InfoTrack Development Project

To gain a better understanding of your technical, design and logic skills, we would like you to create a web-based project using C# with the following requirements.

Task

The CEO from InfoTrack is very interested in SEO and how this can improve Sales. Every morning he logs in to his favourite search engine and types in the same key words "**online title search**" and counts down to see where and how many times their company, **https://www.infotrack.com.au** sits on the list.

To make this task less tedious the CEO reaches out to you to write a small web-based application for him that will automatically perform this operation and return the result to the screen. The application prompts for a string of keywords to search, and a URL to find in the search results. The input values are then processed to return a string of numbers for where the URL is found in the search engine's results.

For example, "**1, 10, 33**" or "**0**".

The CEO is only interested if their URL appears in the first **50** results.

Files

For the results to be consistently reproduced we have created a library of static web pages for you to use in place of a live search engine. Search these web pages as if they were live Google/Bing search results. Note: We have done the "Online Title Search" search part for you, but please still include the input on the UI and pass it back to the server.

The static pages can be found at:
https://infotrack-tests.infotrack.com.au/Google/Page**{01-10}**.html and
https://infotrack-tests.infotrack.com.au/Bing/Page**{01-10}**.html

Example:
https://infotrack-tests.infotrack.com.au/Google/Page01.html
https://infotrack-tests.infotrack.com.au/Google/Page02.htm

Candidates

Juniors:

We know you are new to this so give us your best effort. Show us that you know the basic concepts of OOP. We look forward to seeing what you can deliver. We only ask that you do not use any 3rd party libraries (e.g. HtmlAgilityPack) for scraping the HTML pages. For your test you only need to search the Google pages.

Mids:

You have been at this for a while now, we want you to follow the guidelines given to the Juniors and also show that you know how to structure, decouple and test your code. We will be looking at how you implement SOLID design principle in your code. Showcase what you have learnt thus far and feel free to have a go at some of the Senior requirements.

Seniors:

You will be required to guide the Mids and juniors, so we need to see that you have the knowledge to do so. Follow the guidelines given to the Mids and you will need to provide a solution that uses Ajax calls form the UI to an API on the server (no full post backs). We would also like you to search both Google and Bing pages and show us that you know how to use design patterns to structure and write your code. Your app should be able to easily add another search engine if needed.

Submissions

Please complete the project and send a link to where we can download your code to your contact at InfoTrack. If you have any questions, please do not hesitate to contact us.