

EXPLORER

OPEN EDITORS

GROUP 1

Program.cs BDSA2018.Lecture01

GROUP 2

ProgramTests.cs BDSA2018.Lecture01.Tests

BDSA2018.Lecture01

ProgramTests.cs BDSA2018.Lecture01.Tests

BDSA2018.Lecture01.Tests.csproj

Program.cs

1 using System;

2

3 namespace BDSA2018.Lecture01

4 {

5 1 reference

6 public class Program

7 {

8 1 reference

9 public static void Main(string[] args)

10 {

11 Console.WriteLine("Hello World!");

12 }

13 }

ProgramTests.cs

1 using System;

2 using System.IO;

3 using Xunit;

4

5 namespace BDSA2018.Lecture01.Tests

6 {

7 0 references | Run All Tests | Debug All Tests

8 public class ProgramTests

9 {

10 [Fact]

11 0 references | Run Test | Debug Test

12 public void Main\_prints\_Hello

13 {

14 // Arrange

15 var writer = new StringWriter();

16 Console.SetOut(writer);

17

18 // Act

19 Program.Main(new string[0]);

20

21 // Assert

22 var output = writer.GetStringBuilder().ToString();

23 Assert.Equal("Hello World", output);

24 }

25 }

PROBLEMS

OUTPUT

DEBUG CONSOLE

TERMINAL

Visual Studio Code, Visual Studio or Visual Studio for Mac software help you develop and test your applications.

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Loaded 'C:\Program Files\dotnet\shared\Microsoft.NETCore.App\2.1.3\System.Private.CoreLib.dll'. Skipped loading symbols. The debugger option 'Just My Code' is enabled.

Loaded 'C:\Users\rasmus\l\Desktop\BDSA2018.Lecture01\BDSA2018.Lecture01\bin\Debug\netcoreapp2.1\BDSA2018.Lecture01.dll'. Skipped loading symbols. The debugger option 'Just My Code' is enabled.

Loaded 'C:\Program Files\dotnet\shared\Microsoft.NETCore.App\2.1.3\System.Runtime.dll'. Skipped loading symbols. The debugger option 'Just My Code' is enabled.

Loaded 'C:\Program Files\dotnet\shared\Microsoft.NETCore.App\2.1.3\System.Console.dll'. Skipped loading symbols. The debugger option 'Just My Code' is enabled.

Loaded 'C:\Program Files\dotnet\shared\Microsoft.NETCore.App\2.1.3\System.Threading.dll'. Skipped loading symbols. The debugger option 'Just My Code' is enabled.

Loaded 'C:\Program Files\dotnet\shared\Microsoft.NETCore.App\2.1.3\System.Runtime.Extensions.dll'. Skipped loading symbols. The debugger option 'Just My Code' is enabled.

Hello World!

The program '[15304] BDSA2018.Lecture01.dll' has exited with code 0 (0x0).

OUTLINE

# # Data Access and Entity Framework Core Take 2

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# Agenda

Course fundamentals

Most important skill as a developer

Configuring your box

The shell

Package managers

.NET Standard

Entity Framework Core

DTOs

# Course fundamentals

Not designed to be easy!

Designed to *teach you to teach yourself*

You learn from experience and pain!

You must type it yourself!

You must fail to succeed!

We can't teach you everything!

We are not going to hold your hand!

# Most important skill as a developer

Programmers **spend** 50.1% of their work **time** not programming. Half of their **time spent** programming is **spent debugging**. ... 26% reduction in **time spent debugging** is estimated to equal \$81.1bn in total software development costs saved per year.

- Tom Britton et.al.: Reversible Debugging Software

"Indeed, the ratio of time spent reading versus writing is well over 10 to 1. We are constantly reading old code as part of the effort to write new code. ...[Therefore,] making it easy to read makes it easier to write."

— Robert C. Martin, Clean Code: A Handbook of Agile Software Craftsmanship

# Most important skill as a developer

Most important skill:

***Reading English!***

Second most important skill:

***Writing English!***

Third most important skill:

***Internet Search!***

Fourth most important skill:

***Ask for help!***

# Configuring your box

All the exercises are for a reason!

- You might not get it now, that's ok(!)

Configuring your pc/mac is a chore/challenge/delight(!) you do it!

You will want/need to reinstall from scratch maybe once a year

# The shell/console/terminal

bash

Terminal (bash → zsh)

PowerShell 6+

Windows PowerShell

Command Prompt



# Package Managers

Linux: *apt/yum/rpm*

Windows: *Chocolatey*: <https://chocolatey.org/>

Mac: *Homebrew*: <https://brew.sh/>

All: *npm*: <https://www.npmjs.com/>

.NET: *NuGet*: <https://www.nuget.org/>

They all work the same:

The Shell!



# .NET Standard

<https://docs.microsoft.com/en-us/dotnet/standard/net-standard>

# Entity Framework Core and DTOs

Project.App ← console

Project.App.Tests ← xunit

Project.Model ← classlib

Project.Model.Tests ← xunit

Project.Entities ← classlib

Project.Entities.Tests ← xunit

Connection (Sqlite):

"Data Source=database.db"