Trabalho Acadêmico

Arquitetura e Desenvolvimento de APIs
V1.2

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Instruções de Submissão do Trabalho Acadêmico

Disciplina: Arquitetura e Desenvolvimento de API's – WebAPIs

Descrição:

API construída em C# que possibilita o cadastro, consulta, atualização e exclusão de informações sobre empresas e funcionários.

Tecnologias utilizadas:

Linguagem de Programação	C#
Framework	.NET 10 (ASP.NET Core Web API)
Banco de Dados	MySQL Docker
ORM	Entity Framework Core
Documentação	Swagger (Swashbuckle.AspNetCore)
Testes	Swagger UI
Padrão de Projeto	DDD (Domain, Driver, Design)
IDE utilizada	Visual Studio Code

Evidências:

Empresa

GET

```
Curl
curl -X 'GET' \
  'http://localhost:5157/api/Empresa' \
  -H 'accept: */*'
```

Request URL

```
http://localhost:5157/api/Empresa
```

Server response

Code	Details
200	Response body

```
[
  {
    "id": 1,
    "nome": "Amazon",
    "cnpj": "11122345554649",
    "quantidadeFuncionarios": 2
  },
  {
    "id": 2,
    "nome": "Google",
    "cnpj": "44618234971522",
    "quantidadeFuncionarios": 1000
  },
  {
    "id": 3,
    "nome": "Microsoft",
    "cnpj": "44612884612873",
    "quantidadeFuncionarios": 792
  },
  {
    "id": 4,
    "nome": "Oracle",
    "cnpj": "55219753016485",
    "quantidadeFuncionarios": 697
  }
]
```

Response headers

```
content-type: application/json; charset=utf-8
date: Wed,17 Dec 2025 23:24:56 GMT
server: Kestrel
transfer-encoding: chunked
```

POST
200

Responses

```
Curl
curl -X 'POST' \
  'http://localhost:5157/api/Empresa' \
  -H 'accept: */*' \
  -H 'Content-Type: application/json' \
  -d '{
  "nome": "Bayer",
  "cnpj": "14523696587410",
  "quantidadeFuncionarios": 20
}'
```

Request URL

```
http://localhost:5157/api/Empresa
```

Server response

Code	Details
200	Response headers

```
content-length: 0
date: Wed,17 Dec 2025 23:26:44 GMT
server: Kestrel
```

400

Responses

```
Curl
curl -X 'POST' \
  'http://localhost:5157/api/Empresa' \
  -H 'accept: */*' \
  -H 'Content-Type: application/json' \
  -d '{
  "nome": "Bayer",
  "cnpj": "1452369658710",
  "quantidadeFuncionarios": 20
}'
```

Request URL

```
http://localhost:5157/api/Empresa
```

Server response

Code	Details
400 Undocumented	Error: Bad Request
	Response body

```
Internal server error: CNPJ deve conter 14 caracteres.
```

Response headers

```
content-type: text/plain; charset=utf-8
date: Wed,17 Dec 2025 23:27:11 GMT
server: Kestrel
transfer-encoding: chunked
```

PUT
200

Responses

Curl
```
curl -X 'PUT' \
  'http://localhost:5157/api/Empresa/5' \
  -H 'accept: */*' \
  -H 'Content-Type: application/json' \
  -d '{
  "nome": "Bayer",
  "cnpj": "74589636521445",
  "quantidadeFuncionarios": 1000
}'
```

Request URL
```
http://localhost:5157/api/Empresa/5
```

Server response

Code	Details
200	Response headers `content-length: 0` `date: Wed,17 Dec 2025 23:28:50 GMT` `server: Kestrel`

400

Responses

Curl
```
curl -X 'PUT' \
  'http://localhost:5157/api/Empresa/5' \
  -H 'accept: */*' \
  -H 'Content-Type: application/json' \
  -d '{
  "nome": "Bayer",
  "cnpj": "745896362145",
  "quantidadeFuncionarios": 1000
}'
```

Request URL
```
http://localhost:5157/api/Empresa/5
```

Server response

Code	Details
400 Undocumented	Error: Bad Request

Response body
```
Internal server error: CNPJ deve conter 14 caracteres.
```

Response headers
```
content-type: text/plain; charset=utf-8
date: Wed,17 Dec 2025 23:30:06 GMT
server: Kestrel
transfer-encoding: chunked
```

Evidências DELETE
200

Responses

Curl
```
curl -X 'DELETE' \
  'http://localhost:5157/api/Empresa/1' \
  -H 'accept: */*'
```

Request URL
```
http://localhost:5157/api/Empresa/1
```

Server response

Code	Details
200	Response headers `content-length: 0` `date: Thu,18 Dec 2025 00:56:42 GMT` `server: Kestrel`

422

Responses

Curl

```
curl -X 'DELETE' \
  'http://localhost:5157/api/Empresa/7' \
  -H 'accept: */*'
```

Request URL

```
http://localhost:5157/api/Empresa/7
```

Server response

Code	Details
422 *Undocumented*	Error: Unprocessable Entity

Response body

```
Empresa não encontrada.
```

Response headers

```
content-type: text/plain; charset=utf-8
date: Wed,17 Dec 2025 23:30:55 GMT
server: Kestrel
transfer-encoding: chunked
```

Funcionário

GET

Responses

Curl

```
curl -X 'GET' \
  'http://localhost:5157/api/Funcionario' \
  -H 'accept: */*'
```

Request URL

```
http://localhost:5157/api/Funcionario
```

Server response

Code	Details
200	Response body

```
[]
```

Response headers

```
content-type: application/json; charset=utf-8
date: Thu,18 Dec 2025 00:59:28 GMT
server: Kestrel
transfer-encoding: chunked
```

POST

200

Responses

Curl

```
curl -X 'POST' \
  'http://localhost:5157/api/Funcionario' \
  -H 'accept: */*' \
  -H 'Content-Type: application/json' \
  -d '{
  "nome": "Neymar",
  "cpf": "12345678930",
  "contratoAtivo": 0
}'
```

Request URL

```
http://localhost:5157/api/Funcionario
```

Server response

Code	Details
200	Response headers

```
content-length: 0
date: Thu,18 Dec 2025 01:00:54 GMT
server: Kestrel
```

400

Responses

Curl
```
curl -X 'POST' \
  'http://localhost:5157/api/Funcionario' \
  -H 'accept: */*' \
  -H 'Content-Type: application/json' \
  -d '{
  "nome": "Neymar",
  "cpf": "1234567893",
  "contratoAtivo": 0
}'
```

Request URL
```
http://localhost:5157/api/Funcionario
```

Server response

Code	Details
400 Undocumented	Error: Bad Request

Response body
```
Internal server error: CPF deve conter 11 caracteres.
```

Response headers
```
content-type: text/plain; charset=utf-8
date: Thu,18 Dec 2025 01:01:17 GMT
server: Kestrel
transfer-encoding: chunked
```

PUT
200

Responses

Curl
```
curl -X 'PUT' \
  'http://localhost:5157/api/Funcionario/1' \
  -H 'accept: */*' \
  -H 'Content-Type: application/json' \
  -d '{
  "nome": "Neymar Jr",
  "cpf": "12345678930",
  "contratoAtivo": 0
}'
```

Request URL
```
http://localhost:5157/api/Funcionario/1
```

Server response

Code	Details
200	

Response headers
```
content-length: 0
date: Thu,18 Dec 2025 01:03:12 GMT
server: Kestrel
```

400

Responses

Curl
```
curl -X 'PUT' \
  'http://localhost:5157/api/Funcionario/2' \
  -H 'accept: */*' \
  -H 'Content-Type: application/json' \
  -d '{
  "nome": "string",
  "cpf": "string",
  "contratoAtivo": 0
}'
```

Request URL
```
http://localhost:5157/api/Funcionario/2
```

Server response

Code	Details
422 Undocumented	Error: Unprocessable Entity

Response body
```
Funcionario não encontrado.
```

Response headers
```
content-type: text/plain; charset=utf-8
date: Thu,18 Dec 2025 01:02:01 GMT
server: Kestrel
transfer-encoding: chunked
```

Evidências DELETE
200

Código-fonte comentado.

Disponível no github jenifercmarques/ApiEmpresas.

Caso deseje clonar diretamente: https://github.com/jenifercmarques/ApiEmpresas.git

OBS: Considerar a leitura do passo a passo no readme do projeto antes da execução do mesmo.