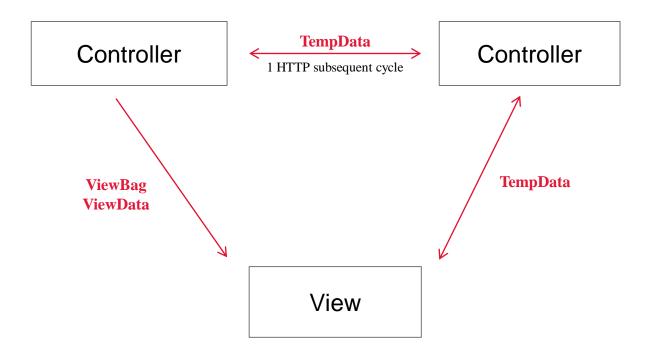
Module - 5 ViewBag, ViewData and TempData

ViewBag and ViewData and TempData

- ViewBag and ViewData are used to communicate between controller and corresponding view. But this communication is only for server call, it becomes null if redirect occurs. So, in short, its a mechanism to maintain state between controller and corresponding view.
- ViewData is a dictionary object while ViewBag is a dynamic property. ViewData being a dictionary object is accessible using strings as keys and also requires typecasting for complex types. On the other hand, ViewBag doesn't have typecasting and null checks.
- **TempData** is also a dictionary object that stays for the time of an HTTP Request. So, TempData can be used to maintain data between redirects i.e. from one controller to the other controller.



ViewBag

- ViewBag is a dynamic property
- This is used to send data from controller to view
- We can assign any name to the property.

ViewBag.PropertyName = Value;

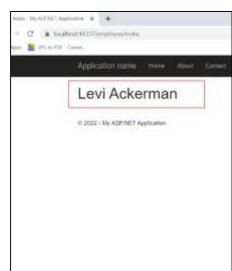
We pass data from controller in the form of ViewBag

mployeeController.cs = x Index.cshtml E DempProject1 DempProject1 Controllers EmployeeController Husing System; uning System Collections Generic; uting System Ling: aming System Web; using System.Web.Mvc; using DempProject1. Madels; @namespace DempProject1.Controllers public class EmployeeController : Controller 10 11 1.2 13 // GET: Employee Propert Name public ActionResult Index() 14 15 1.6 ViewBag.FirstName = "Levi Ackerman"; 17 2.85 1.9

We get data at view by adding '@' before ViewBag property

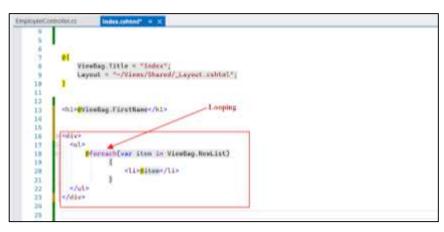
```
EmployeeController.cs
                       Index.cshtml # X
      6
                ViewBag.Title = "Index";
                Layout = "~/Views/Shared/_Layout.cshtml";
    10
                     ViewBag Property
     11
    12
            <h1>@ViewBag.FirstName</h1>
     13
     14
    15
     16
             C# code
     17
     18
```

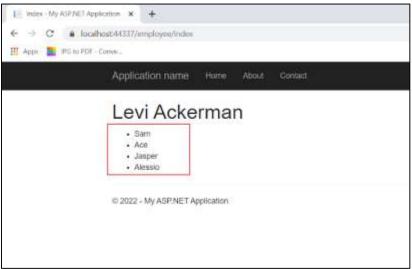
Output



To add a list using ViewBag –

```
- Pp Dempfromott/CompotersEmployee/Controller
                                                                                                          + i th Indexi
Compressed1
          Snamespace DempProjectl.Controllers
   10
11
12
13
                public class EmployeeController : Controller
                    // GET: Employee
                    public ActionHemalt Index[]
    3.46
    3.0
                                                                           To Create a list
                        ViewBag.FirstHaze = "Levi Ackerson"
    19
                        ViewBag.NewList = new List*string*() { "Sain", "Ace", "Jasper", "Alessin");
    18
19
29
31
   22
23 V
```





- How to get data for model from controller to view? –
- First creating a model –(Here model name is Employee.cs and controller is EmployeeController.cs)

```
EmployeeController.cs*
                        Index.cshtml

    S DempProject1.Models.Employe

■ DempProject1
           ⊟using System;
             using System.Collections.Generic;
             using System.Ling;
            using System. Web;
           □ namespace DempProject1.Models
      6
      7
                 public class Employee
      8
      9
                     public int EmpId { get; set; }
    10
     11
                     public string Name { get; set; }
                     public int Age { get; set; }
    12
     13
     14
```

2. Add model to controller and creating new list for 3. Add <1i>for display data in view. Employee model – (Advantage of using this is that we don't have to pass anything to view as parameter)

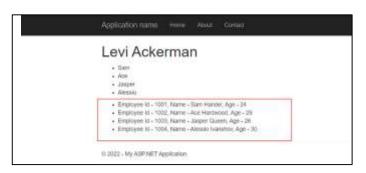
```
Compressor Committee System Continues
        using System Callections Severic;
        using System Hob Por;
using EmpyPenjectl Models;
            public class EmployeeController : Controller
                // SET: Emilianos
                District Chamberlant Street
                    Vicefug FirstNass = "Levi Actornas";
10 10
                    Vicefug NewList r res Listratrings() [ "last, "Aco", "langer", "Alexand");
                     Description of the continues of the continues of
                        new implement) (imple = 1681, Name= "imm fundel", Agenda ),
                         new Engloyer() (Depth = 1882, Namer "Ace Nurdencel", Age-29
                         com Employee() (Empld = 1881, Bases "Jusper Queen", Age-26 ).
                        row Employee() (Seple v. 1896, Namer "Alexand Deprehav", Age:30 )
                    Viewbag Empt. Let - conteyors;
```

Wireflag. Title - "ludes"; Layout ~ "-/Coun/thered/, Layout cabbal"; -01 of Seating Firettime-/bl> 15 10 17. description from in Wineskay Seed Lot) -liveiteen/lin 23 Bforeach(ver item in Viewling, EmpList) <!i>trpleyee 1d - #item.Tmp2d, have - #item.have, Age - #item.high=/Li>

Model

Controller View

OUTPUT -

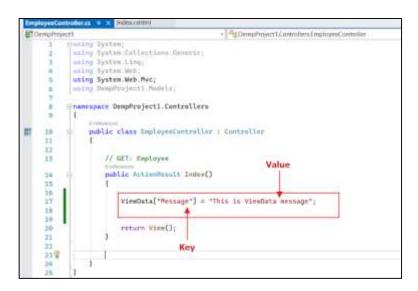


ViewData

- ViewData works as a dictionary
- This is also used to send data from controller to view
- We can assign any name to key

ViewData["myKey"] = Value;

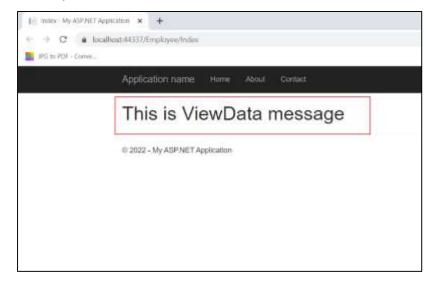
We pass data from controller in the form of ViewData



 We get data at view by adding '@' before ViewData and Key



Output



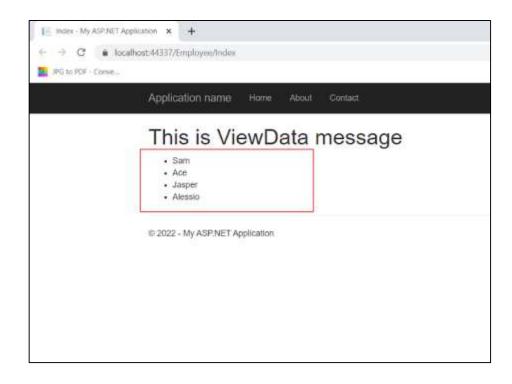
To add a list using ViewData –

Note: Whenever we set or save a data to the dictionary it is saved as an object, so if we want to iterate our foreach, we need to tell what it actually is.

```
38
39
      <h1>@ViewData["Message"]</h1>
40
41
42
     =<div>
43
44
             Oforeach (var item in ViewData["MyList"])
45
46
                 @item
47
48
          49
50
      </div>
51
52
```

■ To tell about the list we need to use –





Advantages of ViewBag and ViewData -

Easy to use

- Less code
- Do not depend on other classes
- Works very well while passing data from controller to view, etc.

