



"JAVA Programming "קורס"

כללי

קורס זה נועד לספק לך בסיס איתן בתכנות ,Java ולצייד אותך בכישורים ובידע הדרושים לפיתוח יישומי Java .

קהל יעד:

הקורס מיועד לאנשים בעלי רקע קודם בתכנות .חסרי רקע יידרשו לעבור מכינה בעקרונות התכנות.

מתכונת הקורס: 40 ש"א

נושאי ההכשרה:

Computer structure and Algorithms	Computer structure. Low and high languages, Compiling, running and debugging
The components of JAVA language	language Types in JAVA, variables, assignment and conditional statements
Loop statements	The FOR statement, the WHILE statement, the DO-WHILE statement and casting.
Arrays	Arrays declaration ,multidimensional array
Methods in Java	Principles of procedural programming. Top- down design of a program, modulation, passing parameters to a method, static methods
Sorting and searching algorithms	Selection sort, insertion sort, bubble sort. Searching methods



Recurrence as an alternative to iteration.	
Different kinds of recursion	

	Different kinds of recursion
Recursion	Recursion and arrays Towers of Hanoi problem
Object Oriented Basics	Class definition: attributes and methods, Constructors (copy, default), Setter and Getter methods, references to object, encapsulation.
Inheritance	Creating subclasses, overriding methods, class hierarchies.
Collections ,composite objects, self referential objects	Dynamic data structures: stack, linked lists, two way linked list
Advanced Input /Output: Streams and Files	Basic file manipulations in JAVA