Custom search by using Google search engine

Below the steps to implement Google Custom Search Engine:

- 1. Request an api key.
- 2. <u>Setup an own search engine id, cx</u> (For general search enter *.com in site name field).
- 3. Add the below Java code after replace api key and cx by your values.

Reference:

https://stackoverflow.com/questions/3727662/how-can-you-search-google-programmatically-java-api/21411273

To search google using API you should use <u>Google Custom Search</u>, scraping web page is not allowed

In java you can use CustomSearch API Client Library for Java

The maven dependency is:

```
<dependency> <groupId>com.google.apis</groupId>
<artifactId>google-api-services-customsearch</artifactId>
<version>v1-rev57-1.23.0</version> </dependency>
```

Example code searching using Google CustomSearch API Client Library

```
public static void main(String[] args) throws GeneralSecurityException, IOException {
   String searchQuery = "test"; //The query to search String cx =
   "002845322276752338984:vxqzfa86nqc"; //Your search engine //Instance Customsearch
   Customsearch cs = new
   Customsearch.Builder(GoogleNetHttpTransport.newTrustedTransport(),
   JacksonFactory.getDefaultInstance(), null) .setApplicationName("MyApplication")
   .setGoogleClientRequestInitializer(new CustomsearchRequestInitializer("your api
   key")) .build(); //Set search parameter Customsearch.Cse.List list =
   cs.cse().list(searchQuery).setCx(cx); //Execute search Search result =
   list.execute(); if (result.getItems()!=null){   for (Result ri : result.getItems()) {
```

```
//Get title, link, body etc. from search System.out.println(ri.getTitle() + ", " +
ri.getLink()); } }
```

As you can see you will need to request an api key and setup an own search engine id, cx.

Note that you can search the whole web by selecting "Search entire web" on basic tab settings during setup of cx, but results will not be exactly the same as a normal browser google search.

Currently (date of answer) you get 100 api calls per day for free, then google like to share your profit.