Disadvantages of ViewBag and ViewData -

- No compile time checking
- Key or property name can be misspelled
- Need to cast while using on view
- Cant send data from view to controller

TempData

- Sometimes we need to pass data from controller to controller, for that we use TempData.
- TempData is used to store data for next subsequently request only
- Suppose we send a request from browser and the server gives a response then this one cycle is called as one HTTP subsequent cycle
- We can assign any name key
- TeamData internally uses session to store data
- TempData can only hold data for one request if we try for second response then the data will be lost.

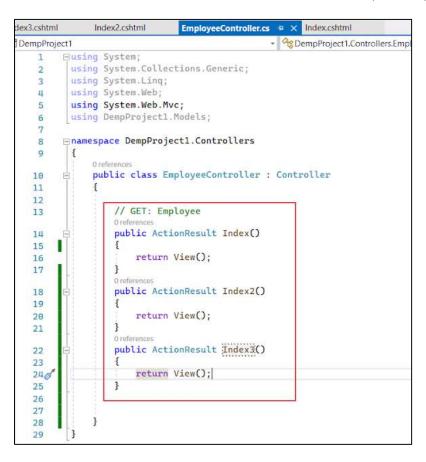
Controller (TempData)



Controller

Diagram: Only one HTTP subsequent cycle representation

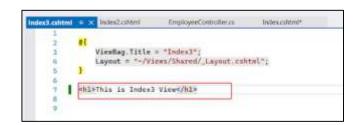
Lets add 3 Action methods to the controller named index, index2, index3



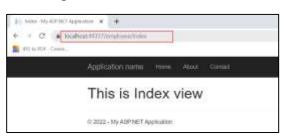
Now adding view to all index, index2, index3







Output –

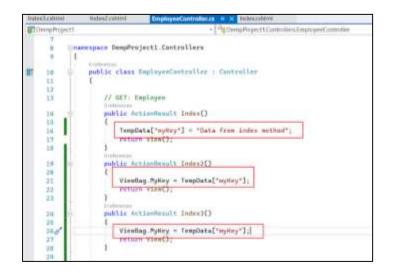






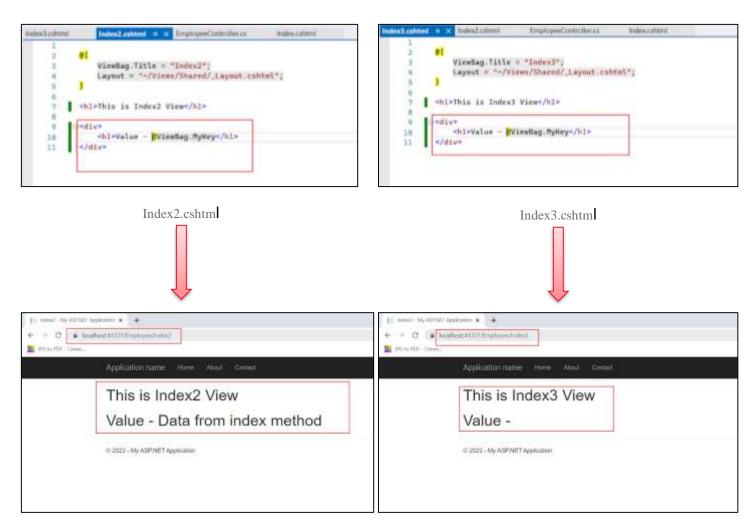
Note: To get the output of all the action method, change the URL as shown in the figure

Now lets include a TempData for Index method and then use ViewBag to display TempData in Index2 and Index3



Now if we save and run above changes we will get following output –

- As we can see TempData helped us get data for Index2 action method but was lost when used for Index3 action method.
- Its because TempData is used to store data for next subsequently request only, after that one request's response, the data gets lost.



THANK YOU