

CONTACTLESS INTEGRATION FOR KIOSK On iOS Devices using Java Script

Enhancing Self-Service Experiences with
NFC, Bluetooth, and QR Code Technologies



Sai Krishna

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INTRODUCTION TO IOS KIOSK INTEGRATION

- iPads and iPhones are increasingly being used in self-service kiosks due to their intuitive interfaces and powerful hardware.
- Contactless experiences are becoming essential for reducing the spread of germs and enhancing user convenience.
- iOS devices enable fast, secure, and touch-free interactions across industries like retail, healthcare, and hospitality.



WEBVIEW IN NATIVE **IOS DEVELOPMENT (SWIFT/OBJECTIVE-C) WITH JAVASCRIPT**

- CREATE A NEW XCODE PROJECT.
- ADD WKWEBVIEW TO YOUR VIEWCONTROLLER.
- IMPORT WEBKIT AND CREATE AN IBOUTLET FOR WKWEBVIEW.
- WRITE CODE TO LOAD A WEB PAGE USING URLREQUEST.
- RUN THE APP TO TEST THE WEBVIEW.
- OPTIONALY, ENABLE JAVASCRIPT, HANDLE NAVIGATION EVENTS, OR LOAD LOCAL HTML CONTENT.

THIS SIMPLE PROCESS ALLOWS YOU TO DISPLAY WEB CONTENT WITHIN YOUR IOS APP USING WKWEBVIEW.

```
1 import UIKit
2 import WebKit
3
4 class ViewController: UIViewController, WKScriptMessageHandler {
5     var webView: WKWebView!
6
7     override func viewDidLoad() {
8         super.viewDidLoad()
9
10        // Create the WKWebView configuration
11        let webConfiguration = WKWebViewConfiguration()
12        webConfiguration.userContentController.add(self, name: "iosApp")
13
14        // Initialize the WebView
15        webView = WKWebView(frame: self.view.frame, configuration: webConfiguration)
16        self.view.addSubview(webView)
17
18        // Load a URL
19        if let url = URL(string: "https://www.conf42.com/js2024") {
20            let request = URLRequest(url: url)
21            webView.load(request)
22        }
23    }
24
25    // Capture messages sent from JavaScript
26    func userContentController(_ userContentController: WKUserContentController, didReceive message: WKScriptMessage) {
27        if message.name == "iosApp" {
28            print("JavaScript message received: \(message.body)")
29        }
30    }
31 }
```

NFC TECHNOLOGY FOR SEAMLESS TRANSACTIONS

NFC allows users to make secure transactions or authenticate their identity by simply tapping their iOS device on a kiosk.

Apple Pay facilitates contactless payments, making the process fast and secure.

Useful in various sectors like retail (for payments), transportation (for ticketing), and healthcare (for secure check-ins).

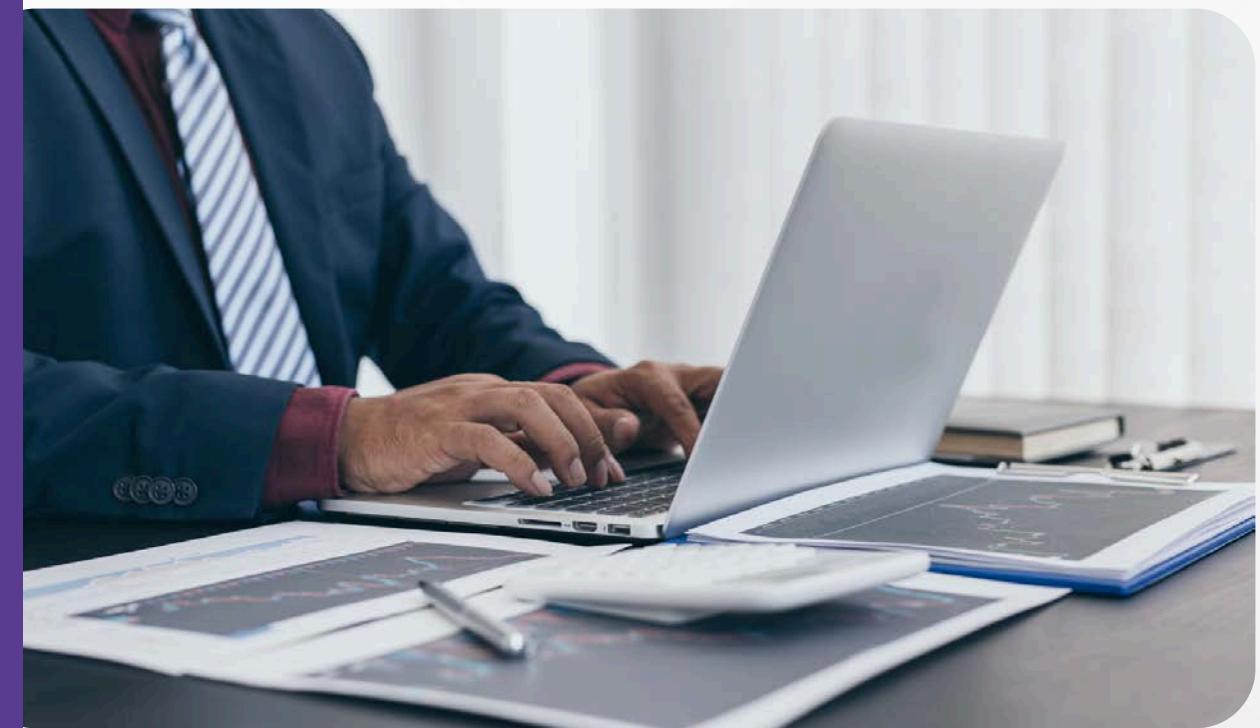


BLUETOOTH FOR PROXIMITY-BASED SERVICES

iOS devices leverage Bluetooth technology for proximity-based services, triggering actions when users approach the kiosk.

Enables automatic check-ins or communicating with printers for printing the customer receipts and shipping labels.

Ideal for customer service kiosks, hotel check-ins, or healthcare systems where the interaction can be initiated automatically.



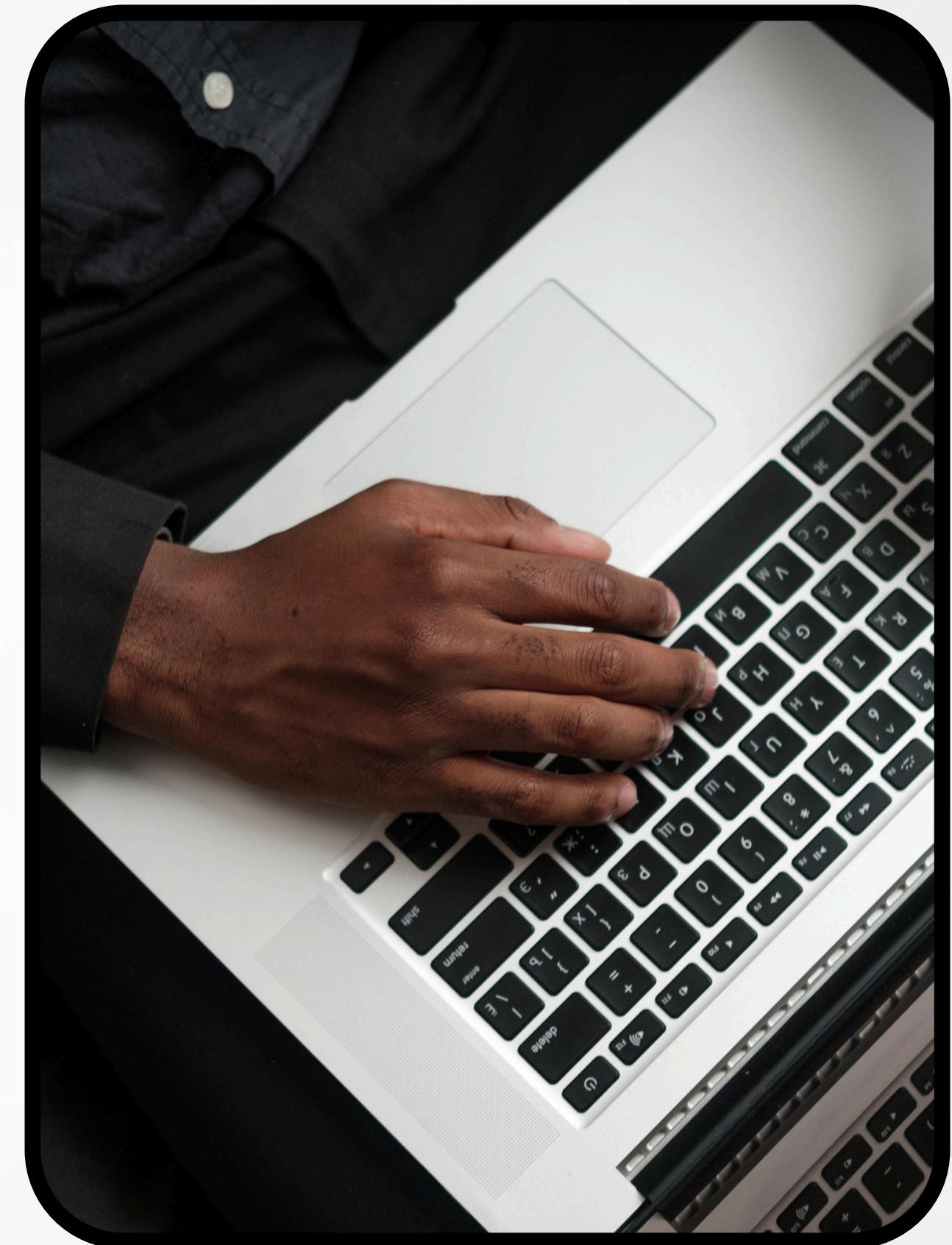
QR CODE AND BARCODE SCANNING FOR **CONTACTLESS INTERACTIONS**

- iOS devices use built-in cameras to scan QR codes and barcodes, providing contactless ways for users to interact with kiosks.
- Easy to integrate third party scan guns specifically for scanning purposes, these devices typically provide faster and more accurate scans.
- Applications include ticket scanning, product information retrieval, and contactless check-ins.
- Common in retail, healthcare, and transportation sectors where touchless interactions are crucial.



PAYMENT INTEGRATION WITH APPLE PAY

- Apple Pay allows secure contactless transactions using Face ID or Touch ID, adding an extra layer of security to the payment process.
- Kiosks integrated with Apple Pay can accept payments without physical contact, reducing risks for both businesses and customers.
- Common use cases include retail, hospitality (restaurant payments), and public transportation (ticket purchases).



CUSTOM IOS APPS FOR KIOSKS

Businesses can develop custom iOS apps to create specific kiosk experiences that integrate with backend systems like CRM, ERP, and customer loyalty programs.



These apps support advanced features like tap-to-pay, push notifications, and digital receipts, enhancing the self-service experience.



Custom apps can offer multilingual support, personalized interactions, and user-friendly interfaces for better engagement.



USE CASES OF IOS KIOSKS IN VARIOUS INDUSTRIES

Retail: Self-service kiosks allow customers to browse, scan, and purchase products without physical contact, streamlining the shopping experience.

Healthcare: iOS-based kiosks simplify patient check-ins, appointment scheduling, and bill payments while reducing wait times.

Transportation: Airports and transit systems use kiosks for contactless ticketing, boarding pass retrieval, and journey planning.

Hospitality: Hotels use kiosks for guest check-ins, room selection, and contactless payments, improving efficiency and guest satisfaction.



MDM TOOLS FOR EASY DEVICE MANAGEMENT



Mobile Device Management (MDM) tools allow businesses to manage and update iOS kiosks remotely, ensuring smooth operations.

MDM tools can push software updates, monitor performance, and ensure security compliance across a large network of kiosks.

Ideal for businesses with multiple kiosks in different locations, ensuring seamless and secure service across all points.



THANK YOU
