

Online Java Compiler with Security Editor and Data Extraction

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Abstract: In this report, we will not present compiler construction techniques in usual sense. Instead, a functional specification technique is discussed. The study is focused on the dynamic semantics issues such as the code generation. The development is conducted in terms of constructive type. As every language needs a specific compiler to compile the programs, we are dealing with the construction of a compiler for JAVA by grabbing the knowledge from the reputed authors which we will discuss in the following sections in this paper. Also the compilation techniques we are going to specify are focused on the imperative programming languages only.

Keywords: online java compiler, security editor, data extraction

1. Introduction

In this paper, we are trying to develop the online compiler for java programming language. We are developing in such a way that even though the user can't have the java tool kit, he can execute the code by connecting to the server. The server is itself having the inbuilt java tool kit. By security editor, we can have the compiled code securely in the encrypted format. The data variables can be extracted from the compiled packages. Even we can figure out the authors of different packages in the developed java software.

2. Related Works

1) Since there exists a few general libraries for Machine learning, Edward Raff developed the Java Statistical and Analysis tool which is a library for machine learning written in pure java. The tool unlike Weka, is very flexible and user friendly. All the required algorithms for machine learning are implemented independently. The framework used for development of this tool is fully object-oriented framework.

2) Muruli Manohar and team says that the compiler for java can be made user friendly by developing an android application. By which user can try out and execute the java codes. To develop this compiler the cloud technology also used. Here the cloud computing is used as the Internet. It is a platform to bring out the users in a single base.

3) Shubham Chourasiya and his team researched to develop the online java compiler with security editor. As the world is marching to stand on the internet, the security issue will be a bigger factor to focus on. They have developed the online java

compiler with security editor which takes the user input file and compile it. The most aim of this project we will simply to put in writing a java program and compile it and rectify in online. The shopper machine doesn't having java Development Kit. The Shopper machine solely connected to the server. The server having java Compiler.

4) Inderdeep Singh and his mate concluded in developing the tool for Reachability analysis tool for object-oriented programming language. The Reachability analysis is important for static analysis of critical properties in concurrent programming such as freedom from deadlocks.

5) Jongwook Kim and his team developed a tool named X15 for Refactoring java software product lines. The tool helps the users to write custom scripts. This tool is useful in developing the different types of java based software. Through this tool, the java development software is made easy.

6) ShamaliKokare and her mates used Data mining techniques and Security editor techniques to develop a Online Java Compiler. Here the user barely connected to the server. Though he won't have any java development kit, still he can compile it and execute the java program by connecting to the server. Here the server is having the inbuilt java compiler and the compiled file is encrypted with the help of security editor.

7) Andria Caruso and her mate studied and developed a tool which extracts and compares the java variables in the java source code. They say that the java source code analyses that firstly extracts the code from repository and then analysis the code.

8) Jasmine Ramadani and Stefan Wagner made an exploratory study to mine the java packages which in turn helps in determining the developer skills in different areas. They say that if every developer makes his developed code in the separate package. Then if we mine the packages, then we will easily get the different parts of different authors in the java software code.

9) Stefan Marr and his team shows that the dynamically typed languages such as java script and python are used for the java byte code. They specify the byte code in such a way that they can handle the primitive data directly and also specifies the data structure clearly. This helps to apply optimization for dynamic-typed language to java.

10) Vipul Narayan and his time discussed about the implementing web page by java thread. They showed a new

programming language version called XTRAITJ which has been launched. This uses threads and improves the efficiency and performance. We can also use java applets and Servlets. This is three tier architecture. This version of programming language removes the problem of using single class and can extend the class more than one in same java environment.

3. Future work

By implementing the different techniques discussed in our paper such as of Data mining, Artificial Intelligence, Network Security, the user friendly and most efficient Online Java Compiler can be developed and implemented realistically.

4. Conclusion

As the world is developing, we have to be most specific with our approach to get over the line. There are thousands of compilers available in the market. To stand in front of all those,

our compiler should be user friendly and specific towards the approach. The online java compiler would be useful to the users whoever not having the java specific toolkit to execute their codes. Here the user is connected to the server which is having the inbuilt java compiler and the security editor so that the compiled code can be encrypted and decrypted using the inbuilt algorithms.

References

- [1] Edward Raff, "JSAT: Java Statistical Analysis Tool, a Library for Machine Learning." 18(23):1-5, 2017.
- [2] Murli Manohar, Pushpesh Kumar, Rachapudi Sachith, Umang Mohan Sharma, Mysore Jayakrishna, "Android Java Compiler Using Cloud," in International Research Journal of Engineering and Technology, vol. 4, no. 5, pp. 378-381, May 2017.
- [3] Shubham Chourasiya, Sneha Gadhave, Renuka Kulthe, Tushar Bhatt, Sunita Patil, "Online Java Compiler with Security Editor," in International Research Journal of Engineering and Technology, vol. 4, no. 2, 1331-1337, February 2017.