

Implementing and Using a Methodology

A 2-day workshop for organizations working to put an IT methodology in place. This workshop provides an understanding of the many aspects of methodologies, their implementation and use. The material covers everything from selecting or creating a methodology to the necessary infrastructure and deployment strategies. It also covers the issues involved in using the methodology in practice and how to get the most leverage and return on investment from it.

The workshop does not deal with any proprietary methodologies or tools, but the knowledge gained will greatly enhance your ability to select and apply these.

Who Should Attend

IT management, project managers, quality management staff, project office staff, methodology users (development staff), methodologists, and project support staff.

Workshop Objectives:

- < Identify the principle aspects of an IT methodology.
- < Describe how a methodology is created.
- < Create your own methodology components.
- < Guide others in the creation and implementation of methodologies.
- < Create an effective infrastructure to support a methodology.
- < Generate consensus and support for a methodology.
- < Get buy-in from your organization for the methodology.
- < Avoid the tool-driven mentality from IT staff.
- < Avoid overwhelming the staff.
- < Maintain development agility and eliminate unnecessary paperwork.
- < Lead the organization through the changes necessary to establish a methodology.

Mastering the Requirements Elicitation

An IIBA-endorsed workshop.

This 3-day workshop is meant to develop interviewing and facilitation skills for requirements gathering, problem solving, process design, or similar activities related to business or system development. The workshop deals specifically with the people aspect of information gathering. There are particular challenges when the required information is distributed among the minds and behaviors of a number of people. This workshop provides some tools, techniques and practices to enable a facilitator to improve the information gathering process, and greatly increase the probability of complete and accurate information in the shortest possible time.

This workshop has a significant "hands-on" component using case studies involving real-life situations. Assignments often use role playing to demonstrate problems and solutions.

Who Should Attend

This workshop will be beneficial for anybody involved in software development, from the business or technical perspective who may be required to direct or participate in any form of requirements gathering process. This includes business SMEs (Subject Matter Experts), business analysts, technical analysts, project managers, and other project stakeholders.

Prerequisites

Attendees should have some understanding of a requirements documenting process and structure, or should have taken *Developing Effective Requirements Specifications*. This will provide a framework for requirements documentation.

Workshop Objectives:

- ▶ Create an effective business/analyst partnership.
- ▶ Plan and set up elicitation sessions and interviews with stakeholders.
- ▶ Elicit requirements from users and other stakeholders using various techniques.
- ▶ Interview individuals with confidence.
- ▶ Execute a successful group session or interview.
- ▶ Deal with many of the problems of information gathering.
- ▶ Deal with many of the problems of group dynamics.
- ▶ Understand how to be a first class facilitator.

Developing Effective Requirements Specifications

A Universal Approach to Business Analysis

A 3-day workshop for business analysts, information systems personnel and project managers. Experienced and novice IT professionals will benefit from this very understandable foundation workshop. The workshop deals with structured analysis techniques that are the basis for all the current methods and tools. This workshop will complement and can be used with all known methodologies. The workshop itself is methodology neutral.

At the end of this workshop, participants will be able to analyze a new or existing system project and develop an effective requirements specification. The latest analysis techniques are combined with effective, proven modeling methods. The workshop focuses on developing complete and accurate requirements in the shortest possible time. The material is based on practical and effective methods that have evolved from many years of experiences with software projects.

The workshop is heavily "hands on" (about 65%). There are no automated tools: All work is simulation of real situations and done in teams relying heavily on group interaction.

Who Should Attend

This seminar is extremely helpful for Business Analysts, Systems Analysts and Designers, Software Engineers, Systems Project Leaders, and also for Systems Users (Subject Matter Experts) who participate in developing requirements specifications.

Workshop Objectives:

- ▶ Create an effective partnership between a business/customer group and the system development group.
- ▶ Effectively fulfil the BA role of "advocate for the user".
- ▶ Use an efficient process and structure for capturing and recording business requirements.
- ▶ Identify scope boundaries and develop a high-level view of a project domain.
- ▶ Create detailed business requirements by analyzing and define the business processes, data and rules.
- ▶ Find the right questions to get the complete requirements.
- ▶ Validate the requirements throughout the process.
- ▶ Create a clear, complete and accurate requirements specification.

