### **Lab Exercise: Using SFSafariViewController Programmatically in iOS Swift**

**Objective:**

Learn how to use SFSafariViewController to open a web page within your app programmatically.

**Step 1: Set Up the Project**

* Create a new Xcode project:
* Open Xcode and create a new project.
* Choose "App" under iOS.
* Name the project SafariViewControllerLab.
* Set Up the View Controller:
* Open ViewController.swift.

**Step 2: Add a Button to Open SafariViewController**

* Create the Button Programmatically:
* Open ViewController.swift and add a button programmatically that will open the SFSafariViewController when tapped.

import UIKit

import SafariServices

class ViewController: UIViewController {

override func viewDidLoad() {

super.viewDidLoad()

view.backgroundColor = .white

setupOpenSafariButton()

}

func setupOpenSafariButton() {

let openSafariButton = UIButton(type: .system)

openSafariButton.setTitle("Open Safari", for: .normal)

openSafariButton.translatesAutoresizingMaskIntoConstraints = false

openSafariButton.addTarget(self, action: #selector(openSafariButtonTapped), for: .touchUpInside)

view.addSubview(openSafariButton)

NSLayoutConstraint.activate([

openSafariButton.centerXAnchor.constraint(equalTo: view.centerXAnchor),

openSafariButton.centerYAnchor.constraint(equalTo: view.centerYAnchor)

])

}

@objc func openSafariButtonTapped() {

if let url = URL(string: "https://www.apple.com") {

let safariVC = SFSafariViewController(url: url)

present(safariVC, animated: true, completion: nil)

}

}

}

**Step 3: Run the App**

* Build and run the app:
* Build and run the app to ensure that the button appears in the center of the screen.
* Tap the button to open the SFSafariViewController and load the specified URL.

**Summary**

This lab exercise demonstrates how to use SFSafariViewController to open a web page within your iOS app programmatically. You learned how to: