

Requirement: Create an Asp.Net Core Web Application that serves country details based on the request path.

Consider the following hard-coded list of countries:

- 1, United States
- 2, Canada
- 3, United Kingdom
- 4, India
- 5, Japan

You can store these countries directly as a dictionary.

Example #1:

If you receive a HTTP GET request at path `"/countries"`, it has to return the list of available countries.

Request Url: `/countries`

Request Method: GET

Response Status Code: 200

Response body (output):

- 1, United States**
- 2, Canada**
- 3, United Kingdom**
- 4, India**
- 5, Japan**

The screenshot shows the Postman interface with a GET request to `http://localhost:5208/countries`. The response is a JSON array of country names. The status is 200 OK, time is 41 ms, and size is 164 B.

KEY	VALUE	DESCRIPTION
Key	Value	Description

Body: 1, United States
2, Canada
3, United Kingdom
4, India
5, Japan

Example #2:

If you receive a HTTP GET request at path `"/countries/{countryID}"`, it has to return the corresponding country name.

Request Url: `/countries/1`

Request Method: GET

Response Status Code: 200

Response body (output):

United States

The screenshot shows the Postman interface with a GET request to `http://localhost:5208/countries/1`. The response is `United States`. The interface includes a top navigation bar with 'Home', 'Workspaces', 'API Network', and 'Explore'. A search bar is present. The main area shows the request details, including the method (GET), URL, and response body. The response body is displayed in a text format, showing 'United States'.

Example #3:

If you receive a HTTP GET request at path `"/countries/{countryID}"`, if the countryID doesn't exist (that is - outside the range of 1 to 5), it should return HTTP 404 response.

Request Url: `/countries/6`

Request Method: GET

Response Status Code: 404

Response body (output):

[No Country]

Example #3:

If you receive a HTTP GET request at path `"/countries/{countryID}"`, if the countryID is greater than 100, it should return HTTP 404 response.

Request Url: `/countries/101`

Request Method: GET

Response Status Code: 400

Response body (output):

The CountryID should be between 1 and 100

Route Constraints:

The "countryID" parameter should be an int value.

The value of "countryID" parameter should be between 1 and 100.

Instructions:

- Create routes with UseEndpoints() middleware.
- Use essential route parameters and route constraints.
- Use parameter validation when necessary.
- Use Map(), MapGet() or MapPost() methods to create endpoints, according to the requirement.
- Return the response with appropriate response status code based on above examples.

Questions for this assignment

Check your source code with Instructor's source code.