**📄 Feature Requirement Document**

**Feature Name: Ticket Scanning by Organizer  
Module: Event Check-In  
Author: Product Manager  
Date: 14 May 2025  
Version: 1.0  
Status: Approved**

**✅ 1. Feature Description**

**Enable event organizers to scan customer tickets at the event entrance using their mobile device or tablet. The system will validate the ticket and return a response: valid, already used, or invalid.**

**✅ 2. Objective**

**To streamline check-in at events by verifying tickets electronically and reducing the chances of fraud or duplicate entries.**

**✅ 3. Business Rules**

* **Only event organizers can scan tickets.**
* **Each ticket has a unique QR code.**
* **A ticket can only be used once per event.**
* **System must return a response instantly (within 2 seconds).**
* **Scanning works via the mobile app or web dashboard.**

**✅ 4. Functional Requirements**

| **ID** | **Requirement Description** |
| --- | --- |
| **FR-01** | **Organizers must log in to access the ticket scanner.** |
| **FR-02** | **The system must use the device camera to scan the QR code.** |
| **FR-03** | **On successful scan, the system should display: "Ticket Valid – Access Granted".** |
| **FR-04** | **If the ticket was already used, show: "Ticket Already Scanned".** |
| **FR-05** | **If the QR code is not found or expired, show: "Invalid Ticket".** |
| **FR-06** | **Log each scan with timestamp, ticket ID, and status (valid/invalid).** |
| **FR-07** | **Support manual ticket entry (in case QR fails to scan).** |

**✅ 5. Non-Functional Requirements**

* **Scan validation must return a response within 2 seconds.**
* **The scanner must work in low-light conditions (use flashlight toggle if needed).**
* **QR scanning must support both Android and iOS devices.**
* **Errors must be clearly displayed in red with vibration alert.**

**✅ 6. Acceptance Criteria**

| **#** | **Given** | **When** | **Then** |
| --- | --- | --- | --- |
| **AC-01** | **A valid ticket QR code is scanned** | **Organizer uses mobile scanner** | **System displays “Valid Ticket” with green indicator** |
| **AC-02** | **Ticket has already been scanned** | **Organizer scans again** | **System displays “Ticket Already Scanned” in yellow** |
| **AC-03** | **QR code is invalid or unrecognized** | **Organizer scans it** | **System displays “Invalid Ticket” with red alert** |
| **AC-04** | **QR code cannot be scanned** | **Organizer clicks “Enter Code Manually”** | **System allows manual ID input and validates it** |