INTCDE21ID008

STAGE-3

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ASP .Net core Logging

Hands-On:

HomeController.cs

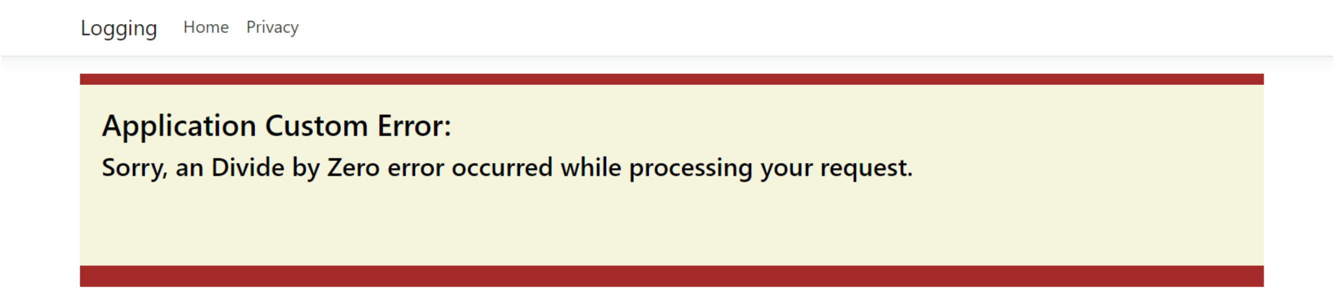
```
using Logging.Filter;

using Logging.Models;

using Microsoft.AspNetCore.Mvc;

using Microsoft.Extensions.Logging;

using System;

using System.Collections.Generic;

using System.Diagnostics;

using System.Linq;

using System.Threading.Tasks;


namespace Logging.Controllers

{

    public class HomeController : Controller

    {

        [MyExceptionFilter]

        public IActionResult Index()

        {

            int a = 5;
            int b = 0;
            int divison = a / b;
            ViewBag.Message = "The Division is: " +divison;
            return View();
        }

        public IActionResult Privacy()
        {
            return View();
        }
    }
}
```

MyExceptionFilter.cs

```
using log4net;
using Microsoft.AspNetCore.Mvc;
using Microsoft.AspNetCore.Mvc.Filters;
using System;
using System.Collections.Generic;
using System.Linq;
using System.Threading.Tasks;

namespace Logging.Filter
{
    public class MyExceptionFilter : ExceptionFilterAttribute, IExceptionFilter
    {
        private readonly ILog _logger =
LogManager.GetLogger(typeof(MyExceptionFilter));

        public override void OnException(ExceptionContext context)
        {
            _logger.Error(context.Exception.Message);
            context.ExceptionHandled = true;
            context.Result = new ViewResult() { ViewName = "CustomErrors" };
        }
    }
}
```

CustomErrors.cshtml

```
@*
    For more information on enabling MVC for empty projects, visit
https://go.microsoft.com/fwlink/?LinkID=397860
*@
@{
    ViewBag.Title = "Error";
}

<div style="background-color: #A52A2A; color: White; height: 10px;">
</div>
<div style="background-color: #F5F5DC; color: White; height: 170px;">
    <div style="padding:20px;">
        <h3 style="color: Black;">
            Application Custom Error:
        </h3>
        <h4 style="color: Black;">
            Sorry, an Divide by Zero error occurred while processing your request.
        </h4>
        <br />
        <br />
    </div>
</div>
<div style="background-color: #A52A2A; color: White; height: 20px;">
```



Application Custom Error:

Sorry, an Divide by Zero error occurred while processing your request.

```
</div>
```

<u>OUTPUT</u>

Log4Net usage for logging

HomeController.cs

```
using log4net;
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.Mvc;

namespace Log4Net.Controllers
{
    public class HomeController : Controller
    {
        private static readonly ILog Log =
LogManager.GetLogger(typeof(HomeController));

        public ActionResult Index()
        {
            try
            {
                Log.Debug("Log4Net usage for logging in ASP.NET MVC");
                Log.Info("First");
                Log.Warn("Second");
                throw new NullReferenceException();
            }
            catch (Exception exp)
            {
                Log.Error("Error");
                Log.Fatal("Fatal");
            }
            return View();
        }

        public ActionResult About()
        {
            ViewBag.Message = "Your application description page.";

            return View();
        }

        public ActionResult Contact()
        {
            ViewBag.Message = "Your contact page.";

            return View();
        }
    }
}
```

Global.asax.cs

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

namespace Log4Net
{
  public class MvcApplication : System.Web.HttpApplication
  {
    protected void Application_Start()
    {
      log4net.Config.XmlConfigurator.Configure();
      AreaRegistration.RegisterAllAreas();
      FilterConfig.RegisterGlobalFilters(GlobalFilters.Filters);
      RouteConfig.RegisterRoutes(RouteTable.Routes);
      BundleConfig.RegisterBundles(BundleTable.Bundles);
    }
  }
}
```

1. **Create a .Net core web application with a controller that is scaffolded with Entity framework options.**

HomeController.cs

```
using AccountDetails.Models;
using Microsoft.AspNetCore.Mvc;
using Microsoft.EntityFrameworkCore;
using Microsoft.Extensions.Logging;
using System;
using System.Collections.Generic;
using System.Diagnostics;
using System.Linq;
using System.Threading.Tasks;

namespace AccountDetails.Controllers
{
    public class HomeController : Controller
    {
        private AccountDbContext context;
        public HomeController(AccountDbContext dbContext)
        {
            context = dbContext;
        }

        public async Task<IActionResult> Index()
        {
            List<Account> accList = await context.Accounts.ToListAsync();
            return View(accList);
        }

        public IActionResult Create()
        {
            return View();
        }

        [HttpPost]
        [ValidateAntiForgeryToken]
        public async Task<IActionResult> Create([Bind("AccountId,AccountName")]
Account obj)
        {
            if (ModelState.IsValid == true)
            {
                await context.Accounts.AddAsync(obj);
                context.SaveChanges();

            }
            else
            {
            return NotFound();
            }

            return RedirectToAction("Index");
        }

        public async Task<IActionResult> Edit(int id)
        {
```

```
{
            Account obj = await context.Accounts.FindAsync(id);
            return View(obj);
        }

        [HttpPost]
        [ValidateAntiForgeryToken]
        public async Task<IActionResult> Edit([Bind("AccountId,AccountName")] Account obj)
        {
            if (ModelState.IsValid == true)
            {
                context.Update(obj);
                await context.SaveChangesAsync();

            }
            else
            {
                return NotFound();
            }

            return RedirectToAction("Index");
        }

        public async Task<IActionResult> Delete(int id)
        {
            Account obj = await context.Accounts.FindAsync(id);
            return View(obj);
        }

        [HttpPost]
        [ActionName("Delete")]
        [ValidateAntiForgeryToken]
        public async Task<IActionResult> DeleteConfirm(int id)
        {
            Account obj = await context.Accounts.FindAsync(id);
            context.Accounts.Remove(obj);
            await context.SaveChangesAsync();
            return RedirectToAction(" Index ");
        }
    }
}
```

AccountDbContext.cs

```
using Microsoft.EntityFrameworkCore;
using System;
using System.Collections.Generic;
using System.Linq;
using System.Threading.Tasks;

namespace AccountDetails.Models
{
    public class Account
    {
        public int AccountId { get; set; }


        public string AccountName { get; set; }
    }
    public class AccountDbContext:DbContext
    {
        public DbSet<Account> Accounts { get; set; }


    public AccountDbContext(DbContextOptions<AccountDbContext>
options):base(options)
        {


        }
    }
}
```