Logging MVC Applications

Abrir : 03\_LoggingExample\_begin

3. In the \*\*Program.cs\*\* code window, locate the following code:

```cs

WebHost.CreateDefaultBuilder(args)

```

4. Place the cursor at the end of the located code, press Enter, and then type the following code:

```cs

.ConfigureLogging((hostingContext, logging) =>

{

var env = hostingContext.HostingEnvironment;

var config = hostingContext.Configuration.GetSection("Logging");

logging.ClearProviders();

if (env.IsDevelopment())

{

logging.AddConfiguration(config);

logging.AddConsole();

}

else

{

logging.AddFile(config);

}

})

```

5. In Solution Explorer, expand \*\*appsettings.json\*\*, and then click \*\*appsettings.development.json\*\*.

6. Place the cursor after the \*\*{\*\* (opening braces) sign, press Enter, and then type the following code:

```cs

"Logging": {

"LogLevel": {

"Default": "Trace"

}

}

```

7. In Solution Explorer, click \*\*appsettings.production.json\*\*.

8. Place the cursor after the \*\*{\*\* (opening braces) sign, press Enter, and then type the following code:

```cs

"Logging": {

"PathFormat": "myLog.txt",

"LogLevel": {

"Default": "Warning"

}

}

```

9. In Solution Explorer, expand \*\*Controllers\*\*, and then click \*\*HomeController.cs\*\*.

10. In the \*\*HomeController.cs\*\* code window, locate the following code:

```cs

ICounter \_counter;

```

11. Place the cursor at the end of the located code, press Enter, and then type the following code:

```cs

ILogger \_logger;

```

12. In the \*\*HomeController.cs\*\* code window, select the following code:

```cs

public HomeController(IDivisionCalculator numberCalculator, ICounter counter)

```

13. Replace the selected code with the following code:

```cs

public HomeController(IDivisionCalculator numberCalculator, ICounter counter, ILogger<HomeController> logger)

```

14. In the \*\*HomeController.cs\*\* code window, locate the following code:

```cs

\_numberCalculator = numberCalculator;

```

15. Place the cursor at the end of the located code, press Enter, and then type the following code:

```cs

\_logger = logger;

```

16. In the \*\*HomeController.cs\*\* code window, locate the following code:

```cs

ViewBag.CounterSucceeded = false;

```

17. Place the cursor at the end of the located code, press Enter, and then type the following code:

```cs

try

{

\_counter.IncrementNumberCount(id);

ViewBag.NumberOfViews = \_counter.NumberCounter[id];

ViewBag.CounterSucceeded = true;

\_logger.LogError("GetDividedNumber - Success");

}

catch (Exception ex)

{

\_logger.LogError(ex, $"An error occured while trying to increase or retrieve the page display count. Number parameter is: {id}");

}

```

18. In the \*\*LoggingExample - Microsoft Visual Studio\*\* window, on the \*\*FILE\*\* menu, click \*\*Save All\*\*.

19. In the \*\*LoggingExample - Microsoft Visual Studio\*\* window, on the toolbar, click the arrow next to the \*\*Start Debugging\*\* button, and then click \*\*Production\*\*.​

20. In the \*\*LoggingExample - Microsoft Visual Studio\*\* window, on the \*\*DEBUG\*\* menu, click \*\*Start Without Debugging\*\*.

21. In Microsoft Edge, click \*\*16\*\*.

>\*\*Note\*\*: The browser does not display how many times the number \*\*16\*\* was viewed.

22. In Microsoft Edge, click \*\*Close\*\*.

23. In File Explorer, navigate to \*\*[Repository Root]\Allfiles\Mod10\Democode\03\_LoggingExample\_begin\LoggingExample\*\*, and then double-click \*\*myLog-XXXXXXXX - Notepad\*\*.

>\*\*Note\*\*: Inspect the \*\*KeyNotFoundException\*\* stack trace.

24. In the \*\*myLog-XXXXXXXX - Notepad\*\* window, click \*\*Close\*\*.

25. In Solution Explorer, expand \*\*Services\*\*, and then click \*\*Counter.cs\*\*.

26. In the \*\*Counter.cs\*\* code window, select the following code:

```cs

NumberCounter[number]++;

```

27. Replace the selected code with the following code:

```cs

if (NumberCounter.ContainsKey(number))

{

NumberCounter[number]++;

\_logger.LogDebug($"The number of times the page was displayed for the number {number} was increased to {NumberCounter[number]}.");

}

else

{

NumberCounter.Add(number, 1);

\_logger.LogDebug($"The number {number} was added to the page display count dictionary.");

}

```

28. In the \*\*LoggingExample - Microsoft Visual Studio\*\* window, on the \*\*FILE\*\* menu, click \*\*Save All\*\*.

29. In the \*\*LoggingExample - Microsoft Visual Studio\*\* window, on the toolbar, click the arrow next to the \*\*Start Debugging\*\* button, and then click \*\*Development\*\*.​

30. In the \*\*LoggingExample - Microsoft Visual Studio\*\* window, on the \*\*DEBUG\*\* menu, click \*\*Start Without Debugging\*\*.

31. In Microsoft Edge, click \*\*16\*\*.

32. In the \*\*LoggingExample - Microsoft Visual Studio\*\* window, on the \*\*View\*\* menu, click \*\*Output\*\*.

33. On the \*\*Output\*\* tab, in the \*\*Show output from\*\* box, select \*\*ASP.NET Core Web Server\*\*.

34. In the \*\*LoggingExample - Microsoft Visual Studio\*\* window, on the \*\*Output\*\* tab, press \*\*Ctrl + F\*\*, and then locate the following text:

```

The number 16 was added to the page display count dictionary.

```

35. In Microsoft Edge, click \*\*Close\*\*.

36. In the \*\*LoggingExample - Microsoft Visual Studio\*\* window, on the toolbar, click the arrow next to the \*\*Start Debugging\*\* button, and then click \*\*Production\*\*.​

37. In the \*\*LoggingExample - Microsoft Visual Studio\*\* window, on the \*\*DEBUG\*\* menu, click \*\*Start Without Debugging\*\*.

38. In Microsoft Edge, click \*\*16\*\*.

>\*\*Note\*\*: The browser displays the numbers by which \*\*16\*\* can be divided.

39. In Microsoft Edge, click \*\*Close\*\*.

40. In File Explorer, navigate to \*\*[Repository Root]\Allfiles\Mod10\Democode\03\_LoggingExample\_begin\LoggingExample\*\*, and then double-click \*\*myLog-XXXXXXXX.txt\*\*.

>\*\*Note\*\*: Press \*\*Ctrl + F\*\*, and then locate the following the sentence \*\*GetDividedNumber - Success\*\*.

41. In the \*\*myLog-XXXXXXXX - Notepad\*\* window, click \*\*Close\*\*.

42. In the \*\*LoggingExample - Microsoft Visual Studio\*\* window, on the \*\*FILE\*\* menu, click \*\*Exit\*\*.