Natech
BANKING SOLUTIONS

# Steal All the Cats!

Deadline: 1 week

Your task is to "steal" 25 cat images from the Cats as a Service API (https://thecatapi.com/) and stash them in your database.

A. Set up a new ASP.NET Core Web API project (.net 8).

B. Store the following properties for **Cat**Entity:

- **Id**: An auto incremental unique integer that identifies a cat within your database
- **CatId**: Represents the id of the image returned from CaaS API
- **Width**: Represents the width of the image returned from CaaS API
- **Height**: Represents the height of the image returned from CaaS API
- **Image**: This should contain your solution on how to store the image
- **Created**: Timestamp of creation of database record

C. Store the following properties for **Tag**Entity:

- **Id**: An auto incremental unique integer that identifies a tag within your database
- **Name**: Describes the cat's temperament, returned from CaaS API (breeds\temperament). Note:
  - One cat may have many tags, and many cats can share a tag
  - Field breed/temperament contains comma-separated values. Each one of them is a tag.
  - Search images on Cat API with breeds only.
- **Created**: Timestamp of creation of database record

D. Implement the following endpoints:

- **POST /api/cats/fetch:** Fetch 25 cat images from CaaS API and save them to the database. After rerunning the operation, no duplicate cats should be present.

- **GET /api/cats/{id}:** Retrieve a cat by its ID.

- **GET /api/cats:** Retrieve cats with paging support (e.g., GET /api/cats?page=1&pageSize=10).
- **GET /api/cats:** Retrieve cats with a specific tag with paging support (e.g., GET /api/cats?tag=playful&page=1&pageSize=10")

E. Implement a set of standard validation rules

F. Use Microsoft SQL Server as Database Storage and Entity Framework Core as ORM

**Deliverables:**

- A Git repository with the complete source code (e.g. Github).
- Use Swagger for API documentation.
- Ensure the documentation is available at /swagger endpoint
- A README file with instructions on how to build and run the application, including setting up the database.
- Unit tests are a plus
- Docker file is a plus

Good Luck!