Working with Dates

Date and Time

The exercise on the right shows some of the things you can do with DateTime.

The results are as follows:

```
Hour: 16
Minutes: 30
14 April 2020
14/04/2020
16:30:31
16:30
2020-04-14 16:30
Press any key to continue . . .
```

```
using System;
      - namespace usingDateTime
           class Program
               static void Main(string[] args)
                   var dateTime = new DateTime(2020, 4, 14);
                   var now = DateTime.Now;
10
                   var today = DateTime.Today;
11
                   Console.WriteLine("Hour: " + now.Hour);
13
14
                   Console.WriteLine("Minutes: " + now.Minute);
15
                   var tomorrow = now.AddDays(1);
16
                   var yesterday = now.AddDays(-1);
18
19
                   Console.WriteLine(now.ToLongDateString());
                   Console.WriteLine(now.ToShortDateString());
20
21
                   Console.WriteLine(now.ToLongTimeString());
                   Console.WriteLine(now.ToShortTimeString());
22
23
                   Console.WriteLine(now.ToString("yyyy-MM-dd HH:mm"));
24
25
26
27
28
29
```

Timespan

Exercise - TimeSpan

The exercise on the right shows some of the things you can do with TimeSpan.

The results are as follows:

```
Minutes: 2
Total Minutes: 62.05
Add Example: 01:10:03
Subtract Example: 01:00:03
ToString: 01:02:03
Parse: 01:02:03
Press any key to continue . . .
```

```
using System;
     -namespace Timespan
           class Program
               static void Main(string[] args)
 9
                   //creating
                   var timeSpan = new TimeSpan(1, 2, 3);
10
11
12
                   var timeSpan1 = new TimeSpan(1, 0, 0);
                   var timeSpan2 = TimeSpan.FromHours(1); //More readable
13
14
                   var start = DateTime.Now;
15
                   var end = DateTime.Now.AddMinutes(2);
16
                   var duration = end - start;
17
                                                    //timespan
                   Console.WriteLine("Duration: " + duration);
18
19
                   //Properties
20
21
                   Console.WriteLine("Minutes: " + timeSpan.Minutes);
                   Console.WriteLine("Total Minutes: " + timeSpan.TotalMinutes);
22
23
24
                   // Add
                   Console.WriteLine("Add Example: " + timeSpan.Add(TimeSpan.FromMinutes(8)));
25
26
                   Console.WriteLine("Subtract Example: " + timeSpan.Subtract(TimeSpan.FromMinutes(2)));
27
28
                   // ToString
                   Console.WriteLine("ToString: " + timeSpan.ToString());
29
30
                   // Parse
31
                   Console.WriteLine("Parse: " + TimeSpan.Parse("01:02:03"));
32
33
34
35
```