

# Editor For Java Programming Language

Ms. Akanksha Mane<sup>1</sup>, Ms. Supriya Biswas<sup>2</sup>, Prof. S. D. Pandhare<sup>3</sup>

<sup>1,2</sup> Dept of Computer Engineering

<sup>3</sup>Assistant Professor, Dept of Computer Engineering

<sup>1,2,3</sup> Sahakar maharshi Shankarrao Mohite Patil Institute  
of Technology and Research, Akluj, Solapur, Maharashtra, (India)

**Abstract-** Java Editor is the easy-to-use its miles advanced with many effective functions to enhance your productiveness and programming capability. Ideal for each the amateur and greater skilled programmer. The purpose of the proposed mechanism is to supplied ease of writing, compiling, and running program. The environments of the software program are consumer pleasant so consumer can effortlessly have interaction and cope with the machine. We are offering most useful functions like create, edit, complier, debug. Write, Run & Share Java code is one of the sturdy and wealthy functions of compilers for Java language. Getting commenced with Java editor is simple and fast. The editor suggests pattern code while you pick out applet or utility or servlet or JDBC packages to get commenced. This utility is not anything however mixture of notepad and Command Prompt. The prolonged technique our utility saves all times, right here consumer simply want to create new record store it and execute it via way of process of clicking on run button. This is the very best method of programming usually for freshers. The utility essential functions are providing workspace to get into, execute and construct the supply code.

**Keywords-** Compiling program, java,workspace, Implement

## I. INTRODUCTION

IDEs commonly offer a code editor, a compiler or translator and a debugger that the developer accesses through integrated graphical consumer interface (GUI) Java is general-purpose. Simultaneous class-primarily based totally, object-orientated programming language, this is particularly aimed to have as few implementation dependencies as possible. This is meant to allow utility builders "write once, run anywhere" (WORA), that indicates that code that runs on one platform does now no longer want to be recompiled to run on another JAVA is a gadget independent and running device independent language. A software system written in JAVA may be run on any appliance or in any platform supplied the translator of that platform. A Java IDE (for Integrated Development Environment) is a software program utility which allows customers to add-on without problems write and debug Java programs. Many IDEs offer functions like syntax highlighting and code completion, which assist the consumer

to code extra without difficulties. Java is an Object-Oriented Programming Language. The supply code documents (documents with a java extension) compiled right into a layout known as byte code .(Documents with a category extension), which could then be achieved with the aid of using a Java translator. This utility may be provided extra capability through create, open, and keep any java document to make our editor gear applied in efficaciously in windows-primarily based systems. Eclipse, a lava-primarily based totally open supply platform that allows the introduction of especially custom designed IDEs from plug-in additives constructed with the aid of using Eclipse members.

The platform is consumer-pleasant for novices and appropriate for the introduction of extra state-of-the-art applications. Eclipse consists of a lot of plug ins that permit builders to increase and look at code written in different languages. IntelliJ IDEA, a business Java IDE with a loose and open-supply network version. The light-weight IDE gives JUnit and TestNG, code completion, help for a couple of refactoring's. Maven and Ant construct gear, a visible GUI builder and a code editor for XML in addition to Java. Java is an object-orientated programming language with its run time environment. It is an aggregate of functions of C and C++ with a few vital extra concepts. Java is properly applicable for each standalone and internet utility improvement and is designed to offer answers to maximum of the issues confronted with the aid of using customers of the net era.

## II. LITERATURE REVIEW

In addition to many editors created over the years. A massive quantity of studies has been committed to knowledge effectiveness of editors. We examine some of the literature in this section.

In this paper authors present an Automatic C code generator which generates the syntactically correct code in C language, which is used for the performance evaluation and analysis of parallel programs. In recent research scenario it is observed that on parallel processing and compilation the automatic source code generation is essential which generates benchmark programs to check the practical performance of

variety of parallel compilation algorithms. An automatic source code generator tools generate the source code from given specifications. These tools can be implemented by using various methods like model-based code generation, simulation-model.[1]

In this paper the authors have explored the emergence of Unified Modeling Language (UML) as a standard for modeling systems which has encouraged the use of automated software tools that facilitate the development process from system analysis through coding. In the proposed approach, the UML class diagram is used to generate XML schema and generated XML schema is used for code generation. The system is implemented for XML Schema generation using .NET platform. An open-source tool named JIBX which is developed by IBM is used for code generation.[2]

In this paper, the authors have described a software architecture supporting code generation from within Ptolemy II. Ptolemy II, a component-based design tool, is intended for embedded and real-time system design. The proposed infrastructure provides a platform for experimentation with synthesis of embedded software or hardware designs from high-level, Java-based specifications. A specification to be given consists of a set of interconnected actors whose functionality is defined in Java. The infrastructure parses the existing Java code for the actors and presents a simple API, using the Visitor pattern (UML) which will be transformed into the Abstract Syntax Tree (AST) and this AST will be used for writing code transformers and backend code generators. A code transformer performs generic optimizations, such as specialization of polymorphic data types, and domain-particular optimizations, such as static buffer allocation for communication between dataflow actors. The back end Java code which is converted from AST.[3]

In this paper authors have proposed an approach to code generation from UML diagrams with focus on the UML sequence diagram as the model. The conversion of UML diagram to XMI is done with help of some pre-existing tool. The meta-components like class, attributes and methods are mined from the XMI file. After extraction of Meta information java files are generated having code which is consistent and redundancy free code equivalent to the given sequence diagram.[4]

In this paper authors have proposed an approach to code generation from UML diagrams with focus on the UML sequence diagram as the model. The alteration of UML diagram to XMI is done with help of a variety of pre-existing tool. The meta-elements like class, attributes and methods are

extracted from the XMI file. After extraction of meta information java files are generated having code which is consistent and redundancy free code equivalent to the given sequence diagram.[5]

### III. EXISTING SYSTEM

Java integrated development environments, or Java IDEs, are software platforms that provide programmers and developers with a comprehensive set of tools for software development in a single product, specifically in the Java programming language. Java IDEs are built to work with specific application platforms and remove barriers involved in the lifecycle of software development. Java IDEs are used by development teams to develop new software, apps, web pages, and services, delivering a single tool with all the features needed to accomplish these tasks and removing the need for integrations. Java IDEs are used to program code for a particular stage or platforms and have integrated features specifically designed for use within these platforms including capabilities to compile, debug, or intelligently complete code routinely.

**Visual Studio:** Microsoft Visual Studio is an integrated development environment (IDE) for creating console and graphical user interface applications along with Windows Forms or WPF applications, web sites, web applications, and web services.

**IntelliJ IDEA:** Jet Brains IntelliJ IDEA is a efficient and ergonomic IDE for web, project, and mobile Java development. It provides high-class support and productivity boosts for enterprise, mobile and web development in Java, Scala and Groovy, with all the latest technologies and frameworks supported out of the box.

**XCode:** XCode6 introduces a essentially new way to design and build software. Swift is an innovative new programming language for Cocoa and Cocoa Touch and, when combined with XCode tools, makes programming a delightfully live understanding. Live rendering within Interface Builder displays your hand-written UI code within the design canvas, instantly reflecting changes you type in code.

**Eclipse:** The Eclipse Foundation offers global community of individuals and organizations with a mature, scalable, and enterprise-responsive environment for open-source software alliance and modernization.

**NetBeans:** NetBeans IDE. The Smarter and Faster Way to Code. Quickly and easily develop desktop, mobile and web applications with Java, PHP, C/C++ and more. NetBeans IDE

is Available, open source, and has a worldwide community of users and developers.

