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//
// PoliticalScience.swift
// FBLA-QuizME
//
// Created by Udit Garg on 11/28/18.
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//

import Foundation
import UIKit
import MessageUI

class PoliticalScience: UIViewController {

    // Set up variables that represent labels and buttons on the storyboard
    @IBOutlet weak var QuestionLabel: UILabel!
    @IBOutlet weak var Answer1: UIButton!
    @IBOutlet weak var Answer2: UIButton!
    @IBOutlet weak var Answer3: UIButton!
    @IBOutlet weak var Answer4: UIButton!
    @IBOutlet weak var NextQuestion: UIButton!
    @IBOutlet weak var ScoreLabel: UILabel!

    // Create an array of integers that represent the number of questions
    var randomQuestionArray:[Int] = [0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12]

    override func viewDidLoad() {
        super.viewDidLoad()

        // Hide Initial Next Question Buttons
        NextQuestion.isHidden = true

        //Format the buttons
        Answer1.layer.borderWidth=1
        Answer1.layer.borderColor=UIColor.darkGray.cgColor
        Answer1.layer.cornerRadius=5
        Answer2.layer.borderWidth=1
        Answer2.layer.borderColor=UIColor.darkGray.cgColor
        Answer2.layer.cornerRadius=5
        Answer3.layer.borderWidth=1
        Answer3.layer.borderColor=UIColor.darkGray.cgColor
        Answer3.layer.cornerRadius=5
        Answer4.layer.borderWidth=1
        Answer4.layer.borderColor=UIColor.darkGray.cgColor
        Answer4.layer.cornerRadius=5

        // Set the answers to be incorrect
        Answer1Correct = false
        Answer2Correct = false
        Answer3Correct = false
        Answer4Correct = false

        // As soon as the view loads start generating the questions
        RandomQuestions()

        ScoreNumber = 0
    }

    override func didReceiveMemoryWarning() {
        super.didReceiveMemoryWarning()
    }

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    // Dispose of any resources that can be recreated.
}

// If the answer is right then the Next Question button is enabled
func rightAnswer() {
    NextQuestion.isHidden = false
    ScoreNumber = Int(ScoreNumber) + 2
    ScoreLabel.text = String(format: "%i", ScoreNumber)
}

// If the answer is wrong then the Next Question button is hidden
func wrongAnswer() {
    ScoreNumber = Int(ScoreNumber) - 1
    ScoreLabel.text = String(format: "%i", ScoreNumber)
}

// This function randomly generates questions without repeat
func RandomQuestions(){

    Answer1.isEnabled = true
    Answer2.isEnabled = true
    Answer3.isEnabled = true
    Answer4.isEnabled = true

    // This makes randomIndex represent the number of questions available for this
question
    let randomIndex = Int(arc4random_uniform(UInt32(randomQuestionArray.count)))

    // Generates questions until all of the questions for this topic have been
answered
    if randomQuestionArray.count > -1 {

        switch (randomQuestionArray[randomIndex]) {
        case 0:
            QuestionLabel.text = "Which of the following concepts is not included
in the definition of politics?"
            Answer1.setTitle("power", for: .normal)
            Answer2.setTitle("popular Sovereignty", for: .normal)
            Answer3.setTitle("allocation/distribution", for: .normal)
            Answer4.setTitle("society/community/public", for: .normal)
            Answer2Correct = true
        case 1:
            QuestionLabel.text = "The principle that citizens in a democracy are
protected from the government interference in the exercise of several basic freedoms
is known as "
            Answer1.setTitle("popular sovereignty", for: .normal)
            Answer2.setTitle("political equality", for: .normal)
            Answer3.setTitle("political liberty", for: .normal)
            Answer4.setTitle("democracy", for: .normal)
            Answer3Correct = true
        case 2:
            QuestionLabel.text = "What is it called when we expect our
representatives to follow the policy wishes of the voters back home, regardless of
their own personal policy preferences? "
            Answer1.setTitle("direct democracy", for: .normal)
            Answer2.setTitle("trustee model of representation", for: .normal)
            Answer3.setTitle("delegate model of representation", for: .normal)
            Answer4.setTitle("none of the above", for: .normal)
            Answer3Correct = true
        case 3:

