Pass Task 4.1. Presentation Layer

1. Web Server. Web server is a type of application server that host websites, process web requests and response web pages to client browser mainly via HTTP protocol. Since the dot-com boom of the Internet bubble in around 1997-2000, web server becomes essential and has a critical role in the Internet network. Websites we are connecting to today are served from one or more web servers. In software system, web server provides facilities to handle web security such as authentication and authorization, services control, service logging, system configuration, basic messaging and more… There are many different web server applications for each different technology or operating systems. For example, Web Server on Windows platform is Internet Information Service or IIS. In Java, there are many different web servers: Tomcat, Glassfish or JBoss. The majority in OpenSource communities uses Apache as their primary web server.

2. ASP.NET MVC. ASP.NET MVC is an application framework that effectively facilitate the development of web application in MVC (Model-View-Controller) pattern design. In .Net, the original model to developing website is using WebForms that are a set of libraries and controls developed by Microsoft. Since the MVC model is proven to be effective in web development with the benefit of separating of concern, allow developing in separate components, ASP.NET MVC is developed to bring WebForms in ASP.NET to the next level. In this framework, V is the view of the web that are created using html with a support from a view engine such as: WebForm or Razor. M is the model that contain the data for each view. It is important to differentiate this from the Data Access Object or Data Transfer Object as their structures are quite similar. However, the Model in here is closely match with the data to be present on the View or collecting from submitted requests. The C component is controller that sit between View and Model to process incoming requests, manipulate data using Model and passing data to the View to render. In a simple 3-tier software architecture, this MVC framework can implemented as the View is the Presentation Layer, Controller is Business Logic Layer and M is the Data Access Layer. However, in distributed 3-tier software architecture, the ASP.NET MVC fits on Presentation Layer, hence the Controller will delegate business logic tasks to the Business Logic Layer to handle.