

Module 1: Requirements, Projects, and Lifecycles

Kinds of Requirements

- A Multilevel View of Requirements
- Business Requirements
- Functional Requirements
- Technical Requirements

Project Types

- Three Dimensions

Lifecycles

- Waterfall
- Iterative
- Agile
- DevOps

Requirements Before Design

- Architectural Requirements
- Project Requirements

Module 2: Kinds of BI and Analytics Requirements

The Scope of Requirements

- An Overview
- Business Perspective
- Project Perspective

Classifying Requirements

- Business Capability Requirements
- Business Value Requirements
- Governance Requirements
- Data Management Requirements
- Business Services Requirements
- Business Applications Requirements
- Data Preparation Requirements
- Service-Level Requirements
- Technology Requirements

A Requirements Checklist

- Summary

Scenario

- for Exercises 1 through 4

Exercise One

- Business Capabilities

Module 3: Project Requirements Gathering

Requirements Challenges

- Setting the Scope
- Aligning to the Lifecycle
- Asking the Right Questions

Requirements Questions

- Surveying the Landscape
- Making It Personal
- The Current State - Data and Analysis
- The Current State - Existing Reports
- The Future State

BI and Analytics Products

- Business Capabilities
- BI Product Example

Exercise Two

- BI Products

Iterative BI Requirements Gathering

- Product Components
- From PBS to Specification
- A Functional Checklist
- A Technical Checklist

Exercise Three

- Product Breakdown Structure

Agile BI Requirements Gathering

- Backlog, Stories, and Discussions
- Checklists

Analytics Requirements Gathering

- Modeling Lifecycle (CRISP-DM)
- Requirements Framework

Module 4: Requirements Gathering Techniques

Requirements as a Human Process

- People and Requirements Gathering
- Roles and Skills
- Identifying Stakeholders
- Busy People vs. Involved Participants
- Some of the Challenges

Ten Techniques

- An Overview
- Brainstorming
- Interviewing

- Requirements Workshops
- Group Facilitation
- User Stories and Storyboarding
- Prototyping
- Surveys and Questionnaires
- Observation
- Current State Analysis
- Reverse Engineering
- Summary

Module 5: Requirements Mgmt Techniques

Requirements as a Systems Process

- The "Why" and "What" of Requirements Mgmt

Documenting Requirements

- Specifications
- Models
- Stories

Testing Requirements

- Clarity, Correctness, and Measurability
- Completeness

Exercise Four

- Requirements Specification

Managing Requirements

- Scope, Impact, Feasibility, and Change
- Summary

Module 6: Summary and Conclusion

Summary of Key Points

- A Quick Review

References and Resources

- To Learn More

Close the Class

- Evaluations, Thanks, etc.