Essential Skills for the Business Analyst

Eliciting, Documenting, and Analyzing Requirements

Technique is the very foundation of a good business analyst and this workshop teaches techniques. This workshop will help Business Analysts to analyze, document and propose solutions for large and/or complex business areas and to prepare functional specifications. The analysts will be able to gather requirements and record them QUICKLY, ACCURATELY AND COMPLETELY with a battle-proven process. This workshop will significantly reduce the number of post production errors while enhancing the reliability and maintainability of the delivered application.

This 4-day workshop is designed to move a business analyst from guesswork to actual work. The workshop will promote the use of reusable techniques that will strengthen any organizations requirements gathering process. Effective communication is a crucial topic for nearly all occupations. The ability for the business analyst to communicate with business managers and users to gather, understand and document business requirements across affected business areas is an essential skill that needs to be cultivated. This workshop presents a comprehensive process for systematically developing complete and accurate requirements in the shortest possible time. Industry best practices and structured techniques are combined with effective proven modeling methods throughout the workshop. Participants will apply learned techniques to improve how they elicit, analyze, document and manage the requirements gathering process. Problem solving and critical thinking skills are integrated throughout this highly interactive workshop.

Who Should Attend

This workshop is extremely helpful for systems project leaders, business analysts, systems analysts and designers, software engineers, data administrators and systems users who are involved in the client contact and requirements development process. Any employee whose job performance includes effective communications and problem solving would benefit from this workshop. This would include senior managers, project managers, business domain experts, technical project leads, business analysts, customer support personnel, and all IT personnel.

Workshop Objectives:

- < Establish and realize the ROI for requirements.
- < Create an effective customer-development partnership.
- < Delineate critical success factors.
- < Come to an understanding of human thought processes.
- < Watch yourself think and be able to make adjustments "on the fly" to better give any situation what it most needs.
- < Results orientated with good communication and interpersonal skills.
- < Discover how you currently think, and what skills need improvement to "round out" your thinking repertoire. Discover how to set and manage customers' expectations.
- < Distinguish 'fact' from 'opinion and bias' from 'reason'.
- < Learn to recognize deceptive arguments.
- < Eliminate hostile situations that impede corporate progress.
- < Understand the various methods of gathering information.
- < Identify scope boundaries, and develop a high-level view of a project.
- < Identify the structure of the application area or system under study.
- < Analyze, define, and model the business processes, data, and rules.
- < Use rules and structure to test the results.
- < Create a clear, complete and accurate requirements specification.
- < Understand how the requirements specification components support the design.
- < End to end experience of the project lifecycle.

The 21st Century Business Analyst

(Requirements and Design Management)

This 5-day workshop is intended for those involved in the analysis, design and management of systems projects. Novices to experts will benefit from this workshop. Novices will discover a framework that will enable them to move forward with confidence. The experienced will find a wealth of tips and techniques to add to their toolkit. Experts will recognize the power of the underlying structure that will enable them to enhance their skills and increase their performance.

The strategies demonstrated in this workshop are methodology neutral and will not conflict with any existing methodology or tools. In the absence of existing methodology, the approach can be established as a default methodology. The approach is compatible with the current best practices and philosophies but is primarily based on real world practices and needs.

The workshop provides a process. The purpose of any good process is to add power to your existing skills, not to replace them. Good tools will be easy to use and reduce, not increase the time and effort required to develop effective systems.

The path of the workshop follows a hypothetical life cycle model through the various phases of development of a system. The primary emphasis is on analysis, design, and managing the project. Concepts of good programming and good management are identified and discussed throughout the session. Case studies are used to demonstrate ideas and to enable participants to try out the concepts. The workshop is heavily "hands on" (about 65%). There are no automated tools, all work is simulation of real situations and done in teams relying heavily on group interaction.

It would be unrealistic to try to cover everything needed for a career in systems development so this workshop focuses on overall strategy and a foundation of understanding with sufficient tools and structure to ensure a good start. Every aspect will be identified so that participants understand how it all fits together.

Who Should Attend

This workshop is extremely helpful for systems project leaders, business analysts, systems analysts and designers, software engineers, data administrators and systems users who are involved in the client contact and requirements development process. Any employee whose job performance includes effective communications and problem solving would benefit from this workshop. This would include senior managers, project managers, business domain experts, technical project leads, business analysts, customer support personnel, and all IT personnel.

Workshop Objectives:

- ▶ Prepare for the multiple roles and responsibilities of the emerging BA profession.
- ▶ Identify the end to end life cycle and activities of an IT project.
- ▶ Perform the tasks necessary to get an IT project underway.
- ▶ Carry out the business analysis tasks and create a requirements specification.
- ▶ Effectively plan all or part of a project.
- ▶ Perform system analysis and design a possible solution.
- ▶ Perform basic project management functions for execution and control of the project.

A Universal Approach to Systems Analysis and Design

An IIBA-endorsed workshop.

This is a 5-day workshop for information systems personnel. The workshop deals with structured analysis and design techniques that are the basis for all the current methods and tools. This workshop will complement and support product and tool specific training and can be used with all known methodologies. The workshop itself is methodology neutral.

At the end of this workshop, participants will be able to analyze a new or existing system project and develop a complete and accurate requirements specification in the shortest possible time. Working from the requirements definition, participants will then be able to create a design specification using several design techniques and modeling strategies. The latest analysis techniques are combined with effective, proven modeling methods to handle different design situations and projects. The material is based on practical and effective methods that have evolved from many years of experience with software projects.

The workshop is heavily "hands on" (about 65%). There are no automated tools; all work is simulation of real situations and done in teams relying heavily on group interaction.

Who Should Attend

This workshop is extremely helpful for systems project leaders, systems analysts and designers, software engineers and data administrators who are involved in developing requirements specifications and design specifications.

Workshop Objectives:

- ▶ Identify scope boundaries and develop a high-level view of a project.
- ▶ Identify the structure of the application area or system under study.
- ▶ Analyze, define and model the processes and data.
- ▶ Use rules and structure to test the results.
- ▶ Understand the various methods of gathering information.
- ▶ Create a clear, complete and accurate requirements specification.
- ▶ Understand how the requirements specification components support the design.
- ▶ Understand the design processes that will follow the analysis phase.
- ▶ Segregate the design tasks into the principal design areas.
- ▶ Create an interface design using one of several techniques.
- ▶ Create a process architecture using one of several techniques.
- ▶ Create a data architecture.
- ▶ Understand program structure.
- ▶ Understand data structure.
- ▶ Create a clear, unmistakable design specification.

Mastering Use Case Modeling

This 5-day workshop is designed to introduce and create mastery in the capture of modern software system requirements in a use case model. It capitalizes on best practices while updating them for relevance in the newest system architectures of today. Whether a legacy system is to be refactored, or a greenfield project is being considered, this workshop will create a solid foundation for all those involved in eliciting and documenting the new system.

Explicating the requirements of a new system from the minds of domain experts who can't see "the water they swim in" has become the most treacherous waters to navigate in the whole of the Software Development Life cycle (SDLC). This workshop has the courage to face the greatest development challenges head-on. Its author is both a psychologist and software engineer, and a seasoned veteran in all phases of software development. He knows the frustrations developers experience from inadequate requirements, having dealt with it while working with U.S. Navy, U.S. Air Force, municipalities and Fortune 1000 companies. The event is loaded with lessons from the trenches and is heavily "hands-on" (about 65%), with portions of lecture followed by two levels of workshops designed to help the participants internalize and apply the concepts: Activity Labs and Immersive Learning Labs.

Who Should Attend

This learning event is beneficial for anyone that may be involved in software development, including managers (both business and IT) who may need to direct a requirements analysis effort, office personnel who may need to contribute business expertise, analysts who will need to define and organize the requirements, and developers who will need to construct the system from use case models.

Workshop Objectives:

- < Create mastery in understanding the context within which use cases are utilized.
- < Create mastery in understanding use cases as the epitome of requirements capture.
- < Create mastery in detecting system needs underneath stakeholder requests.
- < Create mastery in the writing of clear, unambiguous use cases.
- < Create wisdom of understanding to know exactly how much detail to include.
- < Create mastery of standardized notation in the drawing of use case diagrams.
- < Catch the feel of an iterative incremental approach to developing system requirements.
- < Learn how to use basic and advanced techniques to refine the use case model.
- < Create the ability to integrate data and process requirements.
- < Create a documentation hierarchy and standards for defining levels of requirements.
- < Gain facility in dealing with change through requirement attributes and traceability.
- < Keep the large picture (SDLC) in mind while working on the details (use cases).
- < Learn to manage system scope amidst changing requirements.

A Universal Approach to Systems Analysis

A Gathering Requirements Workshop

At the end of this 3-day workshop, participants will be able to analyze a new or existing system project and develop a requirements specification. The latest analysis techniques are combined with effective proven modeling methods. The workshop focuses on developing complete and accurate requirements in the shortest possible time. The material is based on practical and effective methods that have evolved from many years of experiences with software projects.

Experienced and novice IS professionals will benefit from this very understandable foundation workshop. The workshop deals with structured analysis techniques that are the basis for all the current methods and tools. This workshop will complement and support product and tool specific training and can be used with all known methodologies. The workshop itself is methodology neutral.

The workshop is heavily "hands on" (about 65%). There are no automated tools, all work is simulation of real situations and done in teams relying heavily on group interaction.

The workshop deals with the analysis phase of a project and shows how to create the right environment for analysis, how to effectively document the findings and how to ask all the right questions.

Who Should Attend

This workshop is extremely helpful for systems project leaders, systems analysts and designers, software engineers, data administrators and systems users who are involved in developing requirements specifications.

Workshop Objectives:

- < Identify scope boundaries and develop a high-level view of a project.
- < Identify the structure of the application area or system under study.
- < Analyze, define and model the processes.
- < Analyze, define and model the data.
- < Use rules and structure to test the results.
- < Understand the various methods of gathering information.
- < Create a clear, complete and accurate requirements specification.
- < Understand how the requirements specification components support the design.
- < Understand the design processes that will follow the analysis phase.

A Universal Approach to Systems Design

This is a 3-day workshop for information systems personnel involved in the design process. Experienced and novice IS professionals will benefit from this very understandable foundation workshop. The workshop deals with structured design techniques that are the basis for all the current methods and tools. This workshop will complement and support product and tool-specific training and can be used with all known methodologies. The workshop itself is methodology neutral.

At the end of this workshop, participants will be able to create a design specification for a system development project. The workshop offers several design techniques and modeling strategies to handle different design situations and projects. The material is based on practical and effective methods that have evolved from many years of experience with software projects.

The workshop is heavily "hands on" (about 65%). There are no automated tools; all work is simulation of real situations and done in teams relying heavily on group interaction.

Who Should Attend

This workshop is extremely helpful for systems project leaders, systems analysts and designers, software engineers, data administrators and systems users who are involved in developing requirements specifications.

Prerequisites

The analysis workshop *A Universal Approach To Systems Analysis* is a prerequisite for this workshop.

Workshop Objectives:

- < Understand the design process and goals.
- < Segregate the design tasks into the principal design areas.
- < Create an interface design using one of several techniques.
- < Create a process architecture using one of several techniques.
- < Create a data architecture.
- < Understand program structure.
- < Understand data structure.
- < Create a clear, unmistakable design specification.
- < Create a test plan from the design specification.

Analysis and Design for Managers and End Users

At the end of this 2-day workshop participants will be able to understand and participate in the analysis and design of a new or existing system project. Participants will also be able to read and understand a requirements specification and have a high-level concept of the system design. The workshop demonstrates the latest techniques combined with effective, proven modeling methods. The workshop shows how complete and accurate specifications are developed in the shortest possible time. The material is based on practical and effective methods that have evolved from many years of experience with software projects.

Managers of IT staff and end users involved in systems requirements will benefit from this very understandable foundation workshop. The workshop is heavily "hands on" (about 65%). There are no automated tools; all work is a simulation of real situations and done in teams relying heavily on group interaction.

Who Should Attend

Managers of IT personnel, end users involved in requirements specification, anyone interested in an overview of the analysis and design process.

Workshop Objectives:

- < Identify scope boundaries and develop a high-level view of a project.
- < Identify the structure of the application area or system under study.
- < Analyze, define and model the processes.
- < Analyze, define and model the data.
- < Use rules and structure to test the results.
- < Understand the various methods of gathering information.
- < Create a clear, complete and accurate requirements specification.
- < Understand how the requirements specification components support the design.
- < Understand the design processes that will follow the analysis phase.

Data Modeling and Warehousing Concepts

This 4-day workshop is designed to introduce and explain the principle concepts of data, data modeling, relational database design and data warehousing concepts. The students will acquire a practical understanding of the approaches, methods and tools of data modeling. The workshop begins with the fundamental principles of modeling using the leading Entity/Relationship Diagramming (ERD) methods. The data model, attributes and refinement, requirements analysis, data warehousing concepts all receive special emphasis.

The workshop is heavily “hands-on” (about 65%), with portions of lecture followed by workshops designed to help the students internalize and apply the concepts.

