

TEB



iOS Programlama Eğitimi

6. Gün

Lazy Stored Properties



```
class DataImporter {  
    var fileName = "data.txt"  
  
    init() {  
        println("Data Importer being initialized...")  
    }  
}  
  
class DataManager {  
    lazy var importer = DataImporter()  
    var data = [String]()  
}
```

Lazy Stored Properties



```
let manager = DataManager()  
manager.data.append("Some data")  
  
// DataImporter instance has not been created yet
```

Lazy Stored Properties



```
println(manager.importer.fileName)  
// Data Importer being initialized...  
// data.txt
```

Any & AnyObject



- **AnyObject**
 - Bir class tipinde nesneyi ifade eder
- **Any**
 - Her hangi bir tipte nesneyi ifade eder
 - Fonksiyonlar dahil

Lazy Stored Properties



```
var things = [Any]()  
  
things.append(0)  
things.append(0.0)  
things.append(42)  
things.append(3.14159)  
things.append("hello")  
things.append((3.0, 5.0))  
things.append(Movie(name: "Ghostbusters"))  
things.append({(name: String)->String in "Hello, \ (name)"})
```

Lazy Stored Properties



```
for thing in things {  
  switch thing {  
    case 0 as Int:  
      println("zero as an Int")  
    case 0 as Double:  
      println("zero as a Double")  
    case let someInt as Int:  
      println("an integer value of \(someInt)")  
    case let someDouble as Double where someDouble > 0:  
      println("a positive double value of \(someDouble)")  
    case is Double:  
      println("some other double value")  
    case let someString as String:  
      println("a string value of "\(someString)\")  
    case let (x, y) as (Double, Double):  
      println("an (x, y) point at \(x), \(y)")  
    case let movie as Movie:  
      println("a movie called '\(movie.name)")  
    case let stringConverter as String -> String:  
      println(stringConverter("Michael"))
```

Nested Types



```
struct BlackjackCard {  
  
    // nested Suit enumeration  
    enum Suit: Character {  
        case Spades = "♠", Hearts = "♥"  
        case Diamonds = "♦", Clubs = "♣"  
    }  
  
    // BlackjackCard properties and methods  
    let suit: Suit  
    var description: String {  
        var output = "Suit is \(suit.rawValue)"  
        return output  
    }  
}
```


Nested Types



```
let theSpades = BlackjackCard(suit: .Spades)
println("Spades: \ (theSpades.description)")
// prints "Spades: suit is ♠"
```

Nested Types



```
let heartsSymbol = BlackjackCard.Suit.Hearts.rawValue  
// heartsSymbol is "♥"
```

Operator Functions



Operator Overloading olarak da bilinir.

```
struct Vector2D {  
    var x = 0.0, y = 0.0  
}
```

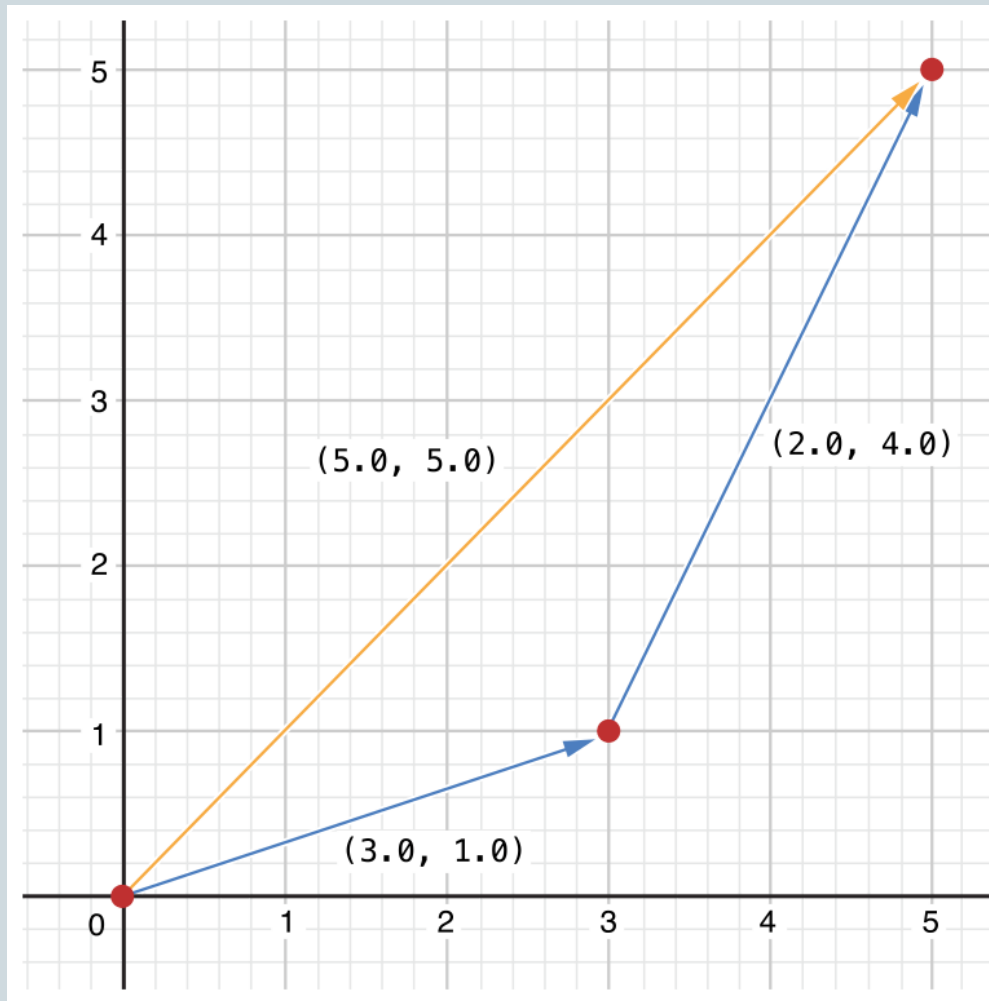
```
func + (left: Vector2D, right: Vector2D) -> Vector2D {  
    return Vector2D(x:left.x + right.x, y:left.y + right.y)  
}
```

Operator Functions



```
let vector = Vector2D(x: 3.0, y: 1.0)
let anotherVector = Vector2D(x: 2.0, y: 4.0)
let combinedVector = vector + anotherVector
// combinedVector is Vector2D with values of (5.0, 5.0)
```

Operator Functions



Prefix and Postfix Operators



```
prefix fun - (vector: Vector2D) -> Vector2D {  
    return Vector2D(x: -vector.x, y: -vector.y)  
}
```

Prefix and Postfix Operators



```
let positive = Vector2D(x: 3.0, y: 4.0)
let negative = -positive
// negative is Vector2D with values of (-3.0, -4.0)
let alsoPositive = -negative
// alsoPositive is Vector2D with values of (3.0, 4.0)
```

Compound Assignment Operators



```
func += (inout left: Vector2D, right: Vector2D) {  
    left = left + right  
}
```


Compound Assignment Operators



```
var original = Vector2D(x: 1.0, y: 2.0)
let vectorToAdd = Vector2D(x: 3.0, y: 4.0)
original += vectorToAdd
// original now has values of (4.0, 6.0)
```

Compound Assignment Operators



```
prefix func ++ (inout vector: Vector2D) -> Vector2D {  
    vector += Vector2D(x: 1.0, y: 1.0)  
    return vector  
}
```

Compound Assignment Operators



```
var toIncrement = Vector2D(x: 3.0, y: 4.0)
let afterIncrement = ++toIncrement
// toIncrement now has values of (4.0, 5.0)
// afterIncrement also has values of (4.0, 5.0)
```

Compound Assignment Operators



- `=` operatörü overload edilemez
- Ternary condition `(a ? b : c)` operatörü overload edilemez

Equivalence Operators



```
func == (left: Vector2D, right: Vector2D) -> Bool {  
    return (left.x == right.x) && (left.y == right.y)  
}
```

```
func != (left: Vector2D, right: Vector2D) -> Bool {  
    return !(left == right)  
}
```

Equivalence Operators



```
let twoThree = Vector2D(x: 2.0, y: 3.0)
let anotherTwoThree = Vector2D(x: 2.0, y: 3.0)
if twoThree == anotherTwoThree {
    println("These two vectors are equivalent.")
}
// prints "These two vectors are equivalent."
```

Custom Operators



prefix operator `+++` `{}`

Custom Operators



```
prefix func +++ (inout vector: Vector2D) -> Vector2D {  
    vector += vector  
    return vector  
}
```


Custom Operators



```
var toBeDoubled = Vector2D(x: 1.0, y: 4.0)
let afterDoubling = +++toBeDoubled
// toBeDoubled now has values of (2.0, 8.0)
// afterDoubling also has values of (2.0, 8.0)
```

More Operator Overloading



- <http://nshipster.com/swift-operators/>