Module 3
Data Types, Variables, and Constants

Lecture
Other Value Types

Module 3 Learning Objectives

Bloom Level	Number	Name	Description	Course Learning Objectives
3: Apply	1	Given Types	Develop a console application that uses specified data types	Basic Programming Concepts
3: Apply	2	Selected Types	Develop a console application that uses programmer-selected data types	Basic Programming Concepts
2: Understand	3	Data Type Comparison	Compare and contrast different C# data types	Basic Programming Concepts
3: Apply	4	Calculations	Develop a console application that uses variables and constants for calculations	Basic Programming Concepts

Last time, we discussed the different value types we can use to represent numbers in C#

Remember, for value types the bits in memory represent the value of the variable

This time, we'll discuss the other value types in C#

- Characters
- char
  - 16 bits
  - Unicode
- Operations as we need them

In-Lecture Quiz

The `char` data type lets you hold

- A: your own hand
- B: somebody else's hand
- C: Dr. T's hand
- D: a single character

- Booleans
- `bool`
  - Only two possible values: `true`, `false`
- Operations may be new to you
  - And: `&&`
  - Or: `||`
  - Not: `!`
- Booleans are very helpful when we make decisions in our code

In-Lecture Quiz

The `bool` data type is named after

- A: George Boole
- B: Bubba Boole
- C: you
- D: me

- Recap
  - C# provides a value types to store characters and Booleans
  - End of Module 3
- Next Time
  - Classes and objects, foundational object-oriented concepts