



Java Plays : Alchemy API Lab

**Presented by:**

IBM

ECOD

**IBM Cloud**

## ***AGENDA***

- ☐ Purpose of This Lab
- ☐ Pre-Requisites
- ☐ Register for Alchemy API Key
- ☐ Create a New Java Project
- ☐ Add Alchemy API Dependency
- ☐ Run AuthorTest Java Snippet
- ☐ Run All AlchemyAPI Java Snippets

## ***Purpose of This Lab***

In this lab, you will learn how to use the rich set of Cognitive Computing APIs made available using Alchemy APIs.

## ***Pre-Requirement***

☐ Install Eclipse Mars

☐ Install Java JDK 1.7

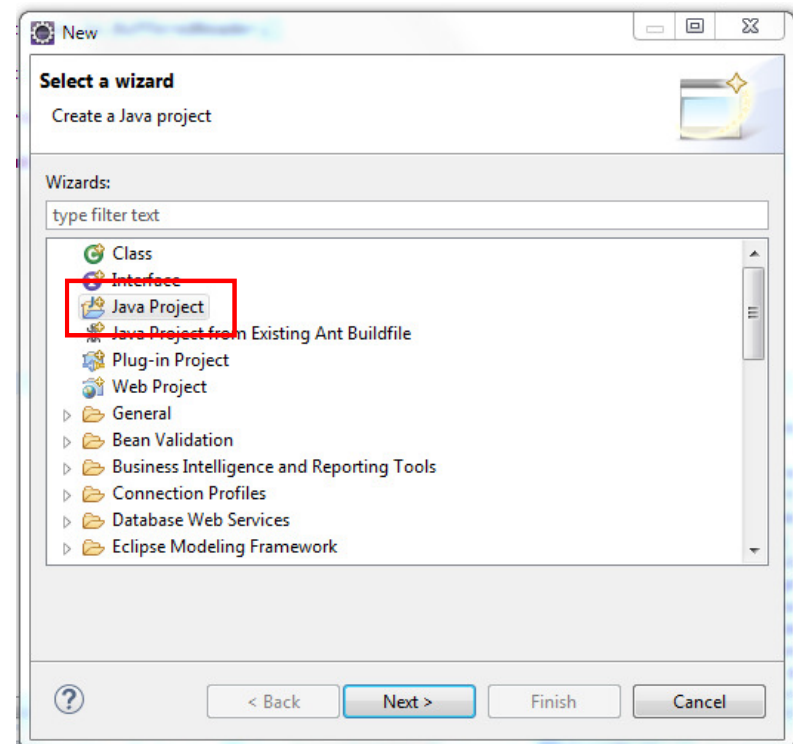
## *Step 1: Register for API Key*

- ❑ Register for API Key at <http://www.alchemyapi.com/api/register.html>.
- ❑ Check your email address for a key from AlchemyAPI.
- ❑ You will replace the key shown below with your Alchemy API Key in each AlchemyAPI snippet.

```
19 | AlchemyAPI alchemyObj = AlchemyAPI.GetInstanceFromString("5fc91e98eacfa5ebf83440e8c6a61d0f60fa380b");  
20 |
```

## Step 2: Create a New Java Project

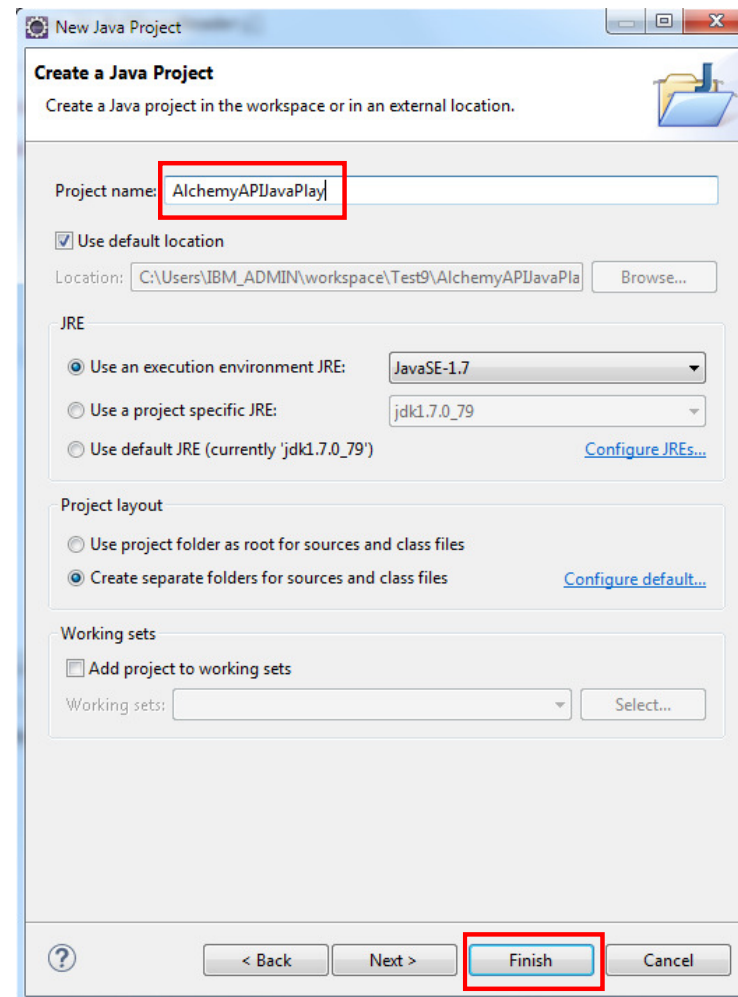
- ❑ Open your local Eclipse pointing to your preferred workspace.
- ❑ Click left upper top menu, File >> New >> Java Project.



