Analyzing Requirements and Defining Microsoft .NET Solution Architectures

- **Course Number:** 2710
- **Length:** 5 Day(s)

Certification Exam

This course will help you prepare for the following Microsoft Certified Professional exams:

- **MCSD Exam 70–300:** Analyzing Requirements and Defining Microsoft .NET Solution Architectures

Course Overview

This five-day course provides students with the knowledge and skills needed to design Microsoft .NET-connected solutions to business problems.

Prerequisites

Before attending this course, students must have:

- A general understanding of the software development life cycle.
- Practical working knowledge of .NET development technologies.
- Familiarity with the Microsoft Solutions Framework (MSF) Process Model.
- Basic familiarity with object modeling and data modeling methodologies.
- Experience working with Microsoft Visio Professional 2000.
- One year experience as part of a software development team.

In addition, it is recommended, but not required, that students complete Course 1846: Microsoft Solutions Framework Essentials, before taking this course.

Audience

This course is intended for:

- Experienced developers moving into a role that requires the skills to bridge business and technology environments.
- Experienced developers, including those with the Microsoft Certified Application Developer (MCAD) credential, pursuing the Microsoft Certified Solution Developer (MCSD) credential.

Course Outline

Level 1
Designing Business Solutions
1.1 Key Disciplines
1.2 Iteration Best Practices
1.3 Phases
1.4 Review
Lab - The MSF Process Model
Level 2
Gathering & Analyzing Information
2.1 Benefits of Modeling
2.2 UML- Unified Modeling Language
2.3 UML Views
2.4 UML Diagrams
2.5 Use Cases

2.6 Usage Scenario
2.7 Requirements
2.8 Gathering Information
2.9 Sources of Information
2.10 Analyzing Information
Lab - Types of UML Diagrams
Level 3
Creating the Logical Design
1.1 Team Roles
1.2 Logical Design Model
1.3 Relationships
1.4 Documenting Logical Design Outputs
1.5 Refining Objects
1.6 Establishing Control
1.7 Review
Lab - The Product Management Role
Goals and Physical Design
2.1 Deliverables
2.2 Physical Design Analysis
2.3 Physical Design Analysis
2.4 Physical design Rationalization
2.5 Cohesion and Coupling
2.6 Packing Components
2.7 Physical Design Implementation
2.8 Review
Lab - The Development Role
Presentation Layer
3.1 Designing the User Interface
3.2 Designing User Process Components
3.3 Review
Level 4
Designing the Data Layer
1.1 Designing the Data Store
1.2 Optimizing Data Access
1.3 Partitioning Data
1.4 Implementing Data Validation
1.5 Review
Designing Security Specifications
2.1 Security Vulnerabilities
2.2 Security Strategies
2.3 Planning for Application Security
2.4 STRIDE
2.5 Security Policy
2.6 NET Security Features
2.7 Strategies
2.8 Review
Level 5
Completing the Planning Phase
1.1 Design Considerations
1.2 Availability & Reliability
1.3 Interoperability
1.4 Planning for Admin Features
1.5 Migration
1.6 Final Planning
1.7 Review
Lab - The Testing Role
Stabilizing and Deploying
2.1 Stabilization Phase
2.2 Roles and Responsibilities
2.3 Testing and Piloting for Stabilization
2.4 Tracking Bugs
2.5 Pilot
2.6 Deploying Phase
2.7 Review
Lab - The Release Management Role
2.8 Course Final Review