Module 11
Class Design and Implementation

Lecture
Console Class: Constructors

Module 11 Learning Objectives

Bloom Level	Number	Name	Description	Course Learning Objectives
2: Understand	1	Fields and Properties	Describe the relationship between fields and properties	Basic OO Concepts
3: Apply	2	Console Application Fields and Properties	Design and implement the fields and properties for a console application class	Basic OO Concepts
3: Apply	3	Console Application Methods	Design and implement the constructors and methods for a console application class	Basic OO Concepts
3: Apply	4	XNA Fields and Properties	Design and implement the fields and properties for an XNA class	Basic OO Concepts,Basic XNA Concepts
3: Apply	5	XNA Methods	Design and implement the constructor and methods for an XNA class	Basic OO Concepts,Basic XNA Concepts

Last time we designed our Die class and implemented the fields and properties in the class

This time, we'll add our constructors to the class

- State, Behavior, and Identity
- Identity
  - So we can distinguish one object from another
  - Memory address

In-Lecture Quiz

To create a new object of a class (called instantiation) we call the

- A: police
- B: cops
- C: constructor
- D: healer

- Die Class
  - State: number of sides, side that's on top
  - Behavior: roll
  - Identity: when we create a new die object (instantiation)
    - Standard 6-sided die
    - Die with any number of sides (20, for example)

In-Lecture Quiz

When we want to pass information in to a constructor, the constructor header needs to have

- A: parameters
- B: fuzzy feet
- C: fancy fringe
- D: party pickles

In-Lecture Quiz

When we want to pass information in to a constructor, the call to the constructor needs to have

- A: a cell phone
- B: disagreements
- C: fights
- D: arguments

- Recap
  - We’ve added multiple constructors and learned more about how parameters work
- Next Time
  - We’ll add our Roll method to the Die class