Back End Tech Assessment - C# / .Net

Create a .NET Core solution to contain an HTTP endpoint that:

- 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?minprice=5&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(minprice and/or maxprice and/or size)
 - c. And filter(summary) 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 the most common words in the product descriptions, excluding the most common five in the source URL
 - 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 the full mocky.io response
- Documentation for the users of your API

Hints

- You do not need to implement authorization but look for other potential security vulnerabilities
- 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 $\operatorname{\mathsf{run}}$
- Avoid including artifacts (NuGet packages, bin folders) from your local build
- Compress the solution and send us a zip file.