☐ Click Next.

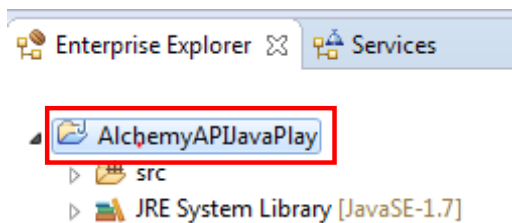
☐ Name the project, AlchemyAPIJavaPlay.

☐ Click Finish.



Java Plays : Alchemy API

❑ You have successfully created a lab project.

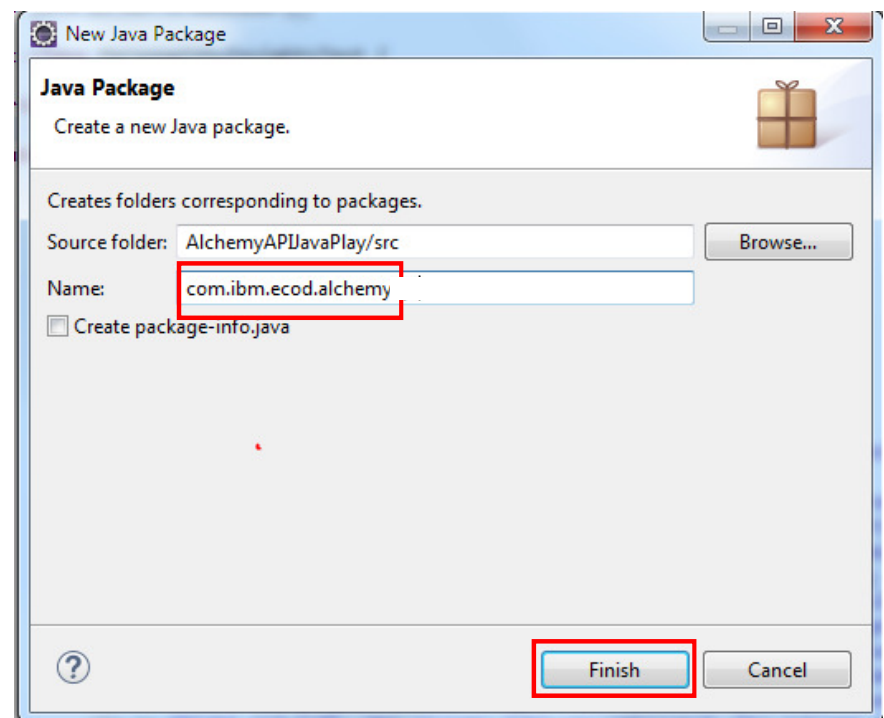


❑ Right click on the project.

❑ Select New >> Package.

❑ Name the package as **com.ibm.ecod.alchemy**

❑ Click Finish.





## Step 3: Add Alchemy API Dependency

❑ Go to AlchemyAPI GitHub repository at <https://github.com/ibmecod/javaplays-alchemyapi>

❑ Click Download Zip.