Who Should Attend

This workshop is beneficial for anybody that may be involved in software development, including managers (both business and IT) who may need to direct a requirements analysis effort, office personnel who may need to contribute business expertise, analysts who will need to define and organize the requirements, and developers who will need to construct the system.

Workshop Objectives:

- < Identify and apply the various elements used for gathering data requirements.
- < Document data requirements using entity relationship diagrams (ERD) with standard notation and add necessary meta-data information.
- < Identify and understand the use of primary and foreign keys and relationships.
- < Learn how to use basic and advanced techniques to refine the data model.
- < Ability to integrate data and process requirements.
- < Identify the uses of data requirements in building application systems, for well-designed interfaces and designing databases.
- < Learn which skills facilitate communication and approaches to organize the data requirements gathering process.

Critical Thinker's ToolKit

Critical thinking is a vital topic for nearly all occupations in today's companies. An organization can collectively "out-think" its competition if its constituents master the thinking tools taught in this workshop. Critical thinking is the very foundation of good problem-solving skills. The American educational system is good at teaching us "what to think", but is woefully remiss on teaching us the correct way to understand and evaluate subject matter ("how to think").

This 3-day workshop is designed to fill that gap and improve the overall thinking skills of each attendee through the "hands-on brain" use of a distilled set of crucial thinking tools. The ToolKit, once learned, can be applied to any subject area. This workshop will be comprised of 1/3 lecture and 2/3 lab exercises.

Who Should Attend

All employees whose job performance includes effective thinking. This would include senior managers, project managers, business domain experts, technical project leads, business analysts, customer support personnel, and all IT personnel. Non-programmers and programmers alike will gain insight into how they and others think, and how thinking translates into successful decisions and actions.

Workshop Objectives:

- < Discover how you currently think, and what skills need improvement to "round out" your thinking repertoire.
- < Watch yourself think and be able to make adjustments "on the fly" to better give any situation what it most needs.
- < Conduct deep analysis of complex situations using proven CIA tactics.
- < Learn and apply the Critical Thinker's ToolKit, which will improve decision making and execution strategy.
- < Distinguish 'fact' from 'opinion and bias' from 'reason'.
- < Learn to recognize deceptive arguments.
- < Evaluate information sources.
- < Conduct deep analysis of complex problem situations using proven CIA tactics.
- < Come to an understanding of human thought processes ... that lead to the actions ... that make up the processes ... that causes work to flow through a company.
- < Gain facility in using matrices to systematically consider every significant aspect of a process or problem situation.
- < Develop the ability to think in 3D (three dimensions).

Applied Critical Thinker's ToolKit: Business Process Analysis

This 3-day workshop is designed to enable teams to apply and extend the principles learned in the Critical Thinker's ToolKit workshop also offered by New Instruction. The workshop is grounded in neuroscience research, analytical thinking practices from the CIA, and business process analysis best practices. Attendees will experience an intense, immersive, comprehensive, "hands-on-brain" walkthrough of what is demanded of today's new breed of Business Process Analysts.

The experiential workshop holds as its primary objective, the equipping of participants for the challenging task of understanding human thought processes that lead to the actions that make up the processes that causes work to flow through a company. In addition, you will stretch your communication skills to better enable you to extract information from experts who have long since forgotten how and why they do what they do. This unique type of interviewing skill allows you to better visualize "what is" and open the door for "what should be". Strategically placed throughout this workshop are "Hands-On-Brain" experiential exercises that simulate the real world conditions the skills will be used within. This workshop will be comprised of 1/3 lecture and 2/3 lab exercises.

Who Should Attend

Senior managers, project managers, business domain experts, technical project leads, business analysts, customer support personnel, and IT staff who may be involved in a BPM initiative and want to experience greater effectiveness in their respective roles. Non-programmers and programmers alike will gain insight into how they and others think and how thinking translates into the actions that make up business processes.

Prerequisites

3-day *Critical Thinker's ToolKit* workshop.

Workshop Objectives:

- < Apply critical thinking skills to the discipline of business process analysis and design.
- < Watch yourself think and be able to make adjustments "on the fly" to better give any situation what it most needs.
- < Conduct deep analysis of complex situations using proven CIA tactics.
- < Develop and enhance the ability to think in the three dimensions necessary to work within the new paradigm of business analysis that views work not so much as functional silos, but as connected end-to-end business processes.
- < Actually analyze an area of business and model its processes!
- < Become a master "systems sleuth", detecting proposed system points of integration and user requirements, and mapping them onto a series of mental models.
- < Follow a step-by-step process for interviewing, eliciting, researching, and documenting requirements of both O-O systems and SOA initiatives.

