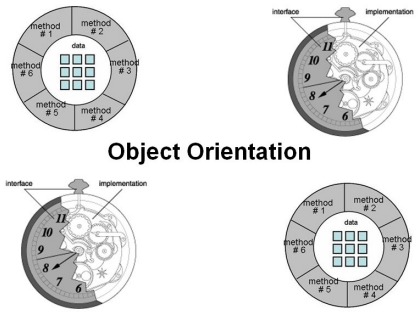
Object Orientation

Duration: 1 day Price: € 699

Open Schedule



Audience Object Orientation Course

The course Object Orientation is intended for individuals who want to become familiar with the basic concepts of object-oriented system development.

Prerequisites Course Object Orientation

To join the course Object Orientation no specific skills or knowledge is required. General knowledge of system design is helpful to a proper understanding.

Realization Training Object Orientation

The theory is treated on the basis of presentation slides. Demos and exercises are used to illustrate the theory. The course material is in English. The course times are from 9.30 up and to 16.30.

Certification Object Orientation

Participants receive an official certificate Object Orientation after successful completion of the course.

Content Course Object Orientation

In the course Object Orientation the fundamental concepts behind object oriented design and programming are discussed. Almost all modern programming languages support object orientation and for a good reason. Object orientation provides software that is more maintainable, is more suitable for reuse and is more in line with the real world.

Intro Object Orientation

The course starts with an introduction that explains how object orientation originated. Attention is paid to the software crisis and how you can regard objects as both domain and program concepts.

Classes and Objects

Next the characteristics of classes and objects are discussed. The course then covers what classes are and how objects can be instantiated. Also treated is how the responsibility for data storage and processing can be assigned to classes by means of attributes and methods.

Object Oriented Concepts

Then well known object oriented concepts such as encapsulation, inheritance, polymorphism, interfaces and abstract classes are explained and demonstrated. The relationships that can exist between classes, such as association, aggregation and composition, are also treated.

Object Oriented Modeling

Finally attention is paid to the standard methods and techniques of object oriented system design and modeling with UML.

SpiralTrain BV
Standerdmolen 10, 2e verdieping
3995 AA Houten

info@spiraltrain.nl
www.spiraltrain.nl
Tel.: +31 (0) 30 – 737 0661

Locations
Houten, Amsterdam, Rotterdam, Eindhoven, Zwolle, Online

Modules Course Object Orientation

Module 1 : Intro Object Orientation	Module 2 : Classes and Objects	Module 3 : Object Oriented Concepts
Characteristics of Software	Abstraction in Object Orientation	Object Orientated Concepts
Software Crisis	Procedural versus OO View	Other Key Concepts
Object Oriented Paradigm	Objects	Encapsulation
Object Orientation in Software Process	Classes	Access Control
Domain Analysis	Instance variables	Class Fields and Methods
Requirements Gathering	Methods and Operations	Inheritance
Use Case Analysis	Class or Instance?	Inheritance Hierarchy
Use Case Diagrams	Identifying Classes	Is a rule
Object Orientation in Software Design	Identifying Attributes	Method Overloading
Objects as Domain Concepts	Assign Responsibilities to Classes	Method Overriding
Objects as Program Concepts	Identifying Operations	Polymorphism
Reusability	Prototyping on paper	Polymorphism Example
Object Oriented Programming Paradigm	CRC Cards	Abstract Classes
Unstructured Programming	Constructors	Interfaces
Procedural Programming	Creating Objects	Interface Implementation
Object Oriented Programming	Using Objects	Dynamic Binding

Module 4 : Object Oriented Modeling
Object Oriented Modeling with UML
UML Diagrams and Views
Static Modeling
Class Diagram
Generalizations
Avoid Unnecessary Generalizations
Associations
Identifying Associations
Aggregation
Composition
Object Diagrams
Associations versus Generalizations
Interfaces
Dynamic Modeling
Interaction Diagrams
Sequence Diagrams

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