**AWS Cloud9:** AWS Cloud9 is a cloud-based integrated development environment (IDE) that lets you write, run, and debug your code with just a browser

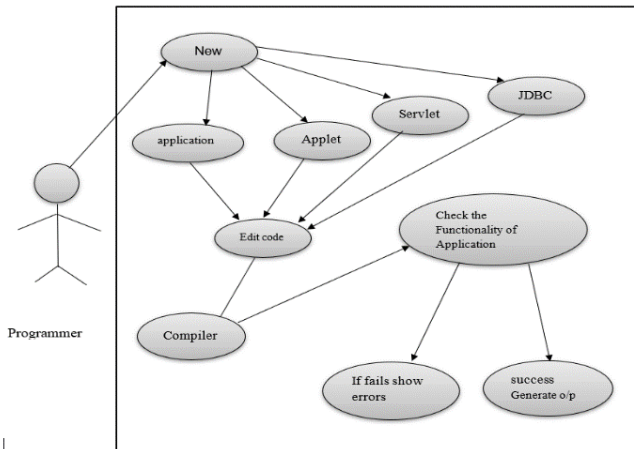


Fig: Flow diagram

**Oracle JDeveloper:** Oracle JDeveloper is a free integrated development environment that simplifies the development of Java-based SOA and Java EE applications. JDeveloper offers complete end-to-end development to Oracle Fusion Middleware and Oracle Fusion Applications with support for the full development life cycle.

#### IV. PROPOSED SYSTEM

In Java applications, the elements that comprise a GUI (Graphical User Interface) are stored in containers called forms.

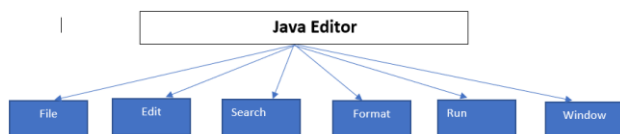


Figure 1: Component of editor

The Java language provides a set of user interface components from which GUI structures can be built. In addition, the IDE gives support for the Beans Binding specification which provides a way to coordinate the values of different bean properties.

This support also simplifies the creation of desktop database applications. The GUI Builder is a tool for designing GUIs visually. As you create and modify your GUI, the IDE necessarily generates the Java code to implement the interface.

GUI forms are indicated by form nodes in the Projects, Files, and Favorites windows.

In this our application We provide all the services to the user which are needed to create, Compile and Execute a java program.

Services are:

**File:** In this section new (used to create a new file.), Open (used to open anpreviously existing file.), rename, save, save as, close (used to close the currently active file), exit this option are available for user.

**Edit:** Cut (used to cut the text from the text area), Paste (used to paste the text to the text area), Undo (used to perform the undo operation), undo, clear, Select all.

**Search:** find (user can search a word /letter within the page), Find next.

**Format:** Font and Color.

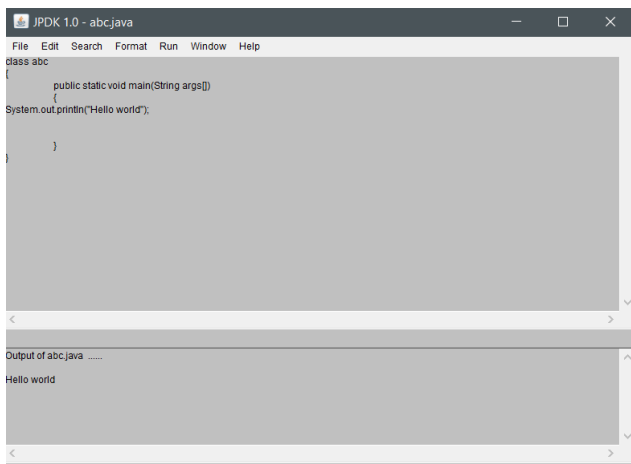
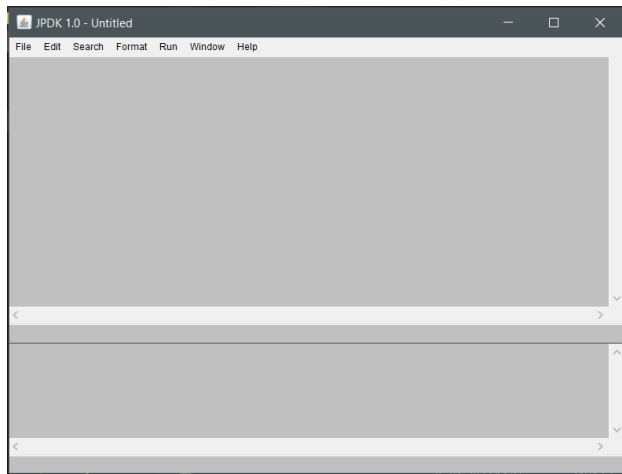
**RUN:** In java programming language the java translator produces machine code in the form the bytecode and run the program (as application, applet, servlet).

