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// ViewController.swift
// OandX
//
// Created by Greg Vinall on 1/06/2015.
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//import UIKit

class ViewController: UIViewController {

let OandX = OandXModel()

// if gameOver is true, stop responding to user input. This will be improved in later revisions.
var gameOver = false

// Search all controls for buttons. For each button found, look to see if it is free (that is, a '+')
// If so, move there. Note each button's tag has a number from which the x, y coordinates can be calculated.
func computerMoves() {
    for view in self.view.subviews as! [UIView] {
        if let btn = view as? UIButton {
            if btn.currentTitle == "+" {
                btn.setTitle("O", forState: .Normal)
                let x:Int = btn.tag / 3
                let y:Int = btn.tag % 3
                OandX.makeMove(x, y: y, player: false)
                break
            }
        }
    }
}

// resultLabel shows who has won (when applicable)
@IBOutlet var resultLabel: UILabel!
```

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// 'function move' calculates the button that was touched,
calculates the x,y coordinates from the button's tag,
// and sends the result to the OandX class for processing (eg stores
the result in the game board).
// A check is made to see if the game has been won.
@IBAction func move(sender: AnyObject) {
    let x:Int, y:Int
    if gameOver {
        return
    }

    switch sender.tag {
        case 0...2:
            x = 0
            switch sender.tag {
                case 0: y = 0
                case 1: y = 1
                default: y = 2
            }
        case 3...5:
            x = 1
            switch sender.tag {
                case 3: y = 0
                case 4: y = 1
                default: y = 2
            }
        default:
            x = 2
            switch sender.tag {
                case 6: y = 0
                case 7: y = 1
                default: y = 2
            }
    }
```

```
    (sender as! UIButton).setTitle("X", forState: .Normal)

    OandX.makeMove(x,y: y,player: true)

    if OandX.playerWins() {
        resultLabel.text = "You WIN!!!!"
        gameOver = true
    } else {
        computerMoves()
        if OandX.computerWins() {
            resultLabel.text = "Computer WINS!!!!"
            gameOver = true
        }
    }
}

override func viewDidLoad() {
    super.viewDidLoad()
    // Do any additional setup after loading the view, typically from
a nib.
}

override func didReceiveMemoryWarning() {
    super.didReceiveMemoryWarning()
    // Dispose of any resources that can be recreated.
}

// Not used at this stage of development.
func refreshUI() {
    var board = [[Int]]()
    board = OandX.returnBoard()
}

}
```