

Module Title : Course ASOOAD : Architecting Software with Object Oriented Analysis & Design using UML
Duration : 3 days

Course Description

Simplifying the software development process will contribute significantly towards successful software development. One of the fundamentals to a sound design in software development is the appropriate adoption and employment of Object Oriented (OO) technology that will contribute to a much more accurate outcome with better quality attributes, robustness and on-time delivery, all crucial factors for successful software development projects. This translates for the business better planning and utilization of resources, customer satisfaction, competitive edge and timely return on investment.

This course is specially designed and formulated from the Software Architect's perspective regardless of the environment, tools, technology and platforms used. It covers the software modelling techniques using Object Oriented Analysis and Design (OOAD) and simplifying the software development process by leveraging on the shared common components. Participants will also learn to apply the proven practical ways in designing a software solution based on the Business Requirements Architecture and the basic concepts of architecting software with its proven methodologies that will be extensively covered in the course deliveries.

This course includes workshops with end to end business scenarios using a single case study which will expose participants with the practical concept and approach in architecting software at each stage of the software development life-cycle. It also focuses on the adoption of the modeling techniques in architecting software based on UML diagrams. Comprising of 75% practical hands-on sessions and 25% class presentations, this intensive course will equip and reinforce participants with clear understanding of software development fundamental.

*****Certificate of Fundamental Understanding in Architecting Software Using Object Oriented Analysis & Design will be awarded upon successfully passing the exam***

Audience

Anyone who involved in the software development lifecycle – from gathering user requirement, system design, software development, implementation to testing.

- IT/Project Managers
- Business Analysts/ System Analysts
- Technical/Solution/Software Architects
- Software Quality Assurance/Testers
- Software Engineers
- Analyst Programmers
- Database Administrators
- Software/ Web/ Application Developers

At Course Completion

- To achieve maintainable IT System by applying software development best practices.
- To make fully traceable and testable IT System and reduce Software errors and bugs making it a more robust system.
- To enhance productivity and quality of the software by promoting Reusable Practices by Component Library sharing and Design Patterns Best Practices.
- To simplify the software development process by leveraging on the shared common components.
- To understand the fundamentals of OOAD's concepts and applications and applying the principal of architecting software correctly.
- To identify the Object Oriented challenges and the context where OOAD can be applied appropriately to achieve successful software project delivery.

Course Outline

1. Architecting Software based on Object Orientation
2. Fundamental Concept of Object-Oriented
3. Software Modeling Techniques using UML:
4. Use Cases Modeling
5. Modeling Activity Diagram
6. Class Responsibility Collaboration
7. Domain Modeling
8. Robustness Analysis
9. Object Interaction Modeling
10. Structural Diagram
11. Beware of Challenges in Architecting Software