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# Assignment

C# & .NET Task

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Create a solution to contain an HTTP endpoint that:

1. Accepts a GET request with three optional query parameters to filter products or highlight some words (separated by commas in the query parameter) in their description:  
Example: `/filter?maxprice=20&size=medium&highlight=green,blue`
2. Reads the list of all products from the URL (think of this as the database):  
<http://www.mocky.io/v2/5e307edf3200005d00858b49>
3. Design the endpoint response so that it contains (in JSON format):
  - a. All products if the request has no parameters
  - b. A filtered subset of products if the request has filter parameters
  - c. A filter object to contain:
    - i. The minimum and the maximum price of all products in the source URL
    - ii. An array of strings to contain all sizes of all products in the source URL
    - iii. An string array of size ten to contain most common words in the product descriptions, excluding the most common five
  - d. Add HTML tags to returned product descriptions in order to highlight the words provided in the *highlight* parameter.  
Example: "These trousers make a perfect pair with **green** or **blue** shirts."

## What we will look for

- Clean, readable, easy-to-understand code
- Performance, scalability, and security
- Unit tests
- Dependency injection
- Appropriate logging including mocky.io response
- Documentation for the users of your API

## Hints

- Feel free to use any open-source libraries
- Feel free to leave notes as code comments

## How To Submit

- You should only spend a few hours completing the assignment
- Have the solution ready to compile and run
- Avoid including artifacts (NuGet packages, bin folders) from your local build
- Compress the solution and send us a zip file