New Learning Methodology for Student of Java Programming Language

Tejinder Singh

Research Scholar of Computer Science, JJT University, Jhunjhunu Rajasthan, Department of Computer Science, Lecturer of Baba Farid College, Bathinda (Punjab)

Abstract—This paper is about learning programming rather than professional practice. In order to have a reasonable focus, its scope is limited to learning computer programming, and centrally, coming to understand the concepts of objectoriented programming (OOP) in Java. It is restricted to novices – students with little or no previous experience of programming. This paper is an attempt to study how students learn the Java programming Language and develop secure applications of use it. Student how can find out vulnerability of Java application. In this paper is an attempt to investigate how students learning programming languages and understandings of concepts in 'scientific' disciplines. In order to have a reasonable focus, its scope is limited to learning computer programming, and centrally, coming to understand the concepts of object-oriented programming (OOP) in Java. It is restricted to learners – students with little or no previous experience of programming.

Keywords—Interest, Related Documentation, books and tutorials, Searching Internet

I. INTRODUCTION

Java is an open source programming language. How can learning the Java programming language by nonprogrammable student or person. I have made a structure of Java Learning Language for students. Learning is the lifelong process of transforming information and experience into knowledge, skills, behaviors, and attitudes. Human learning may occur as part of education, personal development, schooling, or training. It may be goal-oriented and may be aided by motivation. The study of how learning occurs is part of Neuropsychology, educational psychology, learning theory, and pedagogy Learning Method is part of any type of subjects. I have been creating sub learning sections. It is following below diagram subsection of Java Learning.

II. JAVA LEARNING METHOD FOR STUDENT

This is the model of the learning Java programming Language for student in easy way, it is following the steps of learning Java programming Language.



Figure 1.1 Java Learning Method for Student

2.1 Interest: Teach the Java Language to Students by Teacher or Guide, when a student Does diligence for study Java, otherwise does not harvest the good result.

2.2 Related Documentation: The prepared collection of records that describe the structure, purpose, operation, maintenance, and data requirements for a Java Programming Language. The Student is studying to find out all areas where Java is used so the collected data if you are interested that particular area. For example Mobile Apps, web apps etc.

2.3 Coaching OR Self-Study: One of the huge questions in front of the students is to decide whether to go for self-study or for coaching. Self-study is a very good option for every student because without self-study it is very difficult to clear any examination. The main reason behind this thinking is coaching also involves a remarkable amount of self-study. A successful self - study may give you an incredible amount of confidence to deal with any kind of subject or course. Some of the preconditions for self-study are:



Figure 1.2 Self-Study Pyramids

Coaching is not a bad idea at all especially for certain demanding subjects. Reason behind this point of view is not only the technicalities involved in the subject but also the need and confidence desired for the future professional working and practical.

2.3 Books and Tutorials: A book that provides instruction in a particular area. Tutorial is a period of intensive tuition given by a tutor to an individual student or to a small group of students and individual instruction Methods of study includes lectures and practical work. For example a program that provides instruction for the use of a system or of software.

2.4 Searching Internet: Today, everybody knows that the Internet offers information and data from many sources worldwide. Today, the Internet offers an extraordinary amount of information—good, bad, and indifferent. Searching the Internet skills will save time and energy in the long run and will assist users in avoiding the tricks of literature, alterations, theatrics, and tilted data. Even though conducting a skillful search may take more time, the results will be well worth it gives youth-serving professional information on the best and most effective programs, strategies, data, and Web sites. Youth-serving professionals need accurate information related to effective programs and other science-based practices, and it is possible to get this information via skillful searches on the Internet.

Neither is it about problem-solving. It is obvious that programming, both by novices and experts, contains some element of problem-solving, whether it is completely advanced or just the recognition of a context and the application of routine techniques. But the focus here is on students coming to understand the introductory concepts of OOP, rather than original uses of them to solve problems.

III. JAVA INTRODUCTION

Java is a programming language created by James Gosling of Sun Microsystems in 1991. The first public available version of Java (Java 1.0) was released 1995. Over time several versions of Java were released which enhanced the language and its libraries. The current version of Java is Java 1.7 also known as Java 7. From the Java programming language the Java platform evolved. The Java platform allows that code is written in other languages then the Java programming language and still runs on the Java virtual machine. The Java programming language consists out of a Java compiler, the Java virtual machine, and the Java class libraries. The Java virtual machine (JVM) is a software implementation of a computer that executes programs like a real machine. The Java compiler translates Java coding into so-called byte-code. The Java virtual machine interprets this byte-code and runs the program. The Java virtual machine is written specifically for a specific operating system. The Java runtime environment (JRE) consists of the JVM and the Java class libraries.

IV. JAVA TOOLS

A **tool** is any item that can be used to achieve a goal, especially one that is not consumed in the process. Informally the word is also used to describe a procedure or process with a specific purpose. The set of tools needed to achieve a goal is **equipment**. The knowledge of constructing, obtaining and using tools is technology.



Fig. 1.3 Java Tools

CONCLUSION

V.

A new structure is designed for student learning java programming language. This structure is followed by some student providing good result. This structure is used for beginner student; in the other hand that new student interacts with programming Language then use to it. I have outlined main programming paradigms, as well as programming techniques and programming languages elaborated within them. Programming techniques of traditional imperative paradigm essentially differ from techniques of nontraditional ones – functional and logic for learning Java programming language. Main paradigms and usual learning of modern programming languages should be complemented by learning of programming paradigms and their base programming techniques.

REFERENCE

- [1]. Programming language trends, 2008, http://www.caffeinatedcoder.com/programming-language-trends/.
- [2]. Machanick, P. A (2007), "Social construction approach to computer science education", Computer Science Education, 2007, 17, pp. 1-20, [Online] Available:http://www.ingentaconnect.com/content/routledg/ncse/2007
- [3]. "Difficulties in Learning and Teaching Programming—Views of Students and Tutors", IAIN MILNE AND GLENN ROWE, Education and Information Technologies 7:1, 55–66, 2002. 2002 Kluwer Academic Publishers. Printed in the Netherlands.
- [4]. "A student Model For Object Oriented Design and Programming", Fang Wei, Sally H. Moritz, Shahida M. Parvez and Glenn D. Blank,2003.
- [5]. "How to teach programming languages to novice students? Lecturing or not?", Ásrún Matthíasdóttir, Gareth Bellaby, Carlton McDonald and Anne Patterson (2003). WHY LECTURE?
- [6]. "A Study of the Difficulties of Novice Programmers", Essi Lahtinen, Kirsti Ala-Mutka, Hannu-Matti Järvinen, ITiCSE'05,June 27–29, 2005, Monte de Caparica, Portugal. 2005 ACM 1-59593-024-8/05/0006
- [7]. "Teaching Programming:Going beyond "Objects First" ", Jorma Sajaniemi and Chenglie Hu, In P. Romero, J. Good, E. Acosta Chaparro & S. Bryant (Eds). Proc. PPIG 18, 18th Workshop of the Psychology of Programming Interest Group, University of Sussex, September 2006.
- [8]. "The Role of Programming paradigms in the First programming Courses", Milena Vujo sevi c-Jani ci c and Du san To si c, The Teaching of Mathematics, 2008, Vol. XI, 2, pp. 63–83
- [9]. "An Exploration of Internal Factors Influencing Student Learning of Programming", Angela Carbone, John Hurst , Ian Mitchell, Dick Gunstone, ACE '09 Proceedings of the Eleventh Australasian Conference on Computing Education - Volume 95 Pages 25-34, 2009.