Process Mapping Boot Camp

How to Master the Detection, Design and Streamlining of Business Processes

This 2-day Immersive Learning event is the first in our series of Process Management accelerated workshops. It introduces you to the foundational discipline of process mapping, thoroughly grounding you in the fundamentals and change in thinking required to come at this skill set with the proper mind-set. By using the Immersive Learning methods you will find that what you need to know instantly comes to mind when the situation requires it. Through fun (but intense) labs, teamwork, detection and design sessions you will acquire the equivalent of one year's experience in Process Mapping and the larger Process Management context within which it fits.

Together we will simulate live cases where we must play investigative reporter, and objectively observe with our exclusive Look-In/Look-Out thought process that allows us to see the processes that make up "the water we swim in". Upon detection, we learn to map "what is" in a standardized way that then allows multidisciplinary "what should be" discussions about better ways of doing things (business processes). We then step into the design role and become an effective business process modeler, designer and reengineer.

Once equipped — by experiencing this event — the impact on your organization is potentially transformational. The result? Even complex interlocking processes can be caught "in a glance." That is the spark of genius that makes you an expert process detective, and in turn, a more effective Process Mapper and improved solution provider.

Who Should Attend

Senior managers, marketing executives and managers needing better IT support, team leaders of process improvement initiatives, IT project managers that need to automate workflows and turn business process into business transactions, CIOs needing to transition IT staffs from cost center to profit center, managers of operations, administration, or manufacturing, directors/coordinators of TQM, CQI, or Six Sigma, members of process improvement and reengineering teams, process owners, managers, analysts and engineers, and anyone actively involved in process or quality improvement efforts.

Workshop Objectives:

- < Learn how processes interact to form a system.
- < Identify and understand your organization's true core processes.
- < Detect and remove system flaws and activities that do not add value in workflows.
- < Analyze complex processes and their challenges.
- < Learn how to apply process documentation and analysis techniques to solve complex business challenges.
- < Learn to take a "systems thinking" approach to process improvement.
- < Learn how to utilize a comprehensive mapping "tool kit" to analyze processes.
- < Learn how to help an organization capture it's processes in standardized maps that then enable it to take a quantum leap in improved efficiency and more reusable, reconfigurable business processes that result in more consistent high-quality output.

Object-Oriented Analysis and Design

(A Workshop for Working Practitioners)

At the end of this 4-day workshop participants will be able to analyze a new or existing system project, develop a requirements specification, and create a system design. The latest techniques are combined with effective proven modeling methods. The workshop focuses on developing complete and accurate specifications in the shortest possible time. The material is based on practical and effective methods that have evolved from many years of experiences with software projects.

Experienced and novice IS professionals will benefit from this very understandable foundation workshop. This workshop will complement and support product and tool-specific training and can be used with all known methodologies. The workshop itself is methodology-neutral. The workshop is heavily "hands on" (about 65%). There are no automated tools; all work is a simulation of real situations and done in teams relying heavily on group interaction.

The workshop is strongly tied to the works of Jacobsen, Booch, and Rumbaugh and uses the UML notation.

Who Should Attend

This workshop is extremely helpful for systems project leaders, systems analysts and designers, software engineers, and programmers.

Workshop Objectives:

- < Identify scope boundaries and develop a high-level view of a project.
- < Identify the structure of the application area or system under study.
- < Analyze, define, and model the processes.
- < Analyze, define, and model the data.
- < Use rules and structure to test the results.
- < Understand the various methods of gathering information.
- < Create a clear, complete, and accurate requirements specification.
- < Understand how the requirements specification components support the design.
- < Understand the design processes that will follow the analysis phase.
- < Design a user interface and create interface design models.
- < Design the system structure and create implementation models.

Mastering UML and Patterns

From Beginner to Expert in 5 Days

This 5-day workshop equips those in attendance with skills in all phases of Object-Oriented Analysis and Design (OOA&D), using the standard Unified Modeling Language (UML) methodologies. Attendees will learn how to consider any subject matter, identify all its concepts and relationships, and express them through using the UML concepts and tools. It offers a balanced blend of lectures (40%) and immersive labs (60%) which together renders the learning process fun, interactive, very thorough, and above all – relevant.

This workshop follows the structure of *The Complete UML Training Course* authored by the creators of UML — Grady Booch, James Rumbaugh, and Ivar Jacobson, all of Rational Software Corp.

Who Should Attend

Java developers, project leads, executives, and application architects.

Prerequisites

None specified. This workshop will equip interested parties from many other disciplines. It is designed to take them from scratch to adeptness at using the UML tools to effectively model and collaborate together.

Workshop Objectives:

- ▶ Understand and intelligently discuss the UML and how its standards can keep everyone "on the same page".
- ▶ Design any processes they see around them in UML (students will be so steeped in UML projects, they often dream about them at night!).
- ▶ Design and model software and people processes in components able to be exposed as XML Web Services.
- ▶ Get themselves "unstuck" from knotty design problems.
- ▶ Read and understand the 6 major UML models.
- ▶ Know how to intelligently apply their knowledge and make a difference in live projects the very next week.
- ▶ Know how to model synchronous and asynchronous processes.
- ▶ Understand state-of-the-art use of UML in building a Service-Oriented Architecture.
- ▶ Understand state-of-the-art use of UML in automating workflows and business processes.
- ▶ Understand state-of-the-art modeling of embedded security subsystems.
- ▶ Gained invaluable lab experience in Object-Oriented Analysis and Design using UML to build a library of reusable components that can be "snapped together" at will to create new applications.
- ▶ Gain a big-picture perspective of where software modeling is headed and the critical role standardized UML will be playing in its future.

UML with Rational Rose

Throughout the history of software development, as systems became more and more complex, we have sought ways to modularize and structure our systems to gain as much reusability, portability, and maintainability as possible. Object-Oriented development is the next step. One of the initial ideas behind the Unified Modeling Language (UML) was to end the “method wars” within the Object-Oriented community.

This 4-day workshop introduces the student to the techniques and processes of Object-Oriented analysis and design using UML as a basis for system notation, and Rational Rose as the development tool for the accompanying workshops. The workshop is a balanced mix of lecture and workshops that are designed to introduce each new concept and allow the participant to internalize them.

Who Should Attend

This workshop is beneficial for developers, software engineers, business analysts, designers, project leaders, managers (both business and IT) who may need to direct an Object-Oriented development effort.

Prerequisites

It is recommended that the participants have a basic foundation in using Rational Rose.

Workshop Objectives:

- < Understand what UML is.
- < Use UML to represent the design model.
- < Understand when and why specific diagrams are modeled.
- < Understand what objects are, and how they work.
- < Know the critical success factors of an Object-Oriented project.
- < Understand the costs and benefits of Object-Oriented development.
- < Learn how a Context Diagram can contribute to understanding and controlling the scope of a project.
- < Learn how to extract user requirements with event models.
- < Learn how to document user requirements with use cases.
- < Understand the need for well-designed interfaces.
- < Learn how to identify and document necessary object associations.
- < Learn how to identify and document object interactions.
- < Understand the importance of a complete platform definition.
- < Learn how to use Rational Rose to create the above models.
- < Create several diagrams to gain modeling skills.

Software Project Estimating and Scheduling

This is a 3-day workshop that will enable participants to improve their estimating and scheduling skills and increase confidence in their work.

The focus of the workshop is on practical and effective methods that have been proven from experience with thousands of software projects. This workshop creates an understanding of the underlying nature, dynamics and characteristics of software projects and the way they influence estimating and scheduling.

The workshop shows you how to estimate software projects reliably. It covers practical approaches to estimating as well as various techniques to use in different situations. You are shown how to select the most appropriate estimating technique for a specific situation and how to adjust the formulae and models to best fit your situation.

Who Should Attend

This workshop is extremely helpful for systems project managers, analysts, designers, software developers, and anyone else who may be involved in software estimating or scheduling.

Workshop Objectives:

- < Provide an understanding of the estimating process.
- < Provide an understanding of the scheduling process.
- < Identify various estimating strategies and techniques in use.
- < Develop a working knowledge of some of the techniques using case studies.
- < Provide a forum for discussing ideas, concerns, and estimating issues.
- < Enable participants to start using at least two methods from this workshop.
- < Enable participants to create standard estimating and scheduling practices and techniques in their environment.
- < Enable participants to improve their estimating and scheduling skills.