The screenshot shows the GitHub repository page for `ibmecod / javaplays-alchemyapi`. The repository has 3 commits, 1 branch, 0 releases, and 1 contributor. The main content area displays a commit by `sandhya9` 2 minutes ago, titled "Added Java Plays-Alchemy API Lab.ppt". Below the commit, a table lists the files added:

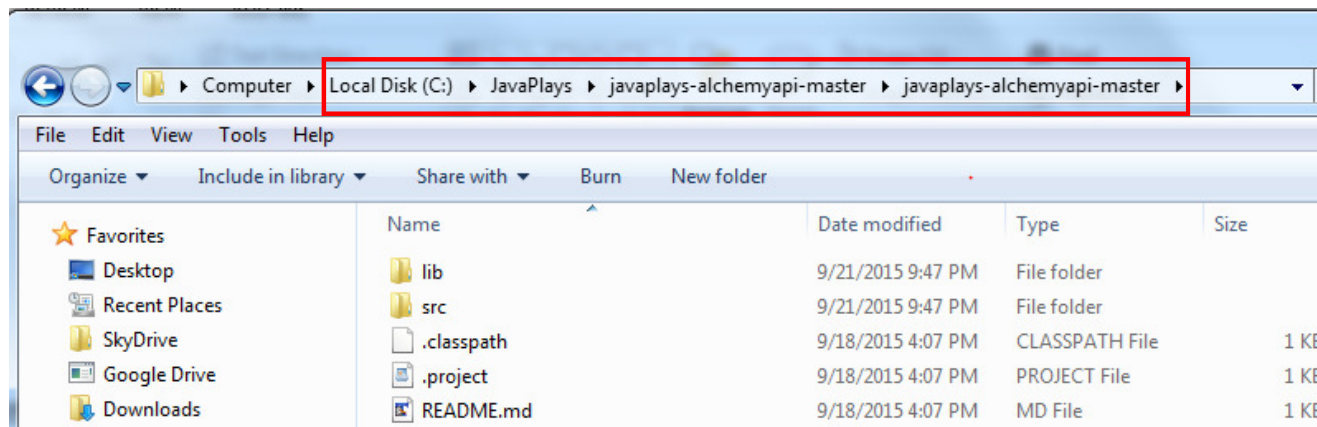
File	Version	Time
<code>lib</code>	Initial Version	3 days ago
<code>src/com/ibm/ecod/alchemy</code>	Initial Version	3 days ago
<code>.classpath</code>	Initial Version	3 days ago
<code>.project</code>	Initial Version	3 days ago
<code>Java Plays - Alchemy API Lab.ppt</code>	Added Java Plays-Alchemy API Lab.ppt	2 minutes ago
<code>README.md</code>	Initial Version	3 days ago

Below the file list, the `README.md` content is shown, starting with the title **AlchemyAPIJavaPlay** and the subtitle **AlchemyAPI Java Code Samples**.

On the right side, the "Code" section is visible, showing options to clone the repository. The `Download ZIP` button is highlighted with a red box.

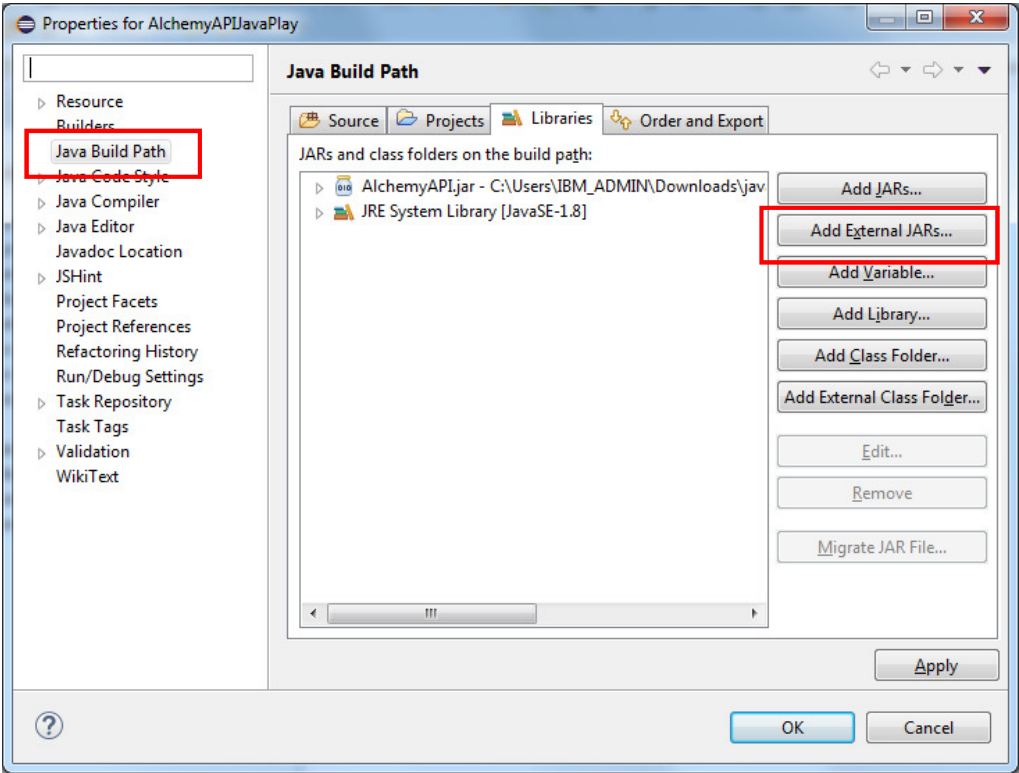
Java Plays : Alchemy API

- ❑ Unzip the downloaded file in your local folder.



