International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395-0056
Volume: 07 Issue: 01 | Jan 2020 www.irjet.net p-ISSN: 2395-0072

ONLINE COMPILER FOR COMPUTER LANGUAGES WITH SECURITY EDITOR

Shradhda Chopkar[1], Pooja Gaidhane[2], Mayuri kalbande[3], Rina Gajbhiye[4], Swati Kolhe[5], Omkar Dudhbure[6]

[1,2,3,4,5]BE Students, Department of Computer Engineering
Manoharbhai Patel Institute of Engineering and Technology, Bhandara, India
[6]Assistant Professor, Department of Computer Engineering
Manoharbhai Patel Institute of Engineering and Technology, Bhandara, India

---

Abstract - *Today's world is work on Internet, in this web world every one of the thing are on the web. We can develop software as a service like online compiler for the execution of the programming languages. This service we can provide to easily solved or write various languages programs , compile and find the errors in online. We can provide four language compiler such as C, C++, Java, Python. This compiler is based on cloud computing with network security by using MD5 algorithm. We can reduce the storage of memory and centralized compiler using cloud computing. It help to save the time, storage using this concept. So that it is very useful tool to compile the code, remove the errors and debug it. User wants to execute programs easily , so we can provide three different language compiler namely C, C++, Java, Python compiler. This compiler can provide online compiler service, so we does not need to install separate compiler on each PC. Using this application we can practice our practical online in less time. Also we can conduct online practical examination. We can provide both services web based as well as android application. So that we can used this application any where, means that it also provide portability with the devices like mobile phone.*

Key Words: **Compilers, Cloud Computing, C, C++, Java, Python, Security with MD5 algorithm.**

1. INTRODUCTION

As we know compiler can be used to execute the programs and get the specific output. Compiler plays an most important role in our computer programming languages. Without compiler we can not perform the operation for the output. So that purpose we can provide service online compiler to execute the programs and get the specific output. We can provide online compiler for three languages namely, C. C++, Java, Python . This online compiler secure and safe. Using this compiler we can conduct practical examinations for students in college. Also we can use this online compiler any where in our mobile . An online compiler which lets you compile your code and save them. A user can make an account in this website and save different files in his account that can be accessed any time. The user will set his/her username and password so that user can login anytime. The programming languages that can be compiled are C, C++, Java and Python. When a user creates a new file, after selecting the programming language the page with the text editor opens and he/she can type the code in. Then the user can compile and run the code and also can provide the custom input. The errors will be displayed on the output if present. User can also see his/her profile by clicking 'Edit Profile' button under Profile section on the nav-bar and see/edit his/her name, username, password. Files are shown based on the selected programming language. There is also a feedback system in which user can give feedback regarding a particular topic. This online compiler is based on cloud computing. So that no more space can be consume for storage purpose. The cloud computing model allows access to information and computer resources from any place that a network connection is usable. The cloud computing supports a various resources, including information processing area , web, computer processing power , and particular corporate and end user purpose. Using this online compiler we does not need to install any compiler in our PC or mobile . We does not need to install jdk for compilation of java programs. We can directly open this online compiler , write program and then execute. If there will be any errors occur then it gives error otherwise it compile our program and gives specific output.

1.1 Related Work

Paper [1] proposed that, they are present a secure compilation scheme to compile associate object-based problem-oriented language to low-level machine language. The abstraction can be accomplished by wishing on a fine-grained program counter-based operation protection scheme , that is an element of our low-level target language. We can discuss why customary compilers fail to supply full abstraction and introduce enhancements required to realize this goal.

We can prove that our increased compilation theme provides abstraction from our high-level linguistic communication to our low-level target language. We having a propensity to show by suggests that of a model implementation that our low-level language with fine-grained memory access management will be accomplished with efficiency on trendy commodity platforms.

Paper [2] proposed that, computing model is for enabling convenient moreover as on-demand network access to a shared pool of configurable computing resources that may be quickly provisioned and free with minimum management efforts. In today's world wide use of net. In this net world all the items are on-line. So we having a tendency to produce code on-line compiler. The main aim of this project is that we are able to simply write program and compile and debug it in on-line. We having a propensity to compare three on-line compilers, namely, Online C, C++ compiler mistreatment cloud computing that reduces the matter of mobility and space for storage by creating the application of cloud computing, centralized c# compiler mistreatment cloud computing that facilitate to reduces drawback of your time, cost, storage space by mistreatment cloud computing idea, on-line java compiler based on cloud computing, that provides most convenient tool to compile code and take away the errors.

Paper[3] proposed that, this paper presents a web-based automatic evaluation system for Java programming assignments, and reports analysis results in associate actual programming course. The compiler receives Java application programs submitted by students and returns the result.

Paper[4] proposed that , is additionally accommodated clients who do not utilize Android gadgets that gotten to using a program on a PC or smart gadget. It has a limited number of compiler time and no execution for Graphical User Interface programs. This paper introduces C/C++, Java compilers which make easy to compile and execute programs anytime anywhere on android smartphone.

Paper[5] proposed that, in this project they have three online compilers namely, Online C, C++, Java and perl compiler. This project based on cloud computing, means it reduce the space to storing of programs. In this paper only three languages can be execute. We can propose the online compiler for four languages namely C, C++, Java and Python with network security.

2. Proposed System

The Proposed system is intended to eliminate the issues with the existing system. The most important aim of this project we will simply write down a C, C++, Java and Python program and compile it and rectify in online. The system will provide feedback form also. The user will give their feedback about any difficulties or any suggestion they have. In this system we can save our programs with respective languages. We will use this system at any time any where with login by giving username and password.

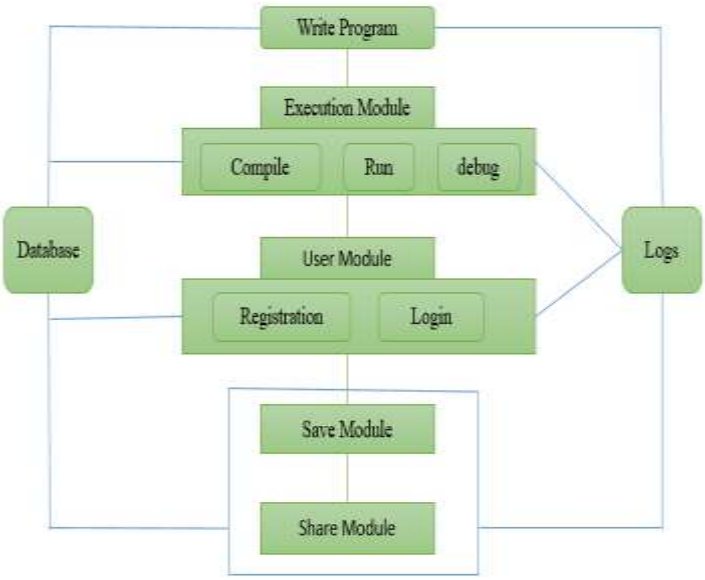

Fig -1: System Architecture

3. CONCLUSION

The proposed online compilers can be used to compile the programs online for programming languages. The Users can compile four different programming languages namely, C, C++, Java and Python. They can used this single platform and then selecting languages compile the programs . It gives the users a convenient way to implement their code in this application. All the functionalities are implemented based on the user requirements. Online Compilers makes a compilation of the program easier and secure.

REFERENCES

[1] S. Chourasiya, S. Gadhave, R. Kuthe, T. Bhatt, Prof. S. Patil, "online java compiler with security editor" ambi, Pune, Maharastra, India. Feb- 2017.

[2] Chandra, S., V., Charan, D., K. and Rani,.S., P. Online C, C++ & Java Compilers Using Cloud Computing, International Journal of Computer Science and Mobile Computing, 4(8),2015, pp. 348–355.

[3] Priyadarashani doke, Surabhi Shingote, Sneha Kalbhor, Anumeha Singh, Heena Yeole, ONLINE C, C++,JAVA COMPILER USING CLOUD COMPUTING - A SURVEY, International Journal of Advances in Engineering Science and Technology 318 ISSN: 2319-1120.

[4]Mohammed, T.Y., and Hamada, M. A cloud-based Java compiler for smart devices. Proceeding ITHET Conference in Information Technology Based Higher Education and Training, 2016, pp. 1-6.

[5] Mayank Patel, "Online Java Compiler Using Cloud Computing", International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-2, Issue-2, Janusary, 2013.

[6]Manjula S.D., MS. Aishwarya, MS. Ashma Banu, MS. Shahwez Anjum, MS. Shruthi M.K,"Online Compiler Using Cloud Computing" Project reference no. : 39S-BE-1766, Proudhadev Araya Institute of Technology, Hospet.

[7]L. Yu, C. Kong, L. Xu, J. Zhao and H. Zhang, "Mining Bug Classifier and Debug Strategy Association Rules for Web-Based Applications," in 08 Proceedings of the 4th international conference on Advanced Data Mining and Applications , 2008

[8] O. B. Michael and G. C. Robin, "A Bug You Like: A Framework for Automated Assignment of Bugs.," IEEE 17th international conference, 2009.

[9] S. Diehl, H. C. Gall and A. E. Hassan, "Special issue on mining software repositories," in Empirical Software Engineering an International Journal © Springer .Science+Business Media, 2009.