**Discussion Question:**

Research the Internet for features added to Java 9. Select one, write a summary, and provide an example you may have found or one you have written. Cite your source.

**Assignment Requirements and Grading:**

Java is a programming language that upgrades to new and advanced versions that ease its use for developers. Java 9 has a lot of features such as:

* Javadoc for API documentation,
* Factory methods for collections ( that helps to create a collection like List, Map, Set and Map.Entry)
* JShell: the interactive Java REPL (Read Evaluate Print Loop) to test and execute java constructors like class, interface, enum, object, statements.
* Stream API Improvements
* Private methods in Interfaces allows to write private static methods using “private” keyword.
* Multi-Resolution Image API (MultiResolutionImage) that allows images with different widths and height
* Java 9 Platform module system
* Improvement in Process API (java.lang.ProcessHandle, java.lang.ProcessHandle.Info)
* HTTP/2 Client

I would like to present a summary of the HTTP/2 Client features. This new feature allows us to call HTTP in a new way to reduce Legacy HTTP Client API’s many problems. HTTP/2 Client allows developers to send http request and process the http response. Here are some advantages of JDK9 HTTP/2 Client feature:

* Lightweight and easy to use, allows multiple http request on a single TCP connection, supports http/1.1 and http/2.0
* Elimination of bandwidth increase by using HPack to compress header
* HTTP/2.0 client supports Text and Binary data
* It works in Synchronous and Asynchronous mode with advance performance

Here is an example of code for http/2 client to request a page and get the response from GreekforGreek website.

HttpClient client = HttpClient.newHttpClient();

HttpRequest req = HttpRequest.newBuilder(URI.create(<http://www.google.com)>)

.header(“user-Agent”, “Java”)

.GET()

Build();

HttpResponse resp = client.send(req, HttpResponse.BodyHandler.asString());

Work citated

“Java 9 features with examples”, <https://www.geeksforgeeks.org/java-9-features-with-examples/>, update 13 April 2022.

“HTTP/2 Client feature of Java 9 with example”, <https://www.geeksforgeeks.org/http-2-client-feature-of-java-9-with-example/>, update 22 January 2020.

1. An initial post of approximately 250 words is due by **Thursday, 11:59 p.m., CST**.

**Assignment:**

Write a program that prompts a user to enter two strings and then checks the strings entered and reports if either the first string is a substring of the second string, or if the second string is a substring of the first string.

**Assignment Requirements and Grading:**

1. This assignment is due by **Sunday, 11:59 p.m., CST**.
2. Add the necessary documentation as described in [Do](https://cyberactive.bellevue.edu/bbcswebdav/institution/CST%20-%20New_ICC/CSD/320/Documentation%20Requirements%20Java.pdf)

I never use this feature but by reading about it in my research, I concluded that it is a helpful tool that will help a developer do his work. It says that HTTP/2 Client allows developers to send http request and process the http response. Like you said, it eliminates HttpURLConnection problems, and it is faster. I agree with you that the configuration will be a problem since it is a new feature. Like any new things, the maintenance and the learning or training for its use will be somehow difficult. It also works in Synchronous and Asynchronous mode with advanced performance

Error: Could not find or load main class Substring

Caused by: java.lang.ClassNotFoundException: Substring

Answer Open the code from the source that from the directory.

I also found the JShell so helpful for the developer to use. Like you said he can quickly use it to test the code and check the logical error before moving forward on the coding. It will also save time because each time you are moving, you just check if the code runs correctly, and you are sure of what you are doing so far. JShell is also known as the interactive Java REPL (Read Evaluate Print Loop). It is also used to test and execute java constructors like class, interface, enum, object, and statements. I agree with the simultaneous use of IDE and JShell as recommended by the Oracle’s website.

Ohh it is easier than I thought. When listing the different features of JDK9, I saw JShell and it’s said that it is also used to test and execute java constructors like class, interface, enum, object, and statements but I did not really want to go in deep. Thanks for revealing its helpful benefice to us. It saves time because it can quickly be used to test the code, check, and correct any logical error before moving forward on the coding. Your example of code made things clearer. You do not need to have a class. Just with JShell you can test the code and see if it is running as expected.