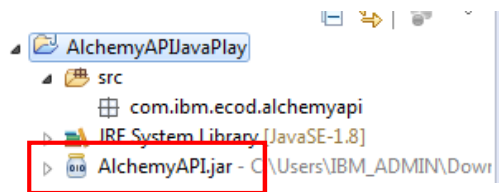
- ❑ Right click on your new Eclipse project >> Click Properties at the bottom.

- ❑ Select Java Build Path.
- ❑ Click on Libraries tab >> Click Add External JARs.



- ❑ Select AlchemyAPI.jar from your unzipped folder. e.g. \javaplays-alchemyapi-master\lib

❑ Click OK.



❑ Now, you are ready to add code using Alchemy API.

### *Step 4: Run Author Test Java Snippet*

- ☐ Double click each Java file to copy and paste the code into **com.ibm.ecod.alchemy** package you created in the new eclipse project, AlchemyAPIJavaPlay .

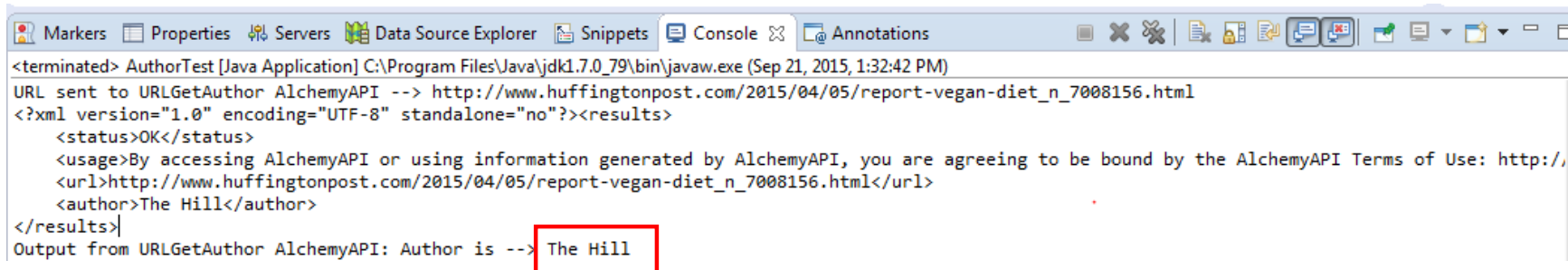


AlchemyUtility.java



AuthorTest.java

- ☐ Replace the Alchemy API key on line 18 in AuthorTest.
- ☐ Right click on the class.
- ☐ Select Run As >> Java Application.
- ☐ You will see the following result.



```
<terminated> AuthorTest [Java Application] C:\Program Files\Java\jdk1.7.0_79\bin\javaw.exe (Sep 21, 2015, 1:32:42 PM)
URL sent to URLGetAuthor AlchemyAPI --> http://www.huffingtonpost.com/2015/04/05/report-vegan-diet_n_7008156.html
<?xml version="1.0" encoding="UTF-8" standalone="no"?><results>
  <status>OK</status>
  <usage>By accessing AlchemyAPI or using information generated by AlchemyAPI, you are agreeing to be bound by the AlchemyAPI Terms of Use: http://
  <url>http://www.huffingtonpost.com/2015/04/05/report-vegan-diet_n_7008156.html</url>
  <author>The Hill</author>
</results>
Output from URLGetAuthor AlchemyAPI: Author is --> The Hill
```

❑ Replace the URL on line 20 with a URL of your choice and run the API snippet again.

## *Step 5: Run All Alchemy Test Java Snippets*

- ❑ Repeat the same steps defined in step 4 to run each of the following Java Class files. No need to copy AlchemyUtility.java file again.



CategoryTest.java



ConstraintQueryTest.java



EntityTest.java



FeedLinksTest.java



ImageTest.java



KeywordTest.java



LanguageTest.java



RelationsTest.java



SentimentTest.java



TaxonomyTest.java



TextExtractTest.java

***This ends the Alchemy API Lab.***

***Thank you !***