.”) Basically, a JWT is an encoded JSON object, which is then signed either with a secret key, or a public/private key pair.

A JWT is composed of three different parts: the header, the payload and the signature.



**Credentials I used for authentications:**

{

"userId": 0,

"firstName": "Inventory",

"lastName": "Admin",

"userName": "InventoryAdmin",

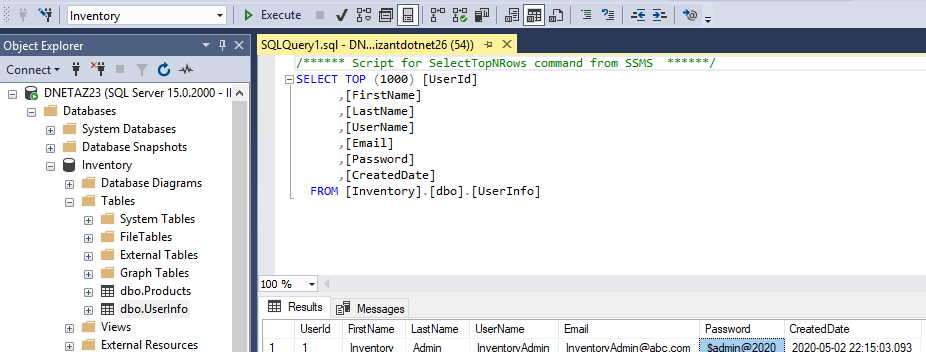
"email": "InventoryAdmin@abc.com",

"password": "$admin@2020",

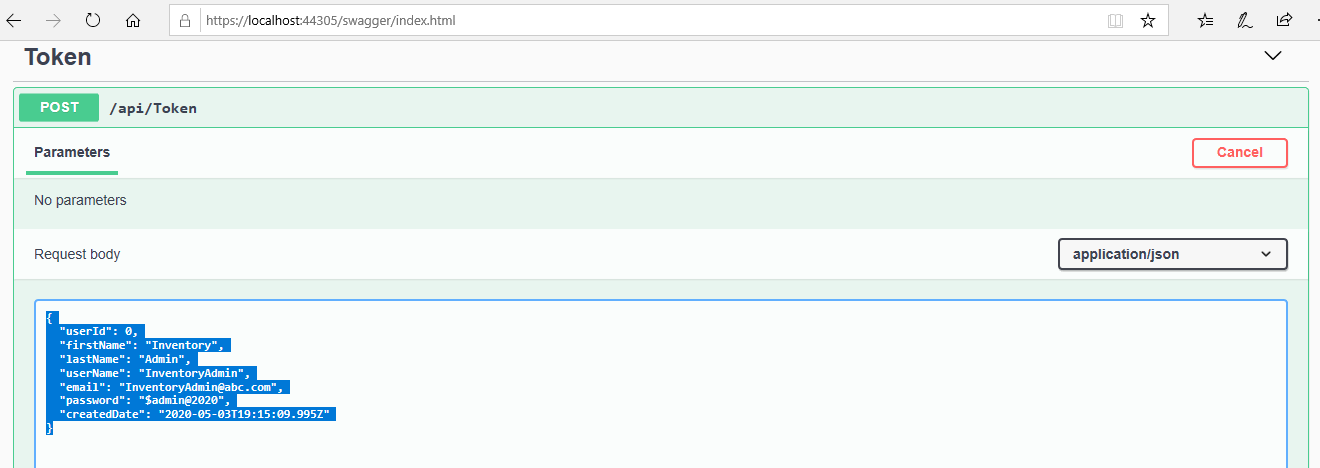
"createdDate": "2020-05-03T19:15:09.995Z"

}

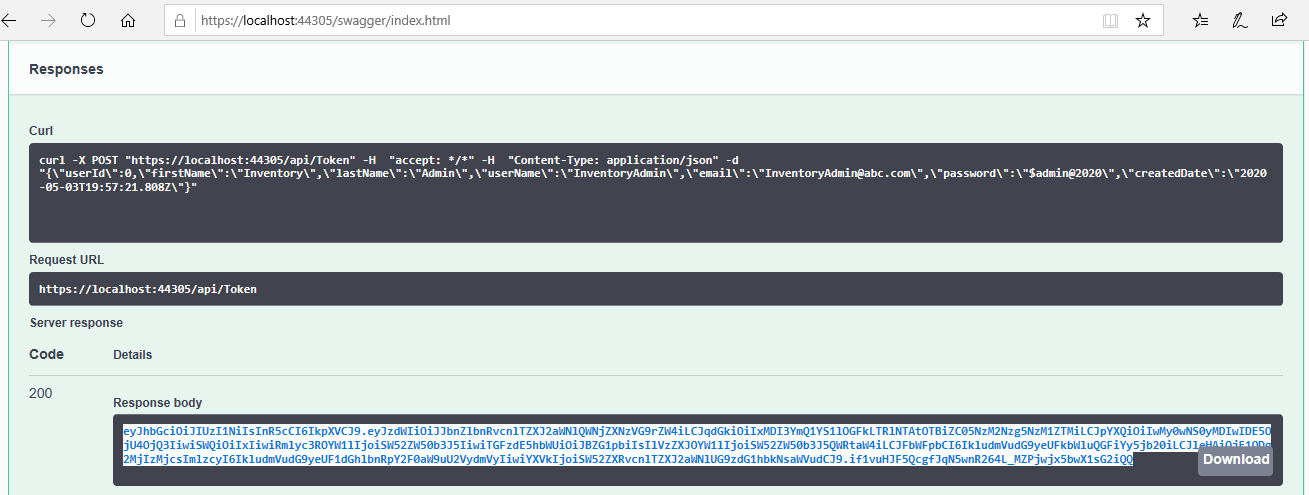
**Credentials for authentications are fetched from Database Table – ‘UserInfo’:**



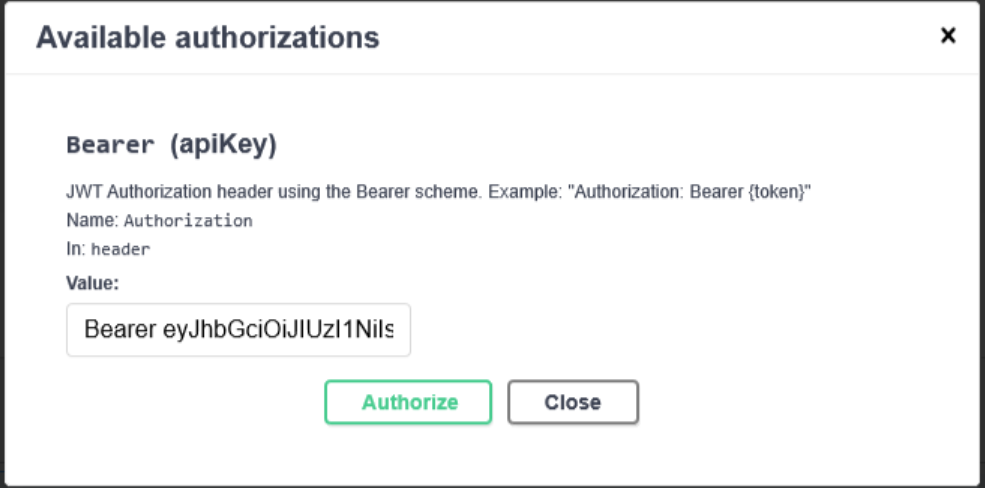
**In the Token section, enter the above details to generate the token:**



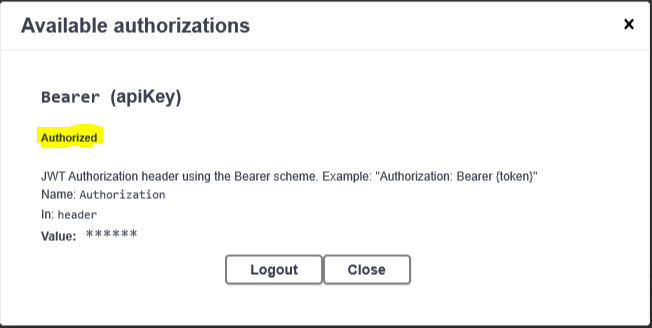
**Token generated can be copied/downloaded:**



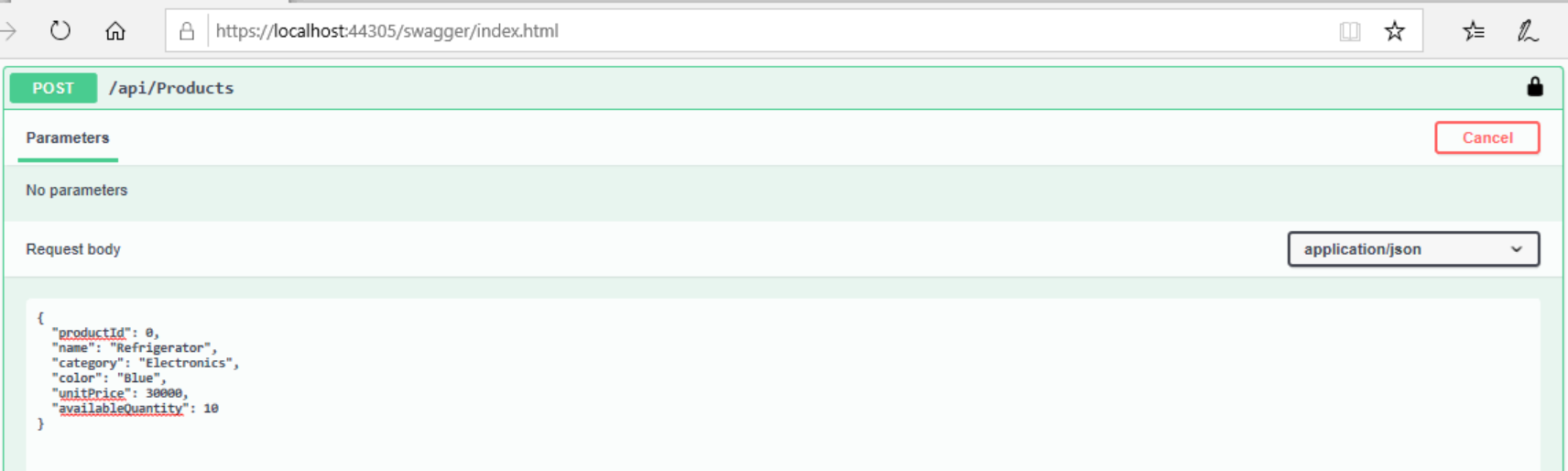
**Click on the ‘Authorize’ button at the top right corner of the Swagger UI and paste the token in the Value field with appening ‘Bearer’ in front, Click on ‘Authorize’**

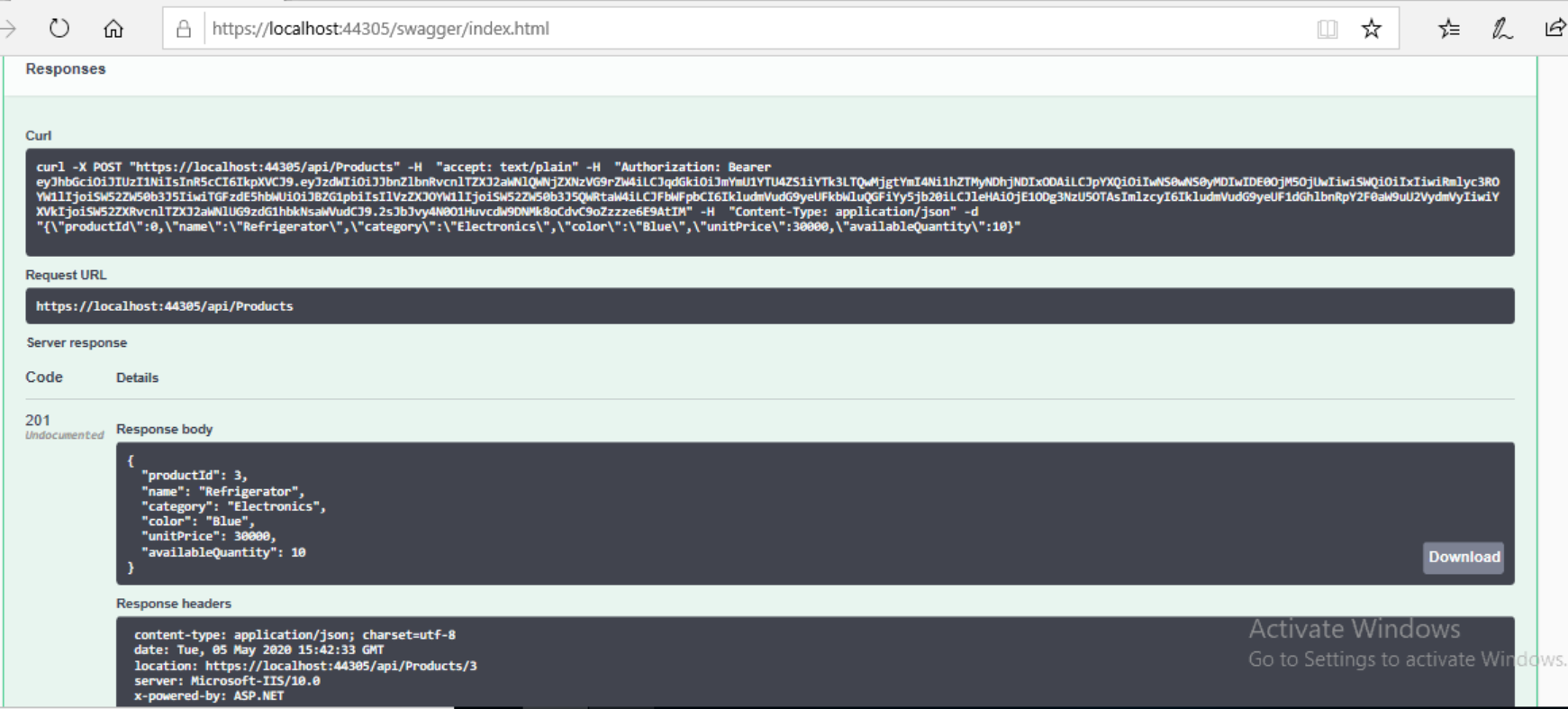


It will show you as ‘Authorized’.

