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Compiler and Tester

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Abstract: Writing a code for software is getting easier day by day. New programming languages are being developed to let developers easily build apps for the customer in a easy way and let them provide the all the specifications or the needs given by the customer without any hassle the biggest example of this is python it is develop to be language uses function named same as English language which would help others to understand this language easily. But for doing such hardcore coding we need our base proper that is the developer's basics should be clear he should know the basic of programming such as if-else, functions, class. So, this software is basically for the new developers learning the programming to let them understand programming in a better way. The basic programming languages which are C, C++, Java are the core of programming if a person knows these languages well then, he can learn any other easily and the compiler of these languages don't show the exact error when it occurs so this software helps to clearly identify the error and understand the reason to not to repeat

Keywords: C, C++, Python, Functions, Class

I. INTRODUCTION

Compiler is word used in computer sector for a software that converts human specific or human readable code or computer understandable algorithms to convert them in such a way that it can be understood to the computer as the computer only understand Boolean(0,1) language so the whole human readable format is converted to a computer readable format the software i.e. thee compiler is different for different languages such as python has python interpreter, java has java virtual machine and android has dalvik virtual machine these convert the code into a format readable by the computer and it executes them according to the sequence supplied by the programmer.

Program functionality and efficiency can be checked by comparing the output of the program with the sample output and resources utilized. [2]. The current situation in programming is that it is getting easier and easier day by day for the experience programmers due to the development of Frameworks and examples of other typical layers, including a data tier to test data integrity and web services tier to test API responses between systems [3]. But it is difficult for the new generation who want to be a programmer but not able to understand the languages easily because of loss of core in programming.

There is need to develop the core of the new programmers so that they can also contribute to the world. The software Uses the basic regular expression of JavaScript and the split function available in java script. It divides the code written in the form of and array and the dividing parameter being the new line. It checks the first two or three words of the line provided and matches with the code or the options provided if it matches then it enters the required function and checks the code according to the conditions provided if there is any mismatch in the code which is detected by the conditions written then it directly shows the specific alert related to it. Here alert is a function of java script which is use to show errors or a situation or a warning to the user.

It is basically written in Java Script and runs on any browser (preferably chrome). The reason of choosing Java Script is regular expression support and the code of it can be run anywhere i.e. any OS and, on any configuration, specifically targeting low configuration. The biggest reason is no need of any installation directly code can be copied and run without any installation or anything. The code may consist of many lines of code say 1000 or 200 but it won't affect the software in any way and in any configuration.

II. PROBLEM STATEMENT

- Needs Some knowledge of programming
- Preferably needed chrome browser
- Need to copy and paste the code no attachment is allowed



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III. PROPOSED METHODOLOGY

The system helps the new and existing programmers to know the errors of the code in their which is not easily explained by the compiler of the system. This enhances the code and makes it easier to remove errors from the code to make a quality software for the customers and apply all the functions i.e. to implement all the functions which are possible to implement to make it more user friendly. But for doing such hardcore coding we need our base proper that is the developer's basics should be clear he should know the basic of programming such as if-else, functions, class. So, this software is basically for the new developers learning the programming to let them understand programming in a better way.

The software Uses the basic regular expression of JavaScript and the split function available in java script. It divides the code written in the form of and array and the dividing parameter being the new line. It checks the first two or three words of the line provided and matches with the code or the options provided if it matches then it enters the required function and checks the code according to the conditions provided if there is any mismatch in the code which is detected by the conditions written then it directly shows the specific alert related to it. Here alert is a function of java script which is use to show errors or a situation or a warning to the user.



Fig.1 Use Case Diagram for the Software

Testing is a critically important verification method it helps us to confirm that the software developed is a error or bug free this helps us to get full rating or get good customer feedback so this software can be used confirm if there is any bug or not easily using coping the code in the input box and correcting it and delivering a bug free software. The feature of this that of it can be run anywhere i.e. any OS and, on any configuration, specifically targeting low configuration. The biggest reason is no need of any installation directly code can be copied and run without any installation or anything. The code may consist of many lines of code say 1000 or 200 but it won't affect the software in any way and in any configuration.

IV. ADVANTAGES

Ease of use – For the user they are simple and easy to use.
No installation – Can be run directly just by double clicking the index file.
Any Configuration – No need to check PC configuration.
Highly interactive -- Shows and points the errors specifically and it is easily understandable.

V. DISADAVANTAGES

No attachment – Need to copy the code dragging is not allowed **Not fully confident** – Only 70 to 80 % errors can be resolved **Less number of languages** – Only 3 languages are there



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VI. CONCLUSION

Now Writing and correcting code is an easy task to do we can get the exact error and learn for it to not to repeat this error again and develop and learn both side by side. The use of javascript lets us to take and run code any and everywhere. The main objective is to help programmers to detect their errors in an easy way to develop a fully qualified and functional software from the consumers [1].

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REFERENCES

- [2]. https://sites.google.com/site/automatedprogrammingtool/requirements-analysis/functional-requirements
- [3]. N-tiered Test Automation System for Agile (2014)

^{[1].} https://www.oreilly.com/library/view/common-system-and/9780133748703/ch04.html