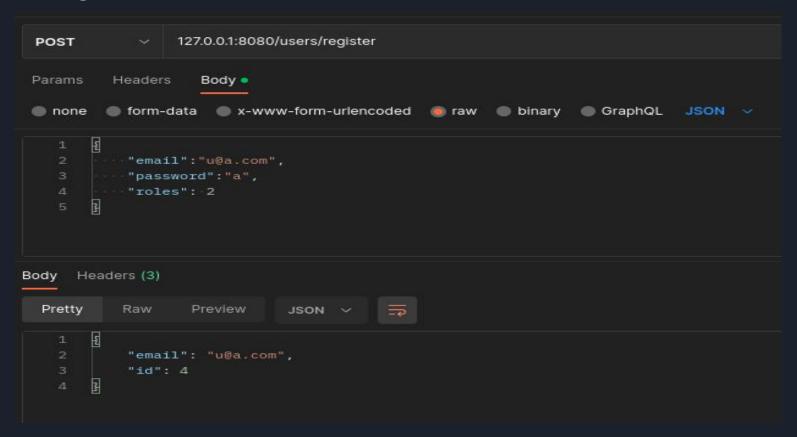
Unit Test REST API Product

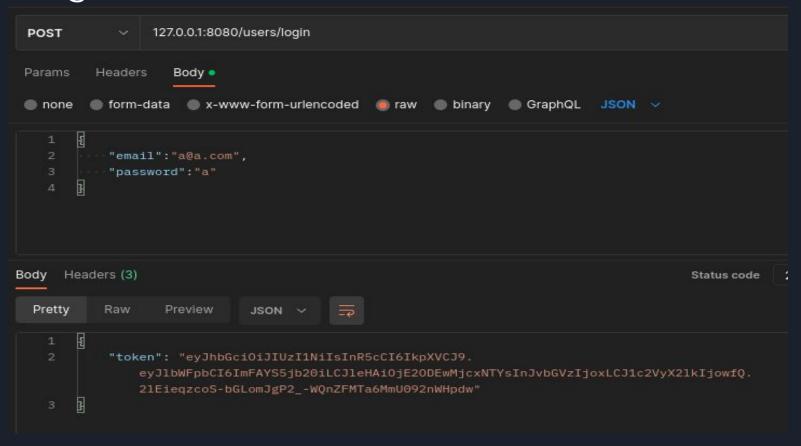
Afrizal Muhammad Yasin - 1955617840-50 Golang 008

Implementasi REST API (CRUD)