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        QuestionLabel.text = "Which of the following responses is available to
citizens when our federal representatives disappoint or fail to represent us?"
        Answer1.setTitle("refuse to re-elect them", for: .normal)
        Answer2.setTitle("recall", for: .normal)
        Answer3.setTitle("impeachment", for: .normal)
        Answer4.setTitle("all of the above.", for: .normal)
        Answer1Correct = true
    case 4:
        QuestionLabel.text = "Fallacies are"
        Answer1.setTitle("errors in reasoning", for: .normal)
        Answer2.setTitle("policy mistakes", for: .normal)
        Answer3.setTitle("arguments with which we disagree as individuals",
for: .normal)
        Answer4.setTitle("all of the above", for: .normal)
        Answer1Correct = true
    case 5:
        QuestionLabel.text = "The statement 'Either we cut spending or
decrease the deficit is an example of' "
        Answer1.setTitle("false dilemma", for: .normal)
        Answer2.setTitle("post hoc fallacy ", for: .normal)
        Answer3.setTitle("hasty generalization ", for: .normal)
        Answer4.setTitle("none of the above", for: .normal)
        Answer1Correct = true
    case 6:
        QuestionLabel.text = "The two most effective and important agents of
political socialization are"
        Answer1.setTitle("peer groups and social classes", for: .normal)
        Answer2.setTitle("interest groups and political parties", for:
.normal)
        Answer3.setTitle("families and schools", for: .normal)
        Answer4.setTitle("media and religious institutions", for: .normal)
        Answer3Correct = true
    case 7:
        QuestionLabel.text = "Political culture is"
        Answer1.setTitle("composed of the most deeply held values and
beliefs", for: .normal)
        Answer2.setTitle("held collectively by the society ", for: .normal)
        Answer3.setTitle("both a and b", for: .normal)
        Answer4.setTitle("none of the above", for: .normal)
        Answer3Correct = true
    case 8:
        QuestionLabel.text = "The time, efforts, and resource required to make
a collective decision is called:"
        Answer1.setTitle("transaction costs", for: .normal)
        Answer2.setTitle("collective action problems", for: .normal)
        Answer3.setTitle("conformity costs", for: .normal)
        Answer4.setTitle("privatization", for: .normal)
        Answer1Correct = true
    case 9:
        QuestionLabel.text = "Which right is granted by the courts but not
explicitly mentioned in the Constitution, as amended?"
        Answer1.setTitle("freedom of speech", for: .normal)
        Answer2.setTitle("right to jury trial", for: .normal)
        Answer3.setTitle("right to privacy", for: .normal)
        Answer4.setTitle("right to equality of opportunity", for: .normal)
        Answer3Correct = true
    case 10:
        QuestionLabel.text = "Bill in congress are typically edited and
reported on by:"
        Answer1.setTitle("a standing committee", for: .normal)
        Answer2.setTitle("the rules committee", for: .normal)

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        Answer3.setTitle("the pro temper", for: .normal)
        Answer4.setTitle("the whip of the current majority party", for:
.normal)
        Answer1Correct = true
    case 11:
        QuestionLabel.text = "Which of the following is not a tool the
Congress can use to control the bureaucracy?"
        Answer1.setTitle("mandatory reports", for: .normal)
        Answer2.setTitle("executive orders", for: .normal)
        Answer3.setTitle("hearing and investigations", for: .normal)
        Answer4.setTitle("committee and conference reports", for: .normal)
        Answer2Correct = true
    case 12:
        QuestionLabel.text = "Absolute government is ____, while constitutional
government is ____."
        Answer1.setTitle("Virtually unlimited; very limited", for: .normal)
        Answer2.setTitle("Very limited; virtually unlimited", for: .normal)
        Answer3.setTitle("Very neutral; unlimited", for: .normal)
        Answer4.setTitle("Limited; very neutral", for: .normal)
        Answer1Correct = true
    default:
        break
    }
    // Removes the possibility of the question that was just shown to be shown
again
    randomQuestionArray.remove(at: randomIndex)
}

