**ASP.NET Core AddMvc vs AddMvcCore**

To setup MVC in an ASP.NET Core application we call AddMvc() method of the IServiceCollection interface in ConfigureServices() method of the Startup class.

services.AddMvc();

In addition to AddMvc() method we also have AddMvcCore() method on the IServiceCollection interface. So, the obvious question that comes to our mind is, what's the difference between these 2 methods.    
  
**AddMvc() v/s AddMvcCore()**  
  
Before we discuss the difference between AddMvc() and AddMvcCore() methods, let's modify the following HomeController to return JSON formatted data, instead of a simple string.    
  
At the moment, there is no base class specified for the the HomeController class. It works for us now because we are returning a simple string from the Index() action method.

public class HomeController  
{  
    public string Index()  
    {  
            return "Hello from MVC";  
    }  
}

However, if we want to return an **HTML View**or **JSON data**from the **Index()** action method, our **HomeController**class has to derive from the **Controller**class provided by the framework. The **Controller**base class provides support to return different results like **JsonResult**, **ViewResult**, **PartialViewResult**etc. Modify the **HomeController**class to derive from the **Controller**class and return **JsonResult**from the **Index()** action method as shown below.

public class HomeController : Controller  
{  
    public JsonResult Index()  
    {  
        return Json(new { id=1, name="Geetha" });  
    }  
}

**Please note :**Controller class is present in Microsoft.AspNetCore.Mvc namespace.   
  
At this point, run the application and we should see JSON data in the browser as expected.   
  
Now, in the ConfigureServices() method call AddMvcCore() method instead of AddMvc() and run the application.

public void ConfigureServices(IServiceCollection services)  
{  
    services.AddMvcCore();  
}

**We get the following error**  
No service for type 'Microsoft.AspNetCore.Mvc.Formatters.Json.Internal.JsonResultExecutor' has been registered.  
  
To be able to return JSON data, JsonFormatterServices need to be registered with the dependency injection container. AddMvc() method does this but not the AddMvcCore() method. You can confirm this by looking at the source code on ASP.NET Core MVC Github page.   
  
As the name implies, AddMvcCore() method only adds the core MVC services. On the other hand, AddMvc() method adds all the required MVC services. AddMvc() method calls AddMvcCore() method internally, to add all the core MVC services. So if we are calling AddMvc() method there is no need to explicitly call AddMvcCore() method again.  
  
I hope this clarifies the difference between AddMvc() and AddMvcCore() methods.