

November 13, 2024

Subject: Visitor Management Application Requirements

Overview

Vision: A custom branded Android based application that provides basic visitor management functionality.

Goal: Basic working prototype we can install at customer site and start charging for as quick as possible

Timeline: Compressed timeline to meet client requirements – need as quickly as possible

Background: I have a small business in the US and offer a variety of services to my clients. One client has an urgent need for a visitor management system and has asked that I put this together for them. I have some developers who can manage the application once it is built, but I don't have resources available to build the application right now and am looking for an external team to help. This is the first time I've used Fiverr or any other platform like this and would have additional job opportunities for someone who does exceptional work at a fair price.

Example Product: Please watch this video on YouTube. It gives an overview of what a visitor management system is: <https://youtu.be/izgNcnOD7u0>. Then please look at the **Zap In** product website to see a full visitor management application (<https://www.zapinapp.com/>). We are not trying to recreate this full featured product, but understanding this product will ensure you understand what we want at a very basic level.

Core Requirements

1. All code and development work is owned by Inlution Technologies and can be transferred completely to my team if requested.
2. Functional Requirements
 - a. Visitor Check-In Process
 - i. Provide a user-friendly interface for visitors to:
 1. Enter their name, company, contact details (optional), and purpose of visit.
 2. Select the host they are meeting from a predefined list.
 - ii. Allow visitors to capture a high-quality headshot using the tablet's built-in camera.
 - b. Badge Printing
 - i. Automatically generate and print a visitor badge upon successful check-in, including:
 1. Visitor Name
 2. Visitor Company (if applicable)
 3. Visitor Photo
 4. Host Name
 5. Date/Time of Check-In
 - ii. Ensure badges are printed on adhesive labels and are visually distinguishable for easy identification, with optional QR codes for advanced tracking.
 - c. Host Notifications
 - i. Send instant notifications to the host via:
 1. Email
 2. Microsoft Teams (integrated using APIs or webhooks)
 - ii. Include visitor details (name, photo, and purpose of visit) in the notification message.
 - d. Branding and Customization
 - i. Must match client colors and include their company logo (both will be provided)



- e. Allow businesses to customize the application with:
 - i. Company logo
 - ii. Color themes
 - iii. Welcome message or branding elements on the visitor interface and printed badges.
- 3. Non-Functional Requirements
 - a. Performance
 - i. Ensure the application operates smoothly on Android device.
 - ii. Enable quick check-in and badge printing within 10 seconds per visitor.
 - b. Scalability
 - i. Support multiple visitor check-ins simultaneously in high-traffic environments.
 - ii. Ensure easy scalability to add more tablets or locations as needed.
 - c. Integration
 - i. Provide seamless integration with wireless label printer using their SDKs or APIs.
 - ii. Ensure compatibility with Microsoft Teams and standard email clients for notifications.
- 4. User Experience (UX) Requirements
 - a. Provide clear instructions and progress indicators during the check-in process.
 - b. Ensure the interface is touch-friendly, with large buttons and intuitive navigation.
 - c. Allow visitors to review and edit their information before submission.
- 5. Support and Maintenance
 - a. Provide error handling for common issues like
 - i. Printer connection failure.
 - ii. Notification sending errors.
- 6. Dual Language
 - a. Include English and Spanish language options
 - b. System can be set to default to either English or Spanish
 - c. Main screen includes a way for user to change to alternate language for their session
 - d. Default language drives all communications outside of the app
 - i. If default is English then email or teams messages are in English and information sent to printer is in English
 - ii. If default is Spanish then all communications sent in Spanish
 - e. If installed at a facility in US the default language will be set to English with a button on screen to switch to Spanish just from the User perspective and for just their session.
 - f. If installed at a facility in Mexico the default language will be set to Spanish with a button to switch to English just from the User perspective and for just their session.

Suggested Equipment

- Tablet: Samsung Galaxy Tab A9+ Tablet 11" 64GB Android Tablet
 - [Amazon Link](#)
- Printer: Brother QL820NWB Direct Thermal Printer - Monochrome - Handheld - Label Print
 - [Amazon Link](#)
- Labels: Brother Genuine, DK-2205 Continuous Paper Label Roll, Cut-to-Length Label, 2.4" x 100 Feet
 - [Amazon Link](#)
- Stand Options
 - Desktop Stand: KABCON Tablet Stand Holder for 4"-14"Tablets [Amazon Link](#)
 - Floor Stand: Bouncepad Original Floorstanding + Brother ® Printer Mount [Bouncepad Link](#)

Standard Use Case

Actors:

- Visitor: A person checking in at the facility.
- Host: The person the visitor is meeting.
- System: The visitor management application.

Preconditions:

1. The visitor management application is installed and running on the tablet.
2. The wireless label printer is connected and operational.
3. Email or Microsoft Teams is set up for notifications.

Basic Flow:

1. Visitor Information Input:
 - a. The visitor approaches the check-in tablet.
 - b. The system displays a welcome screen with a "Start Check-In" button.
 - c. The visitor inputs the following details:
 - i. Full Name
 - ii. Company Name (optional)
 - iii. Contact Information (optional)
 - iv. Host's Name (person they are visiting)
 - v. Reason for visiting
 - d. The visitor presses "Next" to proceed.
2. Photo Capture:
 - a. The system activates the tablet's built-in camera.
 - b. Instructions appear on-screen guiding the visitor to position themselves for a headshot.
 - c. The visitor takes a picture and previews it.
 - d. If satisfied, the visitor presses "Confirm Photo." If not, they can retake the picture.
3. Review and Confirmation:
 - a. The system displays all entered information and the captured photo for review.
 - b. The visitor can edit any information or confirm it as correct.
 - c. Once confirmed, the visitor presses "Submit."
4. Notification to Host:
 - a. The system sends a notification to the host via email and/or Microsoft Teams, including:
 - i. Visitor's Name
 - ii. Visitor's Photo
 - iii. Reason for Visit
 - b. The host receives the notification and can prepare for the meeting.
5. Badge Printing:
 - a. The system sends the visitor's details and photo to the wireless label printer.
 - b. The printer prints a badge with:
 - i. Visitor's Name
 - ii. Host's Name
 - iii. Date/Time of Check-In



- iv. Visitor's Photo
 - v. Reason for Visit
- c. The badge is printed on an adhesive label.
- 6. Badge Application:
 - a. The visitor applies the badge to their shirt.
 - b. The check-in process is complete, and the visitor proceeds to meet the host.

Postconditions:

- 1. The visitor is successfully checked in and wears an identification badge.
- 2. The host is notified of the visitor's arrival.

Exceptions:

- 1. Incomplete Information:
 - a. If mandatory fields are left blank, the system prompts the visitor to complete them before proceeding.
- 2. Printer Error:
 - a. If the label printer fails, the system displays an error message and retries or directs staff to print manually.
- 3. Notification Failure:
 - a. If email/Teams notification fails, the system alerts staff to notify the host manually.

Success Criteria:

- 1. The visitor completes the check-in process without assistance.
- 2. The badge is printed correctly and applied by the visitor.
- 3. The host is notified of the visitor's arrival.