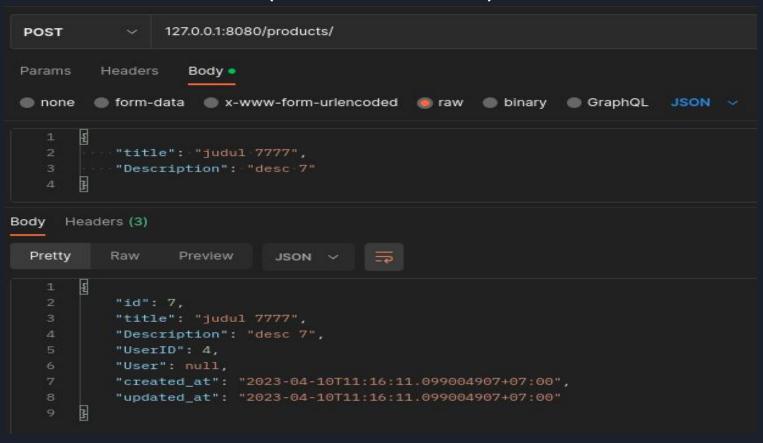
Register



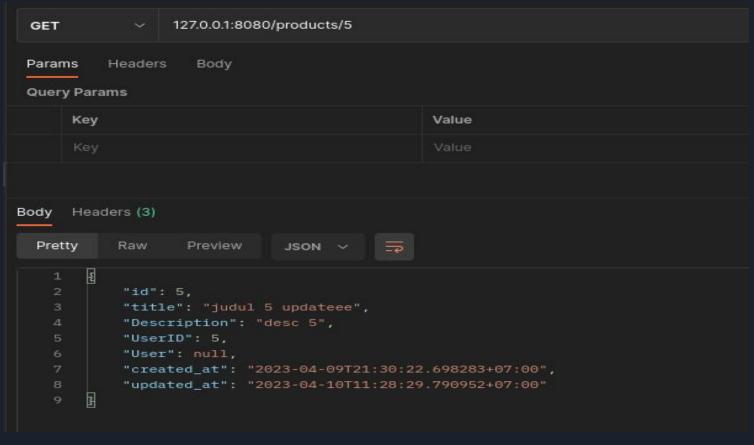
Login



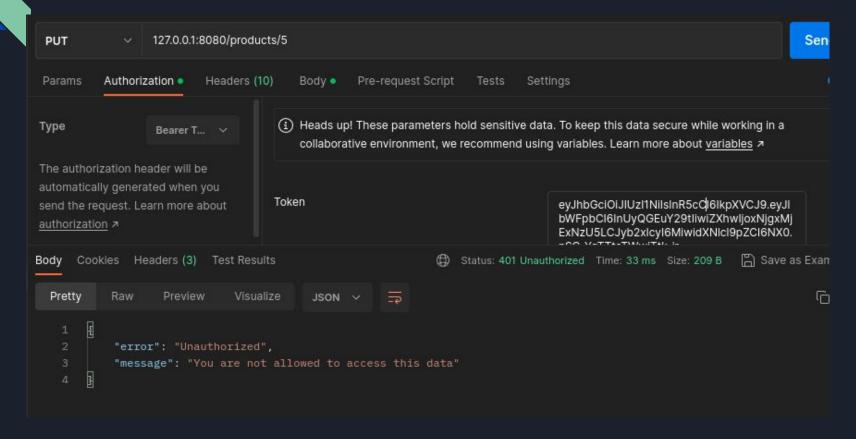
Create Product (admin & user)



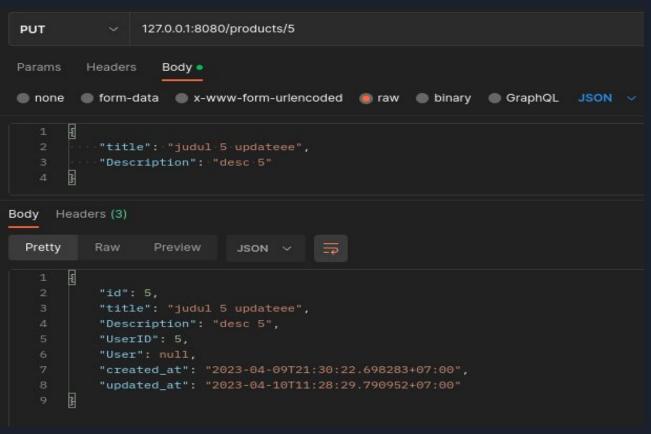
Read Product (admin & user)



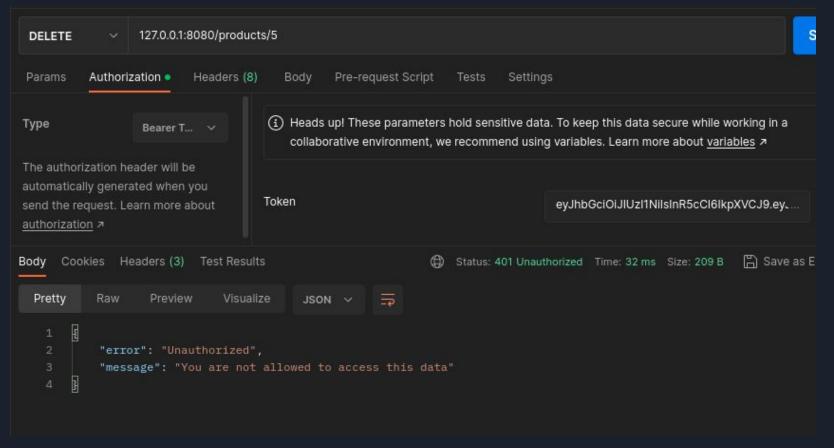
Update Product (admin only if user try)



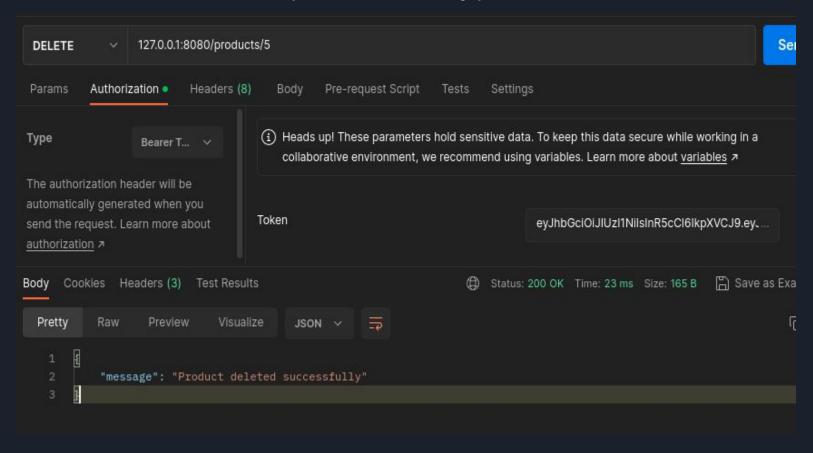
Update Product (admin only)



Delete Product (admin only if user try)



Delete Product (admin only)



Mock test service scenario

Scenario test

Testing menggunakan testify.

Berikut scenario tests:

- Mock Test Service Get One Product Found
- Mock Test Service Get One Product Not Found
- Mock Test Service Get All Product Found
- Mock Test Service Get All Product Not Found

Test Service Get One Product Found

```
func TestProductServiceGetOneProduct(t *testing.T) {
   expectedProduct := models.Product{
       Title:
                "Buku A",
       Description: "ini sebuah buku",
       UserID:
                    2.
   var id uint = 2
   productRepository.Mock.On("GetDataById", id).Return(expectedProduct, nil)
   // Call service function
   product, err := serviceProduct.GetDataById(id)
   // Check if the mock repository was called
   productRepository.Mock.AssertCalled(t, "GetDataById", id)
   // Check if the returned products are correct
   assert.NoError(t, err)
   assert.Equal(t, expectedProduct, product)
```

Test Service Get One Product Found

```
Running tool: /usr/local/go/bin/go test -timeout 30s -run ^TestProductServiceGetOneProduct$ github.com /afrizal423/go-gin-secure-newbie/app/business/product
=== RUN    TestProductServiceGetOneProduct
--- PASS: TestProductServiceGetOneProduct (0.00s)
PASS
ok    github.com/afrizal423/go-gin-secure-newbie/app/business/product 0.006s

> Test run finished at 4/11/2023, 5:24:20 PM <
```

Test Service Get One Product Not Found

```
func TestProductServiceGetOneProductNotFound(t *testing.T) {
    expectedProduct := models.Product{}
   var id uint = 90
    productRepository.Mock.On("GetDataById", id).Return(expectedProduct, errors.New("error"))
   product, err := serviceProduct.GetDataById(id)
    productRepository.Mock.AssertCalled(t, "GetDataById", id)
   assert.Error(t, err)
   assert.Equal(t, expectedProduct, product)
```

Test Service Get One Product Not Found

```
Running tool: /usr/local/go/bin/go test -timeout 30s -run ^TestProductServiceGetOneProductNotFound$ github.com/afrizal423/go-gin-secure-newbie/app/business/product
```

```
=== RUN TestProductServiceGetOneProductNotFound
2023/04/11 17:26:53 failed to create product
--- PASS: TestProductServiceGetOneProductNotFound (0.00s)
PASS
ok github.com/afrizal423/go-gin-secure-newbie/app/business/product 0.006s
```

> Test run finished at 4/11/2023, 5:26:53 PM <

Test Service Get All Product Found

```
func TestProductServiceGetAllProductFound(t *testing.T) {
   products := []models.Product{
           Title:
                     "Buku A",
           Description: "ini sebuah buku",
           Title: "Buku A",
           Description: "ini sebuah buku",
   productRepository.Mock.On("GetAll").Return(products, nil)
   result, err := serviceProduct.GetAll()
   assert.Nil(t, err)
   assert.NotNil(t, result)
   assert.Equal(t, len(products), len(result))
```

Test Service Get All Product Found

```
Running tool: /usr/local/go/bin/go test -timeout 30s -run ^TestProductServiceGetAllProductFound$ github.com/afrizal423/go-gin -secure-newbie/app/business/product

=== RUN TestProductServiceGetAllProductFound
--- PASS: TestProductServiceGetAllProductFound (0.00s)

PASS
ok github.com/afrizal423/go-gin-secure-newbie/app/business/product (cached)

> Test run finished at 4/11/2023, 5:28:38 PM <
```

Test Service Get All Product Not Found

```
func TestProductServiceGetAllProductNotFound(t *testing.T) {
    // expected result product
    expectedProduct := []models.Product{}
    productRepository.Mock.On("GetAll").Return(expectedProduct, errors.New("error"))

products, err := serviceProduct.GetAll()

assert.Error(t, err)
    assert.Len(t, products, 0)
    assert.Equal(t, expectedProduct, products)
}
```

Test Service Get All Product Not Found

Terima Kasih