E-Card Mobile App

Product Requirements Document (PