

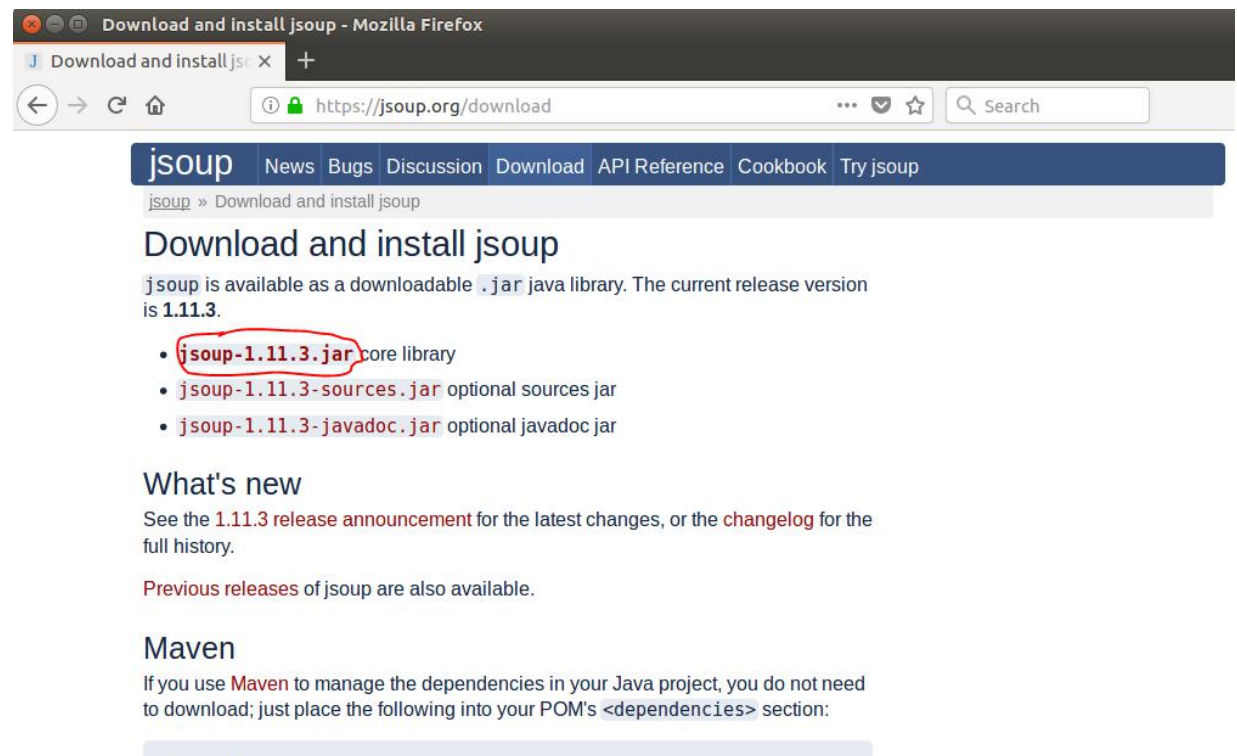
Lab 13: CommandLine Search Engine

Setup

1. Merge the OzgurKilic/lab with your lab repository and pull the contents of your repository from Bitbucket to your local repository.

Exercise 1 : Add Jsoup Library to lab Project

1. Download Jsoup library.

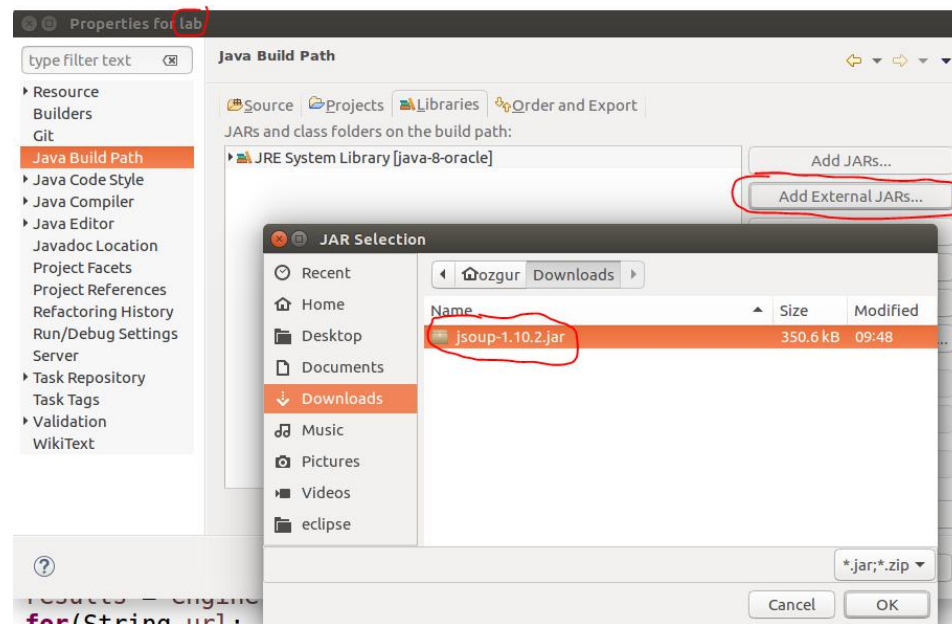


The screenshot shows a web browser window titled "Download and install jsoup - Mozilla Firefox". The address bar shows the URL "https://jsoup.org/download". The page content includes a navigation bar with links: jsoup, News, Bugs, Discussion, Download, API Reference, Cookbook, and Try jsoup. Below the navigation bar, the page title is "Download and install jsoup". The main text states: "jsoup is available as a downloadable .jar java library. The current release version is 1.11.3." A list of download links is provided:

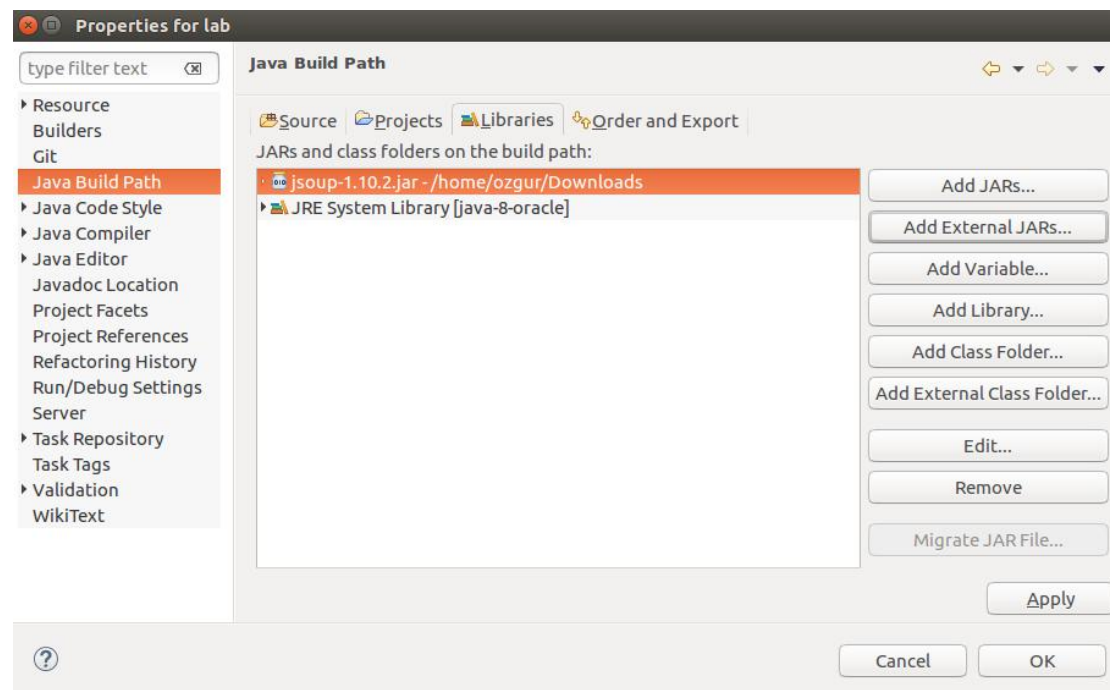
- **jsoup-1.11.3.jar** core library
- jsoup-1.11.3-sources.jar optional sources jar
- jsoup-1.11.3-javadoc.jar optional javadoc jar

The first link, "jsoup-1.11.3.jar", is circled in red. Below the list, there is a section titled "What's new" with a link to the "1.11.3 release announcement" and a link to the "changelog". Another link for "Previous releases" is also present. Finally, there is a section titled "Maven" with text explaining how to use Maven to manage dependencies in a Java project, mentioning the POM's <dependencies> section.

2. Open the properties window of lab project and open the Libraries section. Click the “Add External JARs” button



3. Click the “OK” button of the properties window.



Exercise 2 : Implement the index method of SearchEngine

1. Read content of a URL as described in <https://docs.oracle.com/javase/tutorial/networking/urls/readingURL.html>
2. Parse the content to extract words.
3. Print the words

Exercise 3 : Use jsoup to extract text representation of URL

1. Get the text content from the URL using jsoup classes as described in <https://jsoup.org/>
2. Create a HashMap to index URLs .
3. Implement the search method of SearchEngine

Enter keyword: **Java**

<https://docs.oracle.com/javase/tutorial/java/nutsandbolts/>

<https://docs.oracle.com/javase/tutorial/collections/>

<https://docs.oracle.com/javase/tutorial/networking/urls/readingURL.html>

Enter keyword: **stack**

<https://docs.oracle.com/javase/tutorial/networking/urls/readingURL.html>

Enter keyword:

NOTE: Your lab will **not be graded** if

- Your account name does not have the format described in lab1.pdf
- Your repository name is not lab
- Your files have compilation errors
- You haven't complete the steps described in exercises
- Your added/modified files are not submitted to Bitbucket.
 - You have to add commit and push files as described in lab1.pdf