Session 11

Overview of Fluent Model in ASP.NET Core MVC

Session Overview

- Explain Fluent API and Fluent model

- Describe benefits of Fluent API and Fluent Model

- Outline the procedure to perform operations such as Create, Edit, Delete, and Update (CRUD) using Fluent API

Introduction to Fluent API and Fluent Model (1-2)

Features of a model that EF Core Fluent API allows customizing

Model

- Configures the database mappings for an EF model. The default schema, DB functions, additional data annotation properties, and entities to be omitted from mapping are all configured here.

Entity

- Configures entity-to-table and relationship mappings, such as PrimaryKey, AlternateKey, index, table name, one-to-one, one-to-many, and many-to-many relationships, and so on.

Property

- Configures column name, default value, nullability, foreign key, data type, concurrency column, and other properties.

Introduction to Fluent API and Fluent Model (2-2)

Entity<TEntityType>()

DbModelBuilder.Entity<TEntityType>() returns an object that can be used to configure an entity type that is registered as part of the model. For the same entity, this method can be called numerous times to complete multiple lines of configuration.

HasKey<TKey>()

The primary key property(s) for this entity type is configured.

Benefits of Fluent API

1	2	3	4
• A fundamental design of Fluent API leads to clear visibility.	• Fluent APIs draw attention to the goal of the code.	• Fluent APIs make it simple to manipulate complex notions.	• It is highly flexible and everything that can be configured through Data Annotations is also possible through Fluent API.

Working with Fluent API

Create a class in the **Model** folder.

Create the Context class within the Model.

Create a Customer in the file CustomerController.cshtml

Edit a Customer in the file CustomerController.cshtml

Delete a Customer record through the file CustomerController.cshtml

Summary

✓ The Entity Framework (EF) Fluent API is used to override conventions in domain classes.

✓ The EF Core Fluent API allows customizing Model, Entity, and Property configuration.

✓ DbModelBuilder is a tool that helps to map CLR classes to database schemas.

✓ The main types of mapping that Fluent API supports are entity and Properties mapping.

✓ Fluent APIs make it simple to manipulate complex notions.

✓ The design of Fluent API provides clear visibility and makes it simple to manipulate notions.

✓ Fluent API can also be used to change the mapping of entities to the database or their relationship with each other.