

# Object-oriented Examples



**Mel Grubb**

Developer

@melgrubb | [www.melgrubb.com](http://www.melgrubb.com)



# Overview

**Demo: Offset-aware DateTime**

**Demo: Options Pattern**





# Demo: Offset-aware DateTime



# Dates and Times Are Relative



# **Comparable.CompareTo**

**If this instance is less than “other”, return -1**

**If this instance is greater than “other”, return 1**

**If both instances are equal, return 0**





## Design Tips

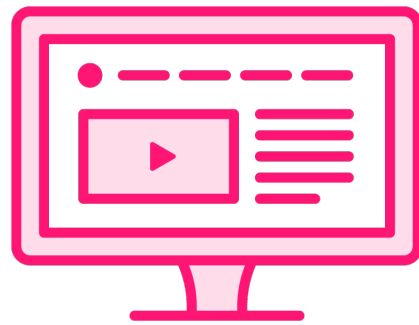
- **Create objects that are smart data**
- **Classes are tools**
- **Don't reinvent wheels**
  - Use .NET DateTimeOffset
  - Use NodaTime for dealing with time zones





# Demo: Options Pattern





## For more information

**Options Pattern in .NET**

**<https://learn.microsoft.com/en-us/dotnet/core/extensions/options>**







## Design Tips

- **Create objects that are smart data**
- **Abstract behavior to solve problems once**
- **Even simple custom types have benefits**
  - Directly manipulate objects during tests



# Summary

## OffsetDateTime

- Intelligently comparable to others

## Options Pattern

- Simple bound object
- Dependency injection
- IOptions interface
- Hosted services and validation



**Up Next:**

# **Putting It All Together**

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