

## Online Java Compiler : Text Editor in Java

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**Abstract:** As we are living in a competitive world as well very fast world, everything in the universes is to be internet. For anything we use internet world all things we get online. Considering need of internet so we created software called "On-line java compiler with security editor". Moto of this project we can easily to write a java program and compile it and debug in on-line. As we know that client machine doesn't having java development kit .They only connected to the server. But server having java compiler that is why server executes the java code and produce the error message to the appropriate client machine. It also used for creating a security editor. By using this we can encrypt and decrypts the file. For security purpose we need the Encryption and decryption process perform using RSA Algorithms. We can say that there is lot of security algorithms are there, but RSA algorithm is very efficient to encrypt and decrypt the file. For a given or in this project is used to view all type of java API .With the help of all types of Java API it is very useful for writing the java program easily, for example if any error in the format of API means we can able to view API throw this modules.

**Keywords:** Text Mining, Classification, Software Repositories, Compiler, Software Projects, Triaging.

### I. INTRODUCTION

The why we used JAVA programming? As we know that JAVA is platform independent. JAVA is works as an interpreter so for programming assignments are very important for improving skills of the students. As last few year ago the lecturer checks each assignment manually and returns a feedback to the student. This process is very time consuming process has problem for lecturer and the students. The lecturer may be exhausted with many submissions and the students must wait for several days to receive their feedback.

### II. COMPILER

Compiler is nothing but a simple computer program that is used for transferring source code which is written in a programming language with the latter often having a binary form known as object code.

*Types of Compiler:*

1. *Native Code Compiler:* The compiler used to compile a source code for same type of platform only.
2. *Cross Compiler:* The compiler used to compile a source code for different kinds platform.

3. *Source to Source Compiler:* The compiler that takes high-level language code as input & output source code of another high-level language only.

*How Compiler Works?*

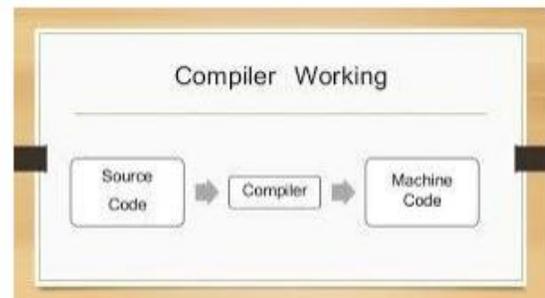


Fig. 1. Working of Compiler

### III. CHARACTERISTICS OF ONLINE JAVA COMPILER

1. Considering all this we can say that online Java compiler is elastic, meaning a user can have as much or as little of a service as they want at any given time.
2. The provider gives the full resources. Just because of Internet access we need a consumer for a personal computer.
3. Agility: It simply gives ability to re-provision technological infrastructure resources.
4. Application Programming Interface (API): APIs simply provide the accessibility to software that enables machines to interact with cloud software.
5. Cost
6. Device and Location Independence: User can not able to access systems using a web browser regardless of their location.
7. Maintenance
8. Multitenancy: They cannot share the resources and cost across a large pool of users.
9. Security: Due to centralization of data we can improve the security. [1]

### IV. JAVA API INFORMATION

At the first we can know as well as we have the knowledge regarding all information of all the API (Application programming Interface) available in java.

API module we can know all the methods that are available in a class or an interface. Java is an interpreter .API is nothing but a collection of classes and interfaces available in a package. We can say that it is not possible for a programmer to remember all the methods available in a class or an interface available in a package so that time the programmer can make use of these JAVA API.

#### V. IMPLEMENTATION OF ONLINE JAVA COMPILER

Following diagram shows how we referred /working of Online Java Compiler. They can easily provide a feature that enables the output of source code in multiprogramming languages at run time, based on a single model that represent the code to render. In this referred papers can says that we can generate assemblies dynamically at runtime and execute. We can say that Online Java Compiler was assume that the user will use his/her favorite text editor to create and correct program files in Java platform only. As we know Java is a independent platform so that we can say considering this assumption allowed to create very simple front end that loads quickly and is platform independent. As we can clearly say that the frontend is designed to be as simple as possible with only a few commonly used options, it is sufficiently functional and can be used quickly .For that we have first check that whether

the text area is empty or not. As we find out the text is empty, display on system warning message. We have other option like use Compile Result Class to represent the of compilation, that are returned from the compiler, Compiler Error Class to represent a compiler error or warning and Compiler Parameter Class to represent the parameters to invoke the compiler. We can say that after successful compilation compiler generate either .class file. As we know that the .class file produce the desired output for the given source code.

