

Code task:

Please implement the following using NestJs and typeORM

Create a code solution for a multi tenant application

All tenants should be in the same database server and the same schema

The application should implement the following:

1. Implement 2 entities: Finding and Resource
2. Rest api for adding a new finding by tenantID (decide on the request structure)
 - a. In case a finding externalId is already exist return an Error
3. Rest api for getting all existing finding by tenantID (decide on the request structure)
4. API Finding input will include the following properties
 - a. externalId (string)
 - b. Type (string)
 - c. Title (string)
 - d. Severity (string enum)
 - e. createdAt
 - f. Sensor (string)
 - g. resource (object)
 - i. uniqueId (string) (this is the cloud unique identifier of the resource like ARN in AWS)
 - ii. Name (string)
 - iii. cloudAccount (string) (AWS account number or Azure subscription id)

Phase 2 - Add multi database servers support

Add the ability to distribute every 3 tenants to different database servers.

Means the code needs to be able to understand in runtime which connection (db server) it should use according to the tenant for any db operations.

In your code put effort on the code architecture and folder structure

Findings examples:

```
{
  "id": "orca-32455",
  "type": "public-s3-bucket",
  "title": "S3 bucket is publicly accessible",
  "severity": "High",
  "sensor": "Orca",
  "createdAt": "2023-02-07T17:04:14+0000",
  "resourceId": "arn:aws:s3::my-bucket-1",
  "resourceName": "my-bucket-1",
  "account": "475894653712"
}
```

```
{
  "id": "orca-48455",
```

```
    "type": "not-encrypted-s3-bucket",
    "title": "S3 bucket is not encrypted",
    "severity": "Low",
    "sensor": "Orca",
    "createdAt": "2023-02-07T17:04:14+0000",
    "resourceId": "arn:aws:s3::my-bucket-1",
    "resourceName": "my-bucket-1",
    "account": "475894653712"
  }

  {
    "id": "2f2221d6-ce40-4ef7-9593-dd9c5bf895cf",
    "type": "public-ssh-port",
    "title": "EC2 has public ssh port expose to 0.0.0.0",
    "severity": "High",
    "sensor": "Wiz",
    "createdAt": "2023-04-07T21:04:14+0000",
    "resourceId": "arn:aws:ec2:us-east-1:712894475712:instance/i-012abcd34efghi56",
    "resourceName": "i-012abcd34efghi56",
    "account": "712894475712"
  }
}
```