

Object-Oriented Programming (OOP)



Document History



Date	Course Version No.	Software Version No.	Developer / SME	Reviewer(s)	Approver	Change Record Remarks
Oct-2008	0.1	NA	Shrilata Tavargeri			Content creation. Inputs from existing material in MS word format and corresponding ppt.
Nov-2008	0.2	NA	Veena Deshpande / Rashmi Bharti			Review
Dec-2008	0.3	NA	CLS team			Review
Jan-2009	1.0	NA	Nilendra Nagwekar			Review
Jul-2009	2.0	NA	Shrilata Tavargeri			Content revamp. Inputs from review team.
May-2011	2.1	NA	Veena Deshpande			Refinements to include contents from WBT slides and review comments of Integration Exercise
Apr-2015	2.2	NA	Kavita Arora	Anjulata	Mahima Sharma	Made changes according to revised TOC

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Apr-2008	2.3	NA	Vaishali Srivastava			Content creation. Inputs from existing material in MS word format and corresponding ppt.

Course Goals and Non Goals



➤ Course Goals

- At the end of this program, participants will gain an understanding of:
 - Principles of Object-Oriented technology
 - Concepts and terminology associated with Object-Oriented technology

➤ Course Non Goals

- This program does not attempt:
 - To explain features of OOP using sample code, or
 - To go into technology specific details.



Pre-requisites



- Fair Knowledge of any programming language

Intended Audience

- Developers in Object-Oriented technology





Day Wise Schedule

➤ Day 1

- Lesson 1: Principles of Object-Oriented Technology
 - What is Object-Oriented Programming
 - Comparing Procedural with OO
 - Why Object-Oriented Programming
 - Features of OOP
 - What is a Class?
 - Class Attribute and Operation
 - What is an Object?
 - Characterization Of Object
 - Object State
 - Object Behaviour
 - Principles Of OOPS

Day Wise Schedule



➤ Day 1

- Lesson 1: Principles of Object-Oriented Technology
 - Concept of Abstraction
 - Concept of Encapsulation
 - Encapsulation versus Abstraction
 - Concept of Modularity
 - Concept of Hierarchy
 - Why Inheritance Hierarchy
 - Types of Inheritance Hierarchy
 - Object Hierarchy
 - A glance at relationships
 - Key Feature – Polymorphism

References



➤ Books:

- Sams Teach Yourself Object Oriented Programming in 21 Days; by Anthony Sintes (Sams Publishing)
- Object-Oriented Software Construction; by Bertrand Meyer, (Prentice-Hall)
- The Object-Oriented Thought Process; by Matt Weisfeld (Sams Publishing)



➤ Websites:

- <http://java.sun.com>
- <http://gd.tuwien.ac.at/languages/c/c++oop-pmueller>

Next Step Courses



- Programming with Object Oriented languages

