

Editor for Programming Languages in Android Operating System

Chetana Dhokale¹, Aadira Pillai², Sanhita Divekar³, Samiksha Jagate⁴, Mrs. M.M. Mali⁵

^{1,2,3,4} Student, Dept. of Information Technology, Pimpri Chinchwad Polytechnic, Maharashtra, India

⁵ Student, Dept. of Information Technology, Pimpri Chinchwad Polytechnic, Maharashtra, India

Abstract - Editor for Programming Languages in Android Operating System is the main idea to use this compiler to make compilation in easier way. It is based on Mobile-server architecture. Windows 7 on 64 bit is used for server machine & Android App as the client machine.

Key Words: Easier compilation, Programs editing, Internal program detection.

1. INTRODUCTION

Android based compiler is the main idea to use this compiler to make compilation in easier way. It is based on Client-server architecture. Windows 7 on 64 bit is used for server machine & Android operating system for client system. In this application three editors are included C, C++ & java. There is no need to installation of any s/w for C or C++ language or any command prompt. User can do programming on those three editors. Apache Tomcat server v6.0 is used in this application. GCC compiler is used for C & C++ coding. JDK 1.7 is used for java coding. The editor screen is divided into two parts one for coding and another part for showing error message or output. User can upload & downloads the file. Multiple users can operate or do the coding on this application by using LAN connectivity. Users can easily do the coding and will get the output. This application can be used from anywhere or any system by using WIFI connectivity. It reduces the user time. This application is reliable and very easy to handle.

2. PROPOSED WORK

Software design system at the technical kernel of the software engineering and is applied regardless of the software process model that is used. Beginning one's software requirements have been analysed and modelled, software design.

Is the last software action within the modelling activity and sets the stage for construction (code generation & testing) Design is what virtually every engineer wants to do. Design is a multiuse process in which representation of data , program structure, interface characteristics and procedural detail are synthesized from information requirement..

Design engineering encompasses that set of principles, concept and practices that are used for the development of high quality system or product. Design concept must be understood before the mechanics of design practice are

applied and design practice itself are used for the creation of various representation of software that server as guide for the construction activity that follows.

It is the place where creativity rules - where customer requirement, business needs and technical representation or model of software , not like the analysis model (that focus on describing require data ,function and behaviour, the design model provides detail about data structure , architecture ,interfaces and components that are necessary to implement system .

The goal of design engineering is to produce a model or representation that exhibits firmness, commodity and delight. To accomplish this, a designer must practice diversification and then convergence. Diversification is the acquisition collection of alternative, the raw material of design components, component solution and knowledge, all contained in catalogues, textbooks and the mind. Once this diverse set of information is assembled, the designer must pick and choose elements from the collection that meet the requirements defined by requirement engineering and the analysis model.

System modelling helps the analyst to understand the functionality of the system and the models that are used to communicate with customers. Different models are used to present the system from different perspectives. Systems context or environment are shown by the External perspective. Behaviour of the system is shown by the Behavioural perspective Structural perspective shows the system or data architecture.

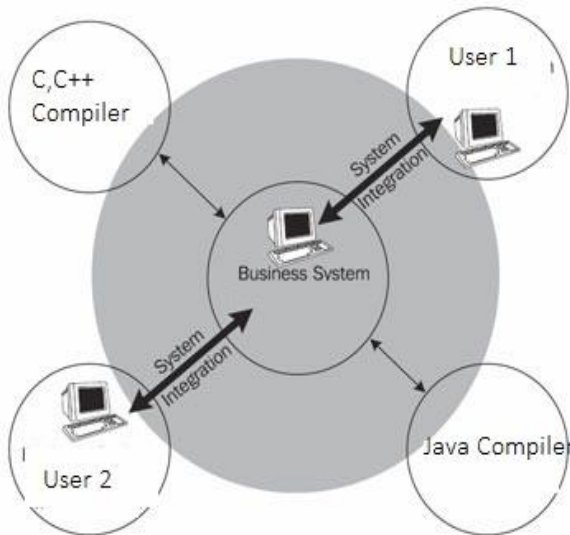
Data processing model shows how the data is processed at different stages.

Composition model shows how entities are composed of other entities and Architectural model shows the principle of sub-systems. Classification model shows how entities have common characteristics. Stimulus/response model shows the systems reaction to events.

Behavioural models are used to describe the overall behaviour of the system. Two types of behavioural model are Data processing models that show how data is processed as it moves through the system; State machine models that show the systems response to events. These models shows different perspectives so that both of them are required to describe the system's behaviour. A Software model for software engineering is chosen based on the nature of

project and application, the models and tools to be used, and controls and deliverables that are required. We have used the "Water fall Model" of software process model. The waterfall mode is also called as Classical life cycle, it suggest a systematic approach to software development. This is the oldest model for software engineering. Linear approach of this model makes systematic and simple. A quality work can be done because of time availability. Every activity is done as per the guidance. Activities are interdependent. Flaws in the software can be easily found out.

- There are four modules of our project:
 1. Operating C, C++ , Java Compiler on Server Side.
 2. Creating Editor
 3. Sending request and getting response from server



3. LITERATURE SURVEY

In this project we define 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 we use wide use of net. During this net world all the items are on-line. So we have a tendency to produce code on-line compiler. This project main aim is we are able to simply write program and compile and debug it in on-line. During this paper, we have a tendency to compare 3 on-line compilers, namely, Online C, C++ compiler mistreatment intranet computing that reduces the matter of mobility and space for storing by creating the utilization of intranet 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 mistreatment cloud computing, that provides most convenient tool to compile code.

4. SYSTEM ARCHITECTURE

It consist the three main operation or process that are input, compilation & displaying output or error message.

Step 1: Firstly start server.

Step 2: Then start wi-fi hotspot from its software i.e. we used MHotspot in our project.

Step 3: Start wi-fi on our android phone and connect to our hotspot.

Step 4: Start our android app i.e. Virtual Editor, Welcome Interface will be opened.

Step 5: Write the code of C,C++ or Java.

Step 6: Click on Compile Code.

Step 7: If there are errors in the code it displays errors and if there are no errors in the code it displays appropriate output.

Step 8: There are other options also like email Text, Search Text, Email as Attachment & Options from which we set Line Wrap, auto Correct, etc. & also change Font, Font size, Font Color etc.

5. HARDWARE AND SOFTWARE REQUIREMENTS

Operating System Server	Windows XP or later for server
Client	Android Mobile
Tools and environment	Apache Tomcat 6,till jdk1.8 and below
User Interface	Android
Code Behind	C, C++, Java

6. SNAPSHOTS



Snapshot1 (Write a Code & Compile Code)



```

/sdcard/demo
class demo
{
public static void
main(String args[])
{
System.out.println("wel-
come");
}
}
    
```

Email Text
 Search Text
 Email as Attachment
 Options

Snapshot2 (Other Options)



```

*/sdcard/demo
Output:welcome
    
```

Snapshot3 (Appropriate Output or Error)

7. CONCLUSIONS

It is the short summery of the application. The web based compiler application is useful for everyone and can be used anywhere. Main idea to use this application is to make the compilation of the proگرامing in easier way. This application is based on intranet connection. Client-server architecture is used in this application.

REFERENCES

- Books
- [1] Java: The Complete edition(seventh Edition) By Herbert Schildt

- [2] Core Java Volume II: Advanced Features by Cay S. Horstmann
- [3] TEXTBOOK OF INTERNET PROGRAMMING & CYBER LAW By Rajeshree R. Khande
- Websites
- [1] General help : www.google.com
- [2] UML Modelling : www.creately.com