BSE1202; Principles of Programming I (4CU)

Course Objectives, Upon completion of the course, the student should be able to: (i) Demonstrate mastery of basic programming concepts, like program structure and control, Application Program Interface (API), memory management among others; (ii) Demonstrate sufficient understanding of Java as a programming language; (iii) Develop simple web and stand alone applications in Java; (iv) Work with an Integrate Development Kit like NETBEAN Switch minimal difficulties; and (v) Differentiate the various programming languages (i.e., in terms of their strength and weakness).

CourseContent ThiscourseisanintroductiontotheJavaprogramminglanguage. Thecourse willincludeanintroductiontotheconceptsof objectorientedprogrammingandwillshowhowJava supportsthisprogrammingparadigm.StudentswilllearnabouttheJavaenvironmentandwill write bothapplets (programs thatexecuteinaWeb browser) and applications (standaloneprogram). Inadditiontolearning aboutbasiclanguagestatements,studentswillalsolearnhowJavaprovides supportforsuchdiverseapplicationsasWebpages,multimedia,educational,etc

References

•ConceptsofProgrammingLanguages, byR.W. Sebesta,5thEdition,AddisonWesley,2002.

•ProgammingLanguages: Concepts andConstructs.By R. Sethi,2nd Edition.Addison

Wesley. 1996.

•IntroductiontoJavaProgramming:Comprehensive Version, by Y. Daniel Liang, Prentice

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