

Employee API Spec

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Description

REST API that will return employee data based on their department.

The API will be published on Azure for public use. The database will be hosted on a SQL server within Azure as well. The code itself will be written in C#, on Visual Studios 2022, and stored on GitHub for version control.

Requirements

- 1) The API should return an error response if the department is not found.
- 2) The API should return an error response if the SQL connection fails.
- 3) All logic should be separated. It will flow as follows:

User Endpoint -> Controller -> Manager -> Helper -> Data Manager -> Database

Tools

- 1) Azure resource: EmployeeAPI
- 2) Azure API App Service: jacescoolapi
- 3) Azure SQL Server: jacesserver
- 4) Azure SQL DB: EmployeeDB
- 5) Visual Studios 2022 for Mac
- 6) GitHub repository setup

Base URL

Swagger UI: <https://jacescoolapi.azurewebsites.net/swagger/index.html>

Manual API Testing: <https://jacescoolapi.azurewebsites.net/employee>

Endpoints

GET /employees

Returns a list of all employees that match a specific department.

Parameters

- **department** (required): the department the employee belongs to. Options:
 1. finance
 2. operations
 3. security
 4. production
 5. executives
- **page number** (required): the page number of the data requested. Standard API Paging procedures.
- **page size** (required): the page size of the data requested. Standard API Paging procedures.

Response

Returns a JSON object with the following properties:

- **employeeId**: the ID of the employee. (primary key)
- **name**: first and last name of the employee.
- **designation**: the role of the employee.

Example

Request:

<https://jacescoolapi.azurewebsites.net/employee?department=security&pageNumber=1&pageSize=10>

Response:

```
[{"employeeId":3,"name":"Steve Rodgers","designation":"body guard"}, {"employeeId":8,"name":"Peter Parker","designation":"senior body guard"}]
```

Errors

This API uses the following error codes:

- **400 Department Not Found**: The request was malformed or missing required parameters.
- **400 Connection error logging into the SQL Database. Check your credentials**: The SQL connection attempt failed. This could be because the password in Azure changed. Check with the DB administrator.
- **400 Page number provided less than 0-**: Page number provided must not be negative.

- 400 Page number exceeded the maximum limit: There is a max limit of 1000 for page number
- 400 Page size provided less than 1: Page size provided must not be less than 1
- 400 Page size exceeded the maximum limit: There is a max limit of 1000 for page size.