The above figure shows how programmer/ User create program, what are the options are available such as application, applet, servlet, jdbc .After editing code user can compile and execute program if any error is present then it displayed on the output window and if code is correct then it shows the output as per user request.

PROS

1. Platform Independent.
2. Simpler and convenient to use.
3. Obtain less space.

**Proposed System output**



## V. CONCLUSION

Through this application users are surely going to have a good experience and henceforth a lot of Coding and Compiling problems are going to be solved. Also, there is still a lot to improve in this application in future, but for the current basic needs, this application is enough. This application also provide compiler and interpreter and an output window with given coding workspace. This application also provide the standard code for (application, applet, frame, servlet, and database) so the programmer's time will reduce automatically

## REFERENCES

- [1] P. M. ee, S. Santra, S. Bhowmick, A. Paul, P. Chatterjee and A. Deyasi, "Development of GUI for Text-to-Speech Recognition using Natural Language Processing," 2018 2nd International Conference on Electronics, Materials Engineering & Nano-Technology (IEMENTech), Kolkata, pp. 1-4, 2018.
- [2] "Automated Syntax testing using JSynTest " at <http://www.mmsindia.com/JSynTest-overview.pdf>

- [3] " Introduction to JTestCase " at <http://jtestcase.sourceforge.net/introduction.html>.
- [4] Shufen Zhang Shuai Zhang Xuebin Chen Shangzhuo , —Analysis and Research of Cloud Computing System Instancel, Future Networks, 2010.ICFN '10. Second Internation execute the program and its instructions.
- [5] Grobauer, B. Walloschek, T. Stocker, E., "Understanding Cloud Computing Vulnerabilities", Security & Privacy, IEEE March-April 2011.
- [6] Chunye Gong Jie Liu Qiang Zhang Haitao Chen Zhenghu Gong, "The Characteristics of Cloud Computing", Parallel Processing Workshops (ICPPW), 2010 39th International Seminar.
- [7] Chunye Gong Jie Liu Qiang Zhang Haitao Chen Zhenghu Gong, "The Characteristics of Cloud Computing", Parallel Processing Workshops (ICPPW), 2010 39th International Seminar.
- [8] JunjiePengXuejun Zhang Zhou Lei Bofeng Zhang Wu Zhang Qing Li, "Comparison of Several Cloud Computing Platforms", Information Science and Engineering (ISISE), 2009 Second Global Symposium.
- [9] Shufen Zhang Shuai Zhang Xuebin Chen Shangzhuo , "Analysis and Research of Cloud Computing System Instance", Future Networks, 2010. ICFN '10. Second International Conference.
- [10] G. Campagna, S. Xu, M. Moradshahi, R. Socher, and M. S. Lam, "Genie: A Generator of Natural Language Semantic Syntax analyzer for Virtual Assistant Commands. In Proceedings of the 40th ACM SIGPLAN Conference on Programming Language Design and Implementation" In: PLDI 2019, page 394410, New York, NY, USA, Association for Computing Machinery, 2019.