# Developer Guide

This guide serves as a reference for other developers on the frameworks, plugins and standard that I utilised in this web application.

Project structures

SeoAnalyzer (main solution)

- SeoAnalyzer.Core
    o This project holds the logic of analysis services used
- SeoAnalyzer.Web
    o This project responsible to display the UI and acts as the controller to accept the request to perform analysis task and carry out the analysis task using methods from SeoAnalyzer.Core.
- SeoAnalyzer.Test
    o This project is a test project which I used to test the analysis services from the SeoAnalyzer.Core

Framework Used:

- Mediator
    o I use mediator framework as the communicator between request from Front-End and service from Back-End. Backend services such as the IAnalysisStrategy class is not called directly by Front-End API Call. The mediator framework is used to reduce the dependencies between the Back-End objects and Front-End objects
- Strategy Pattern
    o I use strategy pattern design to determine which AnalysisService will be called depends on the chosen AnalysisCategory.  IAnalysisStrategy class is the context class which determine the type of AnalysisService will be used.
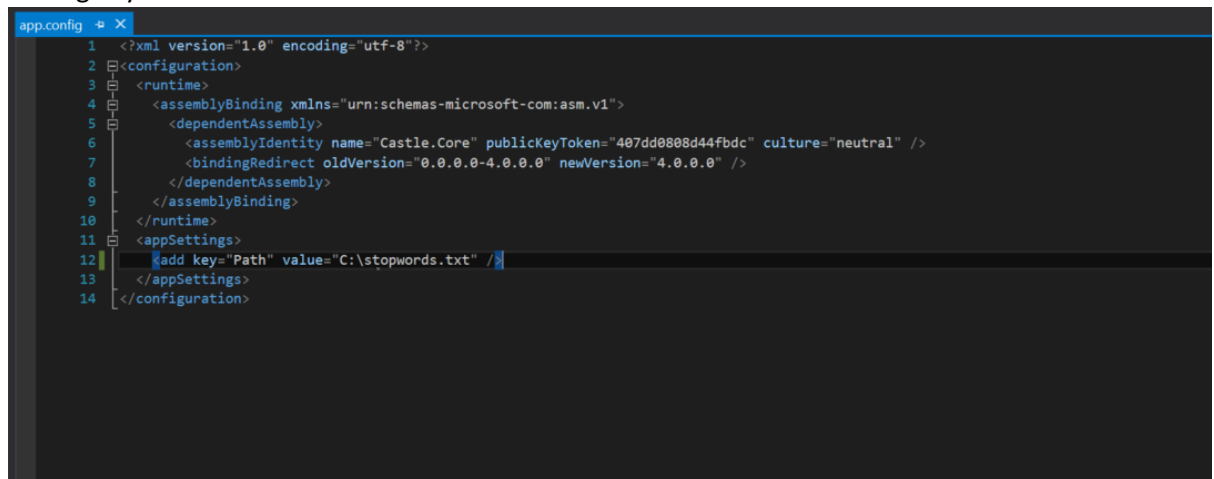
Mentionable Plugins:

- Castle Core & Castle Windsor
    o This plugin is used to assist in the implementation of Dependency Injection Standard in my projects. I use this plugin to achieve inversion of control behaviour on objects such as mediator, services, and validators.
- FluentValidation
    o This plugin is used to validate the user input (at server-side) before analysis task is performed
- HtmlAgilityPack
    o This plugin is used to perform web scrapping. I use this plugin to obtain the inner text of a html source code from a webpage.

About Stop Words:

- The stop words list is not exhausting. You can add in more stop words to this application.
- The stop words list file (stopwords.txt) can be found at the SeoAnalyzer.Web/App_Data folder.
- If you wish to add in more stop words, please append to the stopwords.txt following this format: <your-word>|<your-word>

About Stop Words in Test project (SeoAnalyzer.Test):

- The stop words list files used in SeoAnalyzer.Test is accessed by an ***Absolute Path***. The path must be changed according to your own folder setting. For example, if your SeoAnalyzer.Web projects are place in C:/ SeoAnalyzer drive, and you wish to use the stopwords.txt file in the App_Data folder, you can change your absolute path to 'C:/SeoAnalyzer/SeoAnalyzer.Web/App_Data/stopwords.txt'
- You can modify the path at app.config file inside the SeoAnalyzer.Test Folder. The app-setting key used is 'Path'

```xml
app.config  ☐ ✕
1    <?xml version="1.0" encoding="utf-8"?>
2   <configuration>
3     <runtime>
4       <assemblyBinding xmlns="urn:schemas-microsoft-com:asm.v1">
5         <dependentAssembly>
6           <assemblyIdentity name="Castle.Core" publicKeyToken="407dd0808d44fbdc" culture="neutral" />
7           <bindingRedirect oldVersion="0.0.0.0-4.0.0.0" newVersion="4.0.0.0" />
8         </dependentAssembly>
9       </assemblyBinding>
10    </runtime>
11    <appSettings>
12      <add key="Path" value="C:\stopwords.txt" />
13    </appSettings>
14  </configuration>
```