

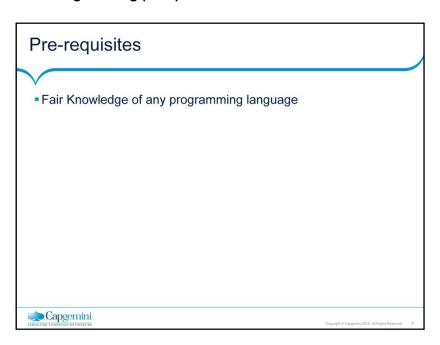
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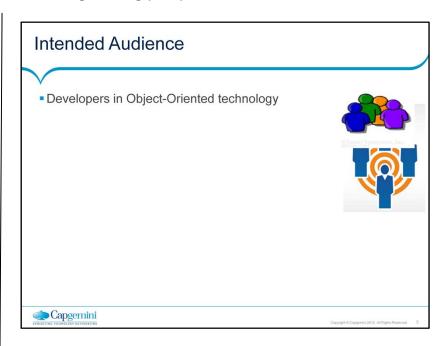
### **Document History** Date Course Software Developer / SME Change Record Remarks Version No. Version No. 06-Oct-2008 0.1D Shrilata Tavargeri Content creation. Inputs from existing material in MS word format and corresponding ppt. Nov-2008 NA Veena Deshpande / Review Rashmi Bharti CLS team 08-Dec-2008 NA Review Jan-2009 NA Nilendra Nagwekar Review 1.0 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 March 2015 2.2 NA Kavita Arora Made changes according to revised TOC Capgemini

### 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.







# Day Wise Schedule

- Day 1
  - Lesson 1: Introduction to Object-Oriented technology
  - Lesson 2: Objects and Classes
  - Lesson 3: Principles in Object-Oriented technology
  - Lesson 4: Some more concepts in OOP



### **Table of Contents**

- Lesson 1: Introduction to Object-Oriented Technology
  - 1.1: Object Oriented concepts
    - 1.1.1: What is Object-Oriented Programming?
    - 1.1.2: Why Object-Oriented Programming?
- Lesson 2: Objects and Classes
  - 2.1: What is an Object?
- (Object State, Object Behavior, Object Identity)
  - 2.2: What is a Class?
  - 2.2.1: Getting into Details
    - (Class Attribute and Operations, Access Modifiers, Constructors and Destructors, Attribute Types)



# Table of Contents (contd.)

- Lesson 3: Principles in Object-Oriented Technology
  - 3.1: Object-Oriented Principles
    - 3.1.1: Abstraction
    - 3.1.2: Encapsulation
    - 3.1.3: Modularity
    - 3.1.4: Hierarchy
  - 3.2: Polymorphism



# Table of Contents (contd.)

- Lesson 4: Some More Concepts in OOP
  - 4.1: Static Members
  - 4.2: Abstract Class
  - 4.3: Interface
  - 4.4: Packages



## 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