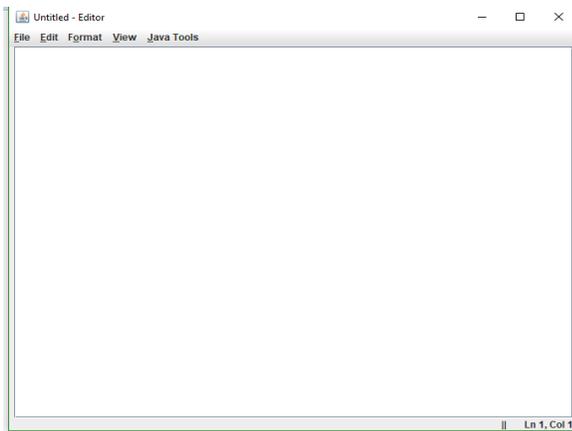


Fig. 2. Working Application

#### VI. ADVANTAGES OF ONLINE JAVA COMPILER

1. Online Java Compiler are self-contained units where they can ready to be executed.
2. As I told earlier Online Java Compiler already compiled into machine language binaries.
3. For daily updation there is no other application used.
4. We want to compile code on windows on an x86 architecture, the end user only needs a windows operating system.
5. We can say that pre-compiled package can run faster than an interpreter compiling source code in a real time.

#### VII. DISADVANTAGES OF ONLINE JAVA COMPILER

1. The primary stage/work of compiler translates the source code into specific machine language.
2. Specifically given Java source code compiled for OS x, Windows and Linux for 32-bit or 64-bit architectures.
3. We cannot easily maintain multiple versions of the source code for the same application.
4. At the initially when we write program it take more time to spent on source code maintenance, when we want to update is occurs trouble.

#### VIII. PURPOSE AND FUTURE SCOPE OF THE PROJECT

The main purpose of this project is it encourages the people who played this game to think in a logical way to win the game, which increases the ability to think logically. It is just a two player time pass game between system and user or between any two users. It is a user friendly game. It is a two player game which is between user and the system or between any two users. One can increase their logical thinking by playing this game. A person do not require any extraneous knowledge to play this game. In this game only two inputs can be accepted ;enaught and crosses. This project is basically developed by using simple Core Java and it can be upgraded using graphical user interfaces.

One major change that can be done is that instead of naught and crosses we can use the finger prints of the user playing the game. In this project we can add a timer and the menu bar to start the new game to know the score and no. of games played.

#### IX. CONCLUSION

After referring all base papers concerning “Online Java Compiler” we tend to conclude that we tend to want to

figure on existing system of enhancing the higher output. As compared to the current scenario wherever every machine got to install the compiler on an individual basis. This would eliminate the requirement to put in the compiler separately. So, we will check the code at the centralized server. Another advantage of this project is that whenever the compiler package is upgraded it can be done simply while not once more putting in it on every and each machine. We have to conclude during this paper, this technology is applied to generate online java compiler victimization Cloud Computing with security editor. As compared to the current scenario wherever every machine got to install compilers on an individual basis. This would eliminate the requirement to put in compilers separately. So we tend to will check our code at the centralized server. Another advantage of such project is that whenever the compiler package is to be upgraded it can be done simply while not once more putting in it on every and each machine.

#### X. REFERENCES

- [1] Java 2-Complete reference (5th edition) by Herbert Schildt
- [2] Thinking in Java by Bruce Eckel.
- [3] <http://java.sun.com/docs/books/tutorial>
- [4] <http://www.cafeaulait.org/course/>
- [5] [www.javatpoint.com](http://www.javatpoint.com)
- [6] [http://en.wikipedia.org/wiki/Java\\_\(programming\\_language\)/](http://en.wikipedia.org/wiki/Java_(programming_language))
- [7] <http://oopweb.com/Java/Documents/IntroToProgrammingUsingJava/VolumeFrames.html>