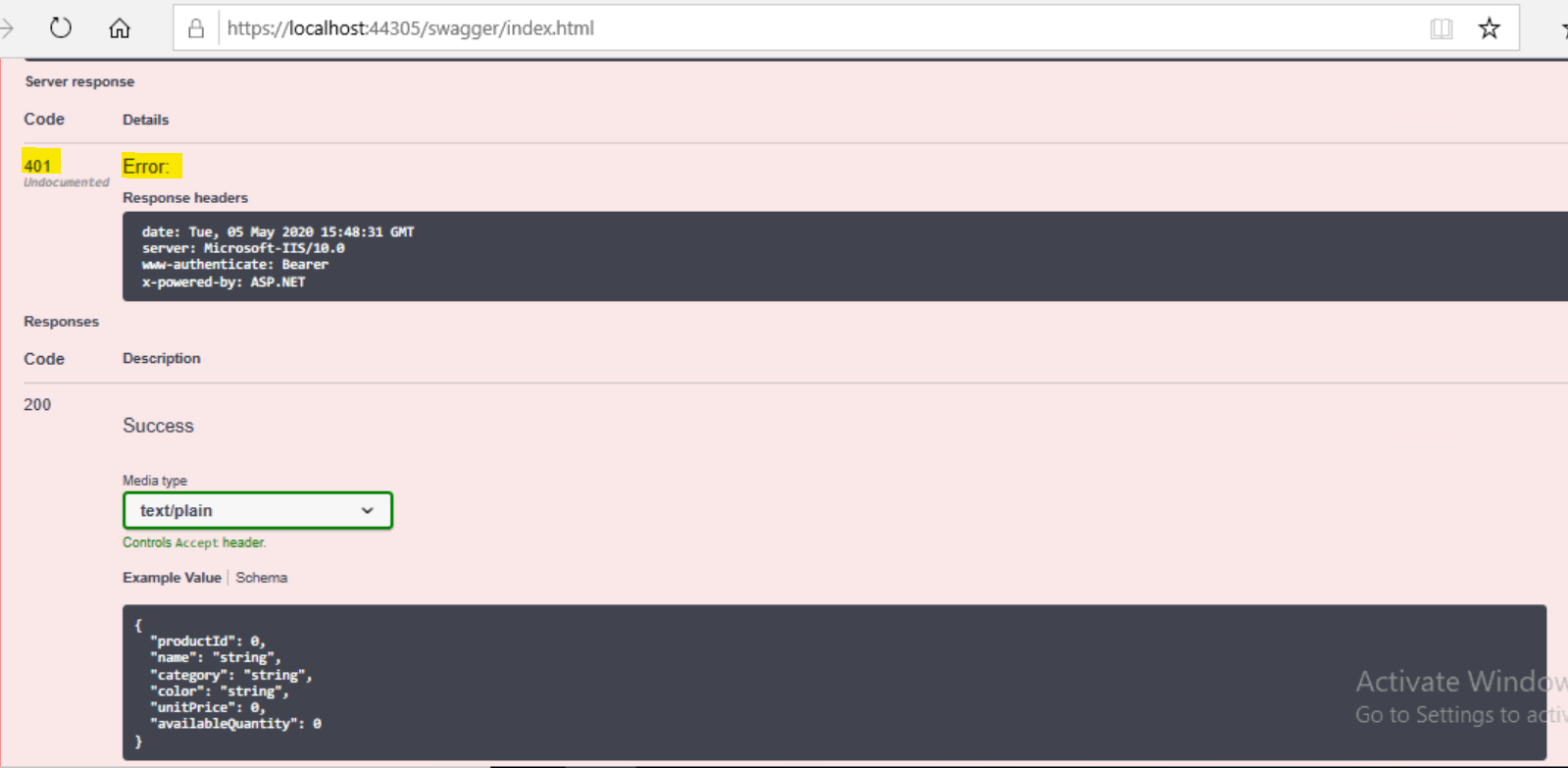


‘**POST’ request is now working successfully after successful authetication:**

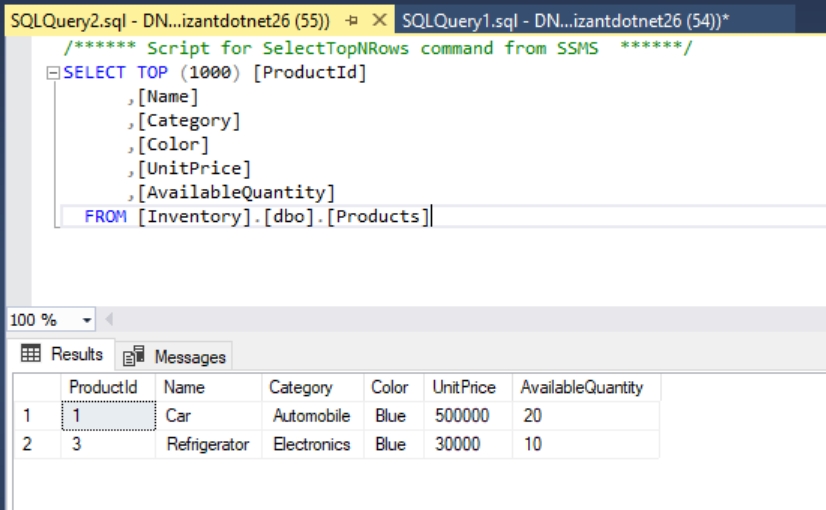




**Without Authentication it will show a 401 Unauthorized error:**



**Data we have executed for ‘POST’ gets inserted into Database:**



**Currently I am working on implementing Redis Cache.**

**Also working on integrating all Azure services.**