1. Explain about WebServer

2. Overview ASP.NET MVC Architecture

3. Explain role of the Model, View and Controller

4. Explain about ViewBag, ViewData, TempData and Session

5. Explain about HTML Helper

6. Explain about Model Binding and Model Validation

1. **Web Server**: A **web server** is a computer program that is responsible for serving web pages to clients. It can refer to both hardware and software, or both of them working together. On the hardware side, a web server is a computer that stores web server software and a website’s component files (for example, HTML documents, images, CSS stylesheets, and JavaScript files). A web server connects to the Internet and supports physical data interchange with other devices connected to the web. On the software side, a web server includes several parts that control how web users access hosted files. At a minimum, this is an HTTP server. An HTTP server is software that understands URLs (web addresses) and HTTP (the protocol your browser uses to view webpages). [An HTTP server can be accessed through the domain names of the websites it stores, and it delivers the content of these hosted websites to the end user’s device 1](https://developer.mozilla.org/en-US/docs/Learn/Common_questions/Web_mechanics/What_is_a_web_server).
2. **ASP.NET MVC Architecture**: **ASP.NET MVC** is a framework for building web applications using the Model-View-Controller (MVC) architectural pattern. The MVC pattern separates an application into three main components: Model, View, and Controller. [The Model represents the application’s data and business logic; the View displays the data to the user; and the Controller handles user input and updates the Model and View accordingly](https://www.dicoding.com/blog/apa-itu-web-server-dan-fungsinya/) .
3. **Role of Model, View, and Controller**: The **Model** component represents data and business logic in an application. It is responsible for managing data storage, retrieval, and validation. The **View** component is responsible for displaying data to the user in a human-readable format. It receives data from the Model and formats it for display. [The **Controller** component handles user input and updates both the Model and View components accordingly](https://www.dicoding.com/blog/apa-itu-web-server-dan-fungsinya/) .
4. **ViewBag**, **ViewData**, **TempData**, and **Session**: These are four different ways of storing data in an ASP.NET MVC application.
   * **ViewBag** is a dynamic object that allows you to store arbitrary data that can be accessed by a view. It is used to pass data from a controller to a view.
   * **ViewData** is similar to ViewBag in that it allows you to store arbitrary data that can be accessed by a view. However, ViewData requires typecasting when retrieving data from it.
   * **TempData** is used to store data temporarily between two consecutive requests. It can be used to pass data between actions in a controller or between controllers.
   * **Session** is used to store data across multiple requests from the same client. [It can be used to maintain state across multiple pages or even multiple visits by the same user](https://www.dicoding.com/blog/apa-itu-web-server-dan-fungsinya/) .
5. **HTML Helper**: An HTML Helper is a method that returns a string of HTML markup that can be inserted into an ASP.NET MVC view. [HTML Helpers are used to generate HTML controls such as text boxes, drop-down lists, and buttons 2](https://www.dicoding.com/blog/apa-itu-web-server-dan-fungsinya/).
6. **Model Binding** and **Model Validation**: In ASP.NET MVC, **Model Binding** refers to the process of mapping HTTP request data (such as form values) to action method parameters or model properties. When an action method is called, ASP.NET MVC automatically maps request data to action method parameters based on parameter names or model property names.

**Model Validation** refers to the process of validating model state before performing any operations on it. [In ASP.NET MVC, model validation can be performed using Data Annotations or custom validation attributes](https://www.dicoding.com/blog/apa-itu-web-server-dan-fungsinya/) .