

# EXERCISE:

## **Ques1: Explain MVC and the benefit of MVC.**

**Ans1:** MVC stands for Model-View-Controller. MVC is an Architecture used for making applications with good pattern design and data models. It doesn't belong to a specific programming language or framework but it is a concept that we can use to make any kind of application or software in any programming language.

The architecture we are talking about right now contains three different parts. The different parts are Model, View and Controller. Each and every one of them plays an important role in application development. Let us learn about these three parts of the architecture in detail.

### **Three parts are :**

1. **Model:** Model can handle Business Logic and Database Logic.
2. **View:** View is used for display, send request and it manages the display in a user understanding manner.
3. **Controller:** Controller is used to call the model and view the view.

### **Benefit of MVC:**

1. Development of the application becomes fast.
2. Easy for multiple developers to collaborate and work together.
3. Easier to Update the application.
4. Easier to Debug as we have multiple levels properly written in the application.

## **Ques2: Explain MVC Life Cycle.**

**Ans2:** Life Cycle of mvc has 6 major steps to execute an application of mvc:

### **For Request Method it has 4 methods:**

**Step 1 Fill route:** Its requests are mapped to the route table which specify which controller and action are to be invoked. If the request is the first request then the first thing is to fill the route table with route collection. This filling of the route table happens in the global.asax file.

**Step 2 Fetch route:** According to the URL sent it searches for the route table to create "RouteData" object which has the details of which controller and action to be invoked.

**Step 3 Request context created:** The "RouteData" object is used to create the "RequestContext" object.

**Step 4 Controller instance created:** This request object is sent to "MvcHandler" instance to create the controller class instance. Once the controller is created it calls the execute method.

**For Response there is two methods:**

**Step 1 Execute Action:** The "ControllerActionInvoker" determines which action to execute and executes that action.

**Step 2 Result sent:** - The action method executes and creates the type of result which can be a view result , file result , JSON result etc.

**Ques 4:Why we use App\_Start, App\_Data and Shared Folder.**

**Ans4:** App\_Data:The App\_Data folder of MVC applications is used to contain the application related data files like .mdf files, LocalDB, and XML files, etc.

App\_Start:The App\_Start folder of MVC applications is used to contain the class files which are needed to be executed at the time the application starts. The classes like BundleConfig, FilterConfig, IdentityConfig, RouteConfig, and Startup.Auth etc. are stored within this folder.

Shared Folder: Shared folder is under Views folder. This in MVC is used to contain all the views that are needed to be shared by different controllers e.g. error files, layout files, etc.

**Ques 5:Use of Global. Asax and difference b/w global Web config and View Web Config.**

**Ans5: Use of Global Asax:**

The Global.asax file in an MVC application is used to allow us to write code which we want to run at the application level, such as Application\_BeginRequest, Application\_error, Application\_Start, session\_start, session\_end, etc.

**Difference between Global Web Config and View Web Config:**

**Global Web Config:**A configuration file is used to manage various settings that define a website.

**View Web Config:** A CSS file that is used directly for view

