Module 9
Arrays and Collection Classes

Lecture
Arrays

Module 9 Learning Objectives

Bloom Level	Number	Name	Description	Course Learning Objectives
2: Understand	1	Array/Collection Class Difference	Describe the key difference between arrays and collection classes	Basic Programming Concepts
3: Apply	2	Array and Collection Use	Develop a console application that uses arrays and lists	Basic Programming Concepts

In this module, we’re going to look at how we can efficiently store and use multiple entities in our game

In-Lecture Quiz

Arrays are

- A: colorful
- B: weird
- C: green
- D: objects

- What can we store in arrays?
  - Anything! But …
  - A particular array can only store a single data type
  - So we can have an array of `int`s and another array of `TeddyBear`s, but we can't mix them in a single array

In-Lecture Quiz

A single array can store many objects of

- A: different types
- B: the same type
- C: glass
- D: any weapon type

0	0.0
1	0.0
2	0.0
3	0.0
4	0.0
5	0.0
6	0.0
7	0.0
8	0.0
9	0.0

In-Lecture Quiz

The value stored at each location in the array is called

- A: Fred
- B: an element
- C: an index
- D: never, it’s texted instead

In-Lecture Quiz

The number of each location in the array is called

- A: Tommy
- B: an element
- C: an index
- D: okay, it’s not texted either

In-Lecture Quiz

We access individual elements of an array using

- A: the array name and an index
- B: the array name and a pinky
- C: the array name and a pixie
- D: I’m a pixie; my name is Pinky

In-Lecture Quiz

Arrays can have the following number of dimensions:

- A: 0
- B: 1
- C: 42
- D: as many as you want

- Recap
  - We discussed how we can use arrays to store multiple values
  - All the elements in a particular array need to be the same data type
- Next Time
  - We'll look at another, more robust, way to store multiple values