



Development Project

To gain a better understanding of your technical, design and logic skills, we would like you to create a solution that will perform the following.

Task

The CEO of InfoTrack is very interested in SEO and how this can improve Sales. Every morning, he logs in to google.com and types in the same key words “**efiling integration**” and counts down to see where and how many times their company, **www.infotrack.com** sits on the list.

Seeing the CEO do this every day, a smart software developer at InfoTrack decides to write a small application for the CEO that will automatically perform this operation and return the result to the screen. They design and code some software that receives a string of keywords, and a string URL. This is then processed to return a string of numbers for where the resulting URL is found in Google. For example, “1, 10, 33” or “0”. The CEO is only interested if their URL appears in the first 100 results.

Additional Instructions

Think of this small project as an opportunity to showcase your abilities as a developer. Some things you should keep in mind when working on this project include:

- **Overengineer the solution.** Try and think outside the box and ask yourself what features you would like to see included as a user of your own product.
- **Code to an enterprise standard.** The code should be easy to understand, extend, and modify. Showcase your ability to demonstrate an effective use of the SOLID principles and design patterns that relate to the project.
- **Make use of this**
URL <https://www.google.com/search?num=100&q=efiling+integration> for retrieving Google search results. Do not use Google API or Html Agility Pack; do some dirty web scraping work of your own.
- **Code using Html 5, and JavaScript.** The front-end UI frameworks used most here at InfoTrack are React and KnockoutJS, but feel free to use any framework you are most comfortable with.
- **Code using C#.** The back-end API frameworks used most here at InfoTrack are ASP.Net MVC and Web API. You are welcome to use any version of .Net 6 or up.



- **Code testing and testability.** Feel free to include some integration tests and unit tests as part of your solution. This goes a long way to make your code more resilient to change.

Submission Help

Please complete the project and send your code back to SoftwareManagers@infotrack.com.

Please refrain from using zip files to send code submissions as these will be blocked by our mail server, instead please provide a link to a zip file you have uploaded to a shared drive (like GoogleDrive, OneDrive or Dropbox). Alternatively, you can add the following emails as collaborators to a **private** GitHub repository. *Please refrain from sharing a public repository.*

- Andreas.Savva@infotrack.com
- Chad.Kelly@infotrack.com
- Brian.Hildebrand@infotrack.com