



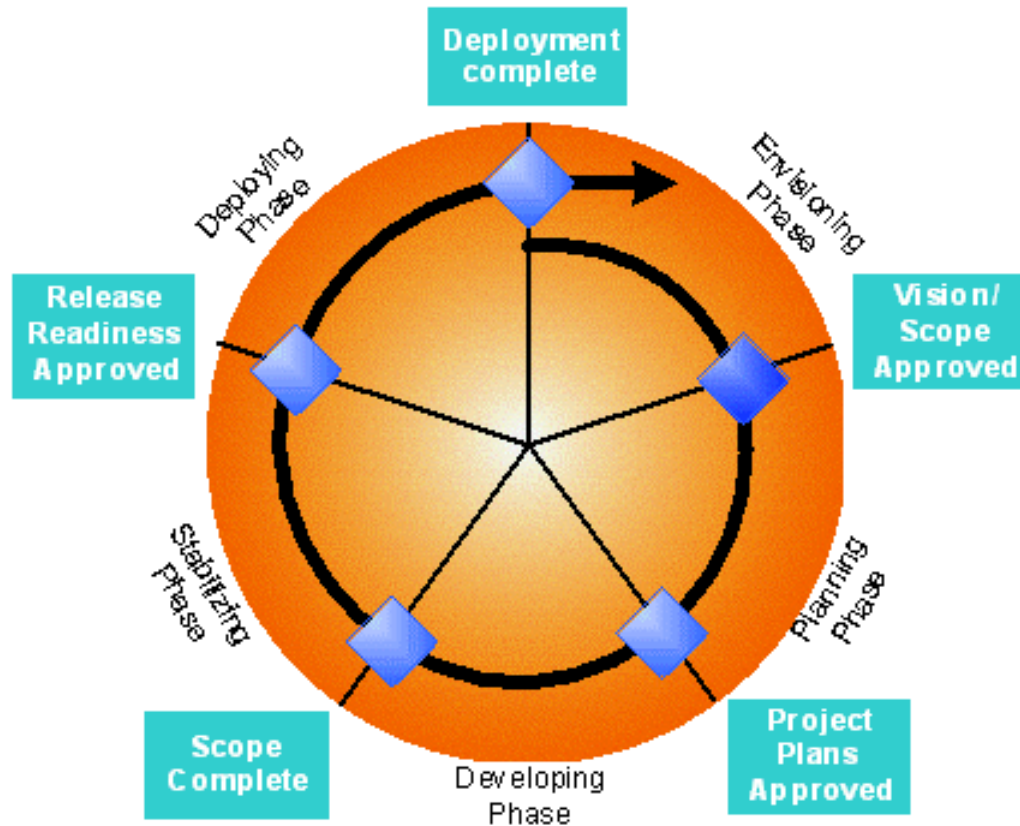
Analyzing Requirements and Defining Microsoft .NET Solution Architectures

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Microsoft .NET Solution Architectures

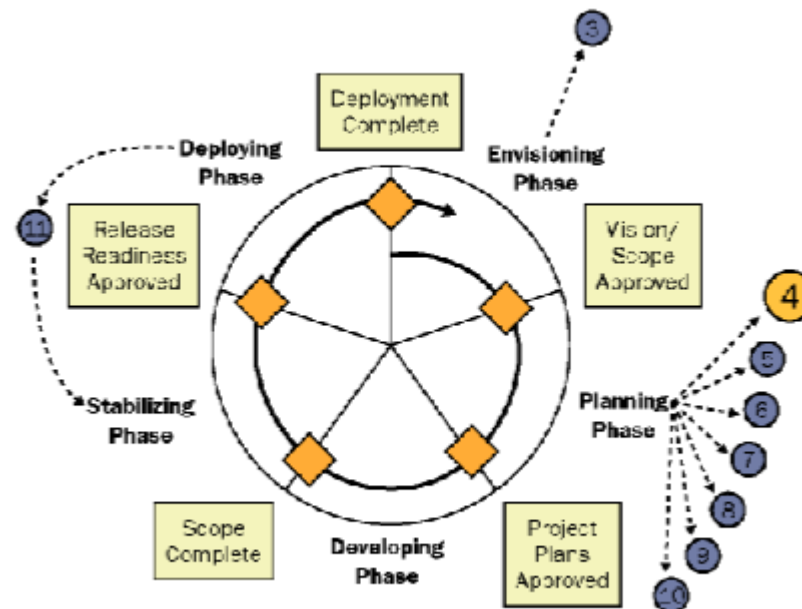
MSF Process Model



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Lectures organized based on MSF Process Model

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- Module 3 Envisioning the Solution
- Module 4 Creating the Conceptual Design
- Module 5 Creating the Logical Design
- Module 6 Creating the Physical Design
- Module 7 Designing the Presentation Layer
- Module 8 Designing the Data Layer
- Module 9 Designing Security Specifications
- Module 10 Completing the Planning Phase
- Module 11 Stabilizing and Deploying the Solution



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Module 1 Introduction to Designing Business Solutions

- ❑ Microsoft® Solutions Framework (MSF), a set of models, principles, and guidelines for designing applications.
- ❑ MSF Process Model and its various phases.
- ❑ key activities that you perform in designing an application, and about the deliverables associated with those activities
- ❑ case study that illustrates the concepts and practices



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Module 2 Gathering and Analyzing Information

- overview of how to gather and analyze information
- types of information that you need to gather, sources of information, and some techniques for gathering information.
- how to analyze all the gathered information and become familiar with some techniques for analyzing information.



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Module 3 Envisioning the Solution

The success of a project depends on the ability of the project team members and the customers to share a clear vision of the goals and objectives of the project.



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Module 3 Envisioning the Solution

- envisioning phase and the roles and responsibilities of team members during this phase.
- how to define the vision of the project and analyze risks associated with the project.



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Module 4 Creating the Conceptual Design

During the envisioning phase, the project team gathers enough information to start the project, which allows them to create the baseline vision/scope document. Near the end of the envisioning phase, the team moves on to the planning phase of the Microsoft® Solutions Framework (MSF) Process Model. During this phase, you ensure that the business problem to be addressed is fully understood so that you can design the solution that addresses the business problem. In addition, you plan how the solution will be developed and determine whether you have the resources to develop the solution.



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Conceptual Design

- Perspective: View the problem from the perspective of the user and the business
- Purpose: Defines the problem and solution in terms of usage scenarios



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Module 4 Creating the Conceptual Design

- purpose of the planning phase and the three design processes that occur during the planning phase: conceptual, logical, and physical design.
- purpose and benefits of functional specification.
- conceptual design process in detail.



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Module 5 Creating the Logical Design

Logical Design:

- Perspective: View the solution from the perspective of the project team
- Purpose: Defines the solution as a logical set of cooperating objects and services



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Module 5 Creating the Logical Design

- purpose and benefits of logical design.
- create the logical design for a business solution.
- how to optimize the logical design.



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Module 6 Creating the Physical Design

Logical Design:

- Perspective: View the solution from the perspective of the developers.
- Purpose: Defines the solution's services and technologies



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Module 6 Creating the Physical Design

- purpose of physical design.
- the tasks and deliverables involved in completing the physical design.
- four steps in creating a physical design: research, analysis, rationalization, and implementation.



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Module 7 Designing the Presentation Layer

The design of any system that will be used by users is not complete without a way for users to interact with that system. User interaction takes place by means of the application's presentation layer. You design the user interface of an application during the physical design process.



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Module 7 Designing the Presentation Layer

- how to design the user interface (UI) components

- the user process components



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Module 8 Designing the Data Layer

- designing the data layer for a solution.

- optimizing data access and implementing data validation in the solution.



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Module 9 Designing Security Specifications

- ❑ adding the appropriate authentication and authorization schemes
- ❑ ensuring data integrity with encryption
- ❑ performing data validation.



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Module 10 Completing the Planning Phase

The planning phase encompasses the greater part of the architecture and design of a solution. It also results in plans to accomplish the development and deployment of the solution, and the schedules associated with tasks and resources. These plans help the project team to work on the subsequent phases of the project.

In this module, you will learn about the tasks and plans that the project team works on to complete the planning phase of the project.



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Module 11 Stabilizing and Deploying the Solution

The goal of the stabilizing phase of the Microsoft® Solutions Framework (MSF) Process Model is to improve the quality of the solution to meet the acceptance criteria for release to production.



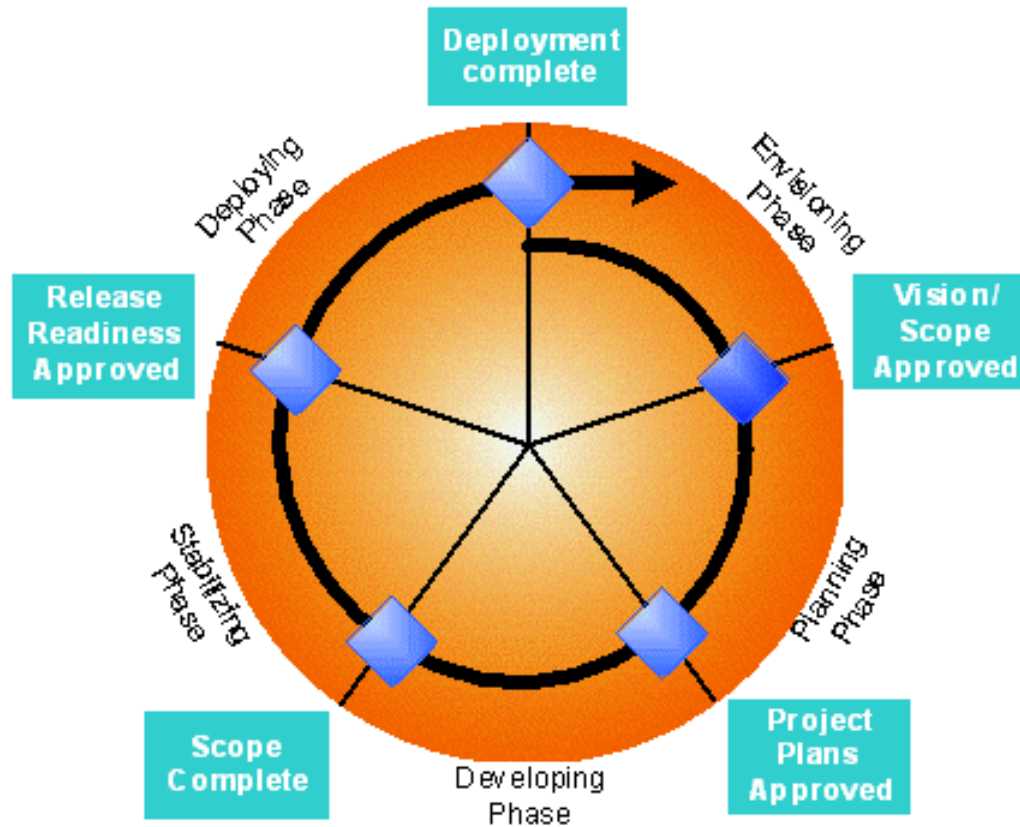
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Module 11 Stabilizing and Deploying the Solution

- ❑ Testing and Piloting for Stabilization
- ❑ Deploying to a Production Environment



Microsoft .NET Framework



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