

# Java programming

Technology, Information Technology



of the of the of the Object Oriented Programming Object oriented programming is a programming methodology, where data and its interactions are of central focus rather than processes. This is in marked contrast to procedural programming where program flow is given the central focus. In object -oriented programming, the emphasis is on the data items being manipulated. These data elements are modeled as classes and they are active entities that can manipulate the data contained in themselves and in other classes. Finally, the system behavior is modeled after the interactions of these data items (Farrell 5).

When confronted with a complex programming task, the programmer can make use of object oriented programming methodology to simplify the process. Instead of employing a large number of procedures in the code, the programmer chooses a number of objects and models their behavior, in such a manner that collectively these objects and interactions can cater to the system requirements. In addition, the programmer can now work on modules, which are classes to implement the system design. These can be reused and the standard library offers a vast number of such modules to perform a myriad of tasks (Buyya 166).

Furthermore, the object - oriented programmer can employ inheritance to reuse the code written by him and add elegant features and behavior to an existing class, at the time of adapting it to a new problem (Balagurusamy 5). Features such as encapsulation and abstraction provided by object - oriented programming, greatly enhance the elegance and simplicity of the programming process. Consequently, it becomes easier for the programmer to focus on the actual requirements and work dynamically in teams, without

redundancy (Goodrich and Tamassia 59 - 61).

#### Works Cited

Balagurusamy, E. Programming With Java: A Primer . Tata McGraw - Hill Education, 2006. Print.

Buyya. Object - oriented Programming with Java: Essentials and Applications. Tata McGraw - Hill Education, 2009. Print.

Farrell, Joyce. Java Programming. Cengage Learning, 2013. Print.

Goodrich, Michael T and Roberto Tamassia. Data Structures and Algorithms in Java. John Wiley & Sons, 2008. Print.