// If the user is on the last question then show them that they have reached
the last question
if (randomQuestionArray.count < 1) {
    let alert = UIAlertController(title: "Wow!", message: "You have reached
the last question for Political Science! Nice Job! Complete this question and then
click on 'Your Score' for a rating!", preferredStyle: .alert)
    alert.addAction(UIAlertAction(title: "Continue", style: .default, handler:
{ action in
        switch action.style{
        case .default:
            print("default")
        case .cancel:
            print("cancel")
        case .destructive:
            print("destructive")
        })
        self.present(alert, animated: true, completion: nil)
        NextQuestion.isEnabled = false
    })
}

if (randomQuestionArray.count == 0) {
    let alert = UIAlertController(title: "Wow!", message: "You got
\\(ScoreNumber) out of 13 questions correct nice job! To see a detailed breakdown of
your score, click-Your Score-next to your score number.", preferredStyle: .alert)
    alert.addAction(UIAlertAction(title: "Continue", style: .default, handler:
{ action in
        switch action.style{
        case .default:
            print("default")
        case .cancel:
            print("cancel")
        case .destructive:
            print("destructive")
        })
    })
}

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        })))
        self.present(alert, animated: true, completion: nil)
    }
}

// These 4 functions tell the user if they got the correct answer or if they got
the incorrect answer
@IBAction func Answer1(_ sender: Any) {
    if Bool(Answer1Correct) == true {
        rightAnswer()
        Answer1.layer.backgroundColor = UIColor.green.cgColor
        Answer1.isEnabled = false
        Answer2.isEnabled = false
        Answer3.isEnabled = false
        Answer4.isEnabled = false
    } else {
        wrongAnswer()
        Answer1.layer.backgroundColor = UIColor.red.cgColor
        Answer1.isEnabled = false
    }
}

@IBAction func Answer2(_ sender: Any) {
    if Bool(Answer2Correct) == true {
        rightAnswer()
        Answer2.layer.backgroundColor = UIColor.green.cgColor
        Answer2.isEnabled = false
        Answer1.isEnabled = false
        Answer3.isEnabled = false
        Answer4.isEnabled = false
    } else {
        wrongAnswer()
        Answer2.layer.backgroundColor = UIColor.red.cgColor
        Answer2.isEnabled = false
    }
}

@IBAction func Answer3(_ sender: Any) {
    if Bool(Answer3Correct) == true {
        rightAnswer()
        Answer3.layer.backgroundColor = UIColor.green.cgColor
        Answer3.isEnabled = false
        Answer1.isEnabled = false
        Answer2.isEnabled = false
        Answer4.isEnabled = false
    } else {
        wrongAnswer()
        Answer3.layer.backgroundColor = UIColor.red.cgColor
        Answer3.isEnabled = false
    }
}

@IBAction func Answer4(_ sender: Any) {
    if Bool(Answer4Correct) == true {
        rightAnswer()
        Answer4.layer.backgroundColor = UIColor.green.cgColor
        Answer4.isEnabled = false
        Answer1.isEnabled = false
        Answer2.isEnabled = false
        Answer3.isEnabled = false
    } else {

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        wrongAnswer()
        Answer4.layer.backgroundColor = UIColor.red.cgColor
        Answer4.isEnabled = false
    }

    // Resets the colors and answers and generates another question
    @IBAction func NextQuestion(_ sender: Any) {
        Answer1.layer.backgroundColor = UIColor.white.cgColor
        Answer2.layer.backgroundColor = UIColor.white.cgColor
        Answer3.layer.backgroundColor = UIColor.white.cgColor
        Answer4.layer.backgroundColor = UIColor.white.cgColor
        NextQuestion.isHidden = true
        Answer1Correct = false
        Answer2Correct = false
        Answer3Correct = false
        Answer4Correct = false
        RandomQuestions()
    }
}
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