



Lecturer

Rokas Slaboševičius

Communicating with the external API

Data



What we will need

- Create an account on <https://www.visualcrossing.com/weather-api>.



Welcome to API

After getting the response in string format, we can convert it into C# classes at <https://json2csharp.com/>

```
var client = new HttpClient();
var request = new HttpRequestMessage
{
    Method = HttpMethod.Get,
    RequestUri = new Uri("https://weather.visualcrossing.com/VisualCrossingWebServices/rest/services/timeline/vilnius?
        unitGroup=metric&key=XXXXXXXXXXXXXXXXXXXX&contentType=json")
};
var response = await client.SendAsync(request);
response.EnsureSuccessStatusCode();
var body = await response.Content.ReadAsStringAsync();
```

With classes, we can deserialize a string into objects of our class

```
var myDeserializedClass = JsonConvert.DeserializeObject<Root>(body);
```



Task 1

- Create an API for storing weather information.
- GET endpoint, which will take the name of the city as query parameter.
- Inside the endpoint, the `IHttpClientExtension`(created by you) service method will be called and will accept the city name parameter.
- Inside the method, an external API will be called to retrieve information by city.
- the access key used in the API Call will be stored in the `appsettings.development.json` file, the URL of the call itself can be in the method.
- The service will also call the repository method to save the Temperature, Country, Region fields received from the api request.
- Our api response must contain the same fields that you saved in the database.

Don't forget to log your information!