Module 6 Practicals

Global.asax.cs :

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.Http;
using System.Web.Mvc;
using System.Web.Optimization;
using System.Web.Routing;

namespace WebApplication2_WebAPI
{
    public class WebApiApplication : System.Web.HttpApplication
    {
        protected void Application_Start()
        {
            AreaRegistration.RegisterAllAreas();
            GlobalConfiguration.Configure(WebApiConfig.Register);
            FilterConfig.RegisterGlobalFilters(GlobalFilters.Filters);
            RouteConfig.RegisterRoutes(RouteTable.Routes);
            BundleConfig.RegisterBundles(BundleTable.Bundles);


        }
    }
}
```

WebApiConfig.cs :

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web.Http;

namespace WebApplication2_WebAPI
{
    public static class WebApiConfig
    {
        public static void Register(HttpConfiguration config)
        {
            // Web API configuration and services
            // Web API routes

            //enable attribute routing
            config.MapHttpAttributeRoutes();
```

```
            }
        }
}
```

EmployeeController.cs :

```csharp
using System;
using System.Collections.Generic;
using System.Linq;
using System.Net;
using System.Net.Http;
using System.Web.Http;
using WebApplication2_WebAPI.Models;

namespace WebApplication2_WebAPI.Controllers
{
    public class EmployeeController : ApiController
    {
        Employee[] employees = new Employee[]{
         new Employee { id = 1, name = "Mark",    age = 30 },
         new Employee { id = 2, name = "Allan", age = 35 },
         new Employee { id = 3, name = "Johny", age = 21 }
        };

        //GET Methods
        [Route("api/employee/details")]
        public IEnumerable<Employee> GetAllEmployees()
        {
            return employees;
        }

        [Route("api/employee/{id}")]
        public IHttpActionResult Get(int id)
        {
            var employee = employees.FirstOrDefault((p) => p.id == id);
            if (employee == null)
            {
                return NotFound();
            }
            return Ok(employee);
        }

        [Route("api/employee/details/{name}")]
        public IHttpActionResult Get(string name)
        {
            var employee = employees.FirstOrDefault((p) => p.name == name);
            if (employee == null)
            {
                return NotFound();
            }
```

[Heli Parekh]   **[2]**

```csharp
                return Ok(employee);
        }

        //POST Method
        [Route("api/employee/insert")]
        public IEnumerable<Employee> Post(Employee emp)
        {
            int len = employees.GetLength(0);
            try
            {
                employees.SetValue( new Employee { id = emp.id, name =
emp.name, age = emp.age } , len );
            }
            catch (IndexOutOfRangeException e)
            {
                Console.WriteLine(e.Message);
            }
            return GetAllEmployees();
        }

        //PUT Method
        [Route("api/employee/update/{name}")]
        public IEnumerable<Employee> Put(Employee emp , string name)
        {
            var employee = employees.FirstOrDefault((p) => p.name == name);
            employee.id = emp.id;
            employee.name = emp.name;
            employee.age = emp.age;
            return GetAllEmployees();
        }

        //DELETE Method
        [Route("api/employee/delete/{name}")]
        public IEnumerable<Employee> Delete(string name)
        {
            var employee = employees.FirstOrDefault((p) => p.name == name);
            //assume to be deleted , as it's array
            employee.id = 0;
            employee.name = null;
            employee.age = 0;
            return GetAllEmployees();
        }
    }
}
```

Employee.cs :

```csharp
using System;
using System.Collections.Generic;
using System.Linq;
```

[Heli Parekh]   **[3]**

```csharp
using System.Web;

namespace WebApplication2_WebAPI.Models
{
    public class Employee
    {
        public int id { get; set; }
        public string name { get; set; }
        public int age { get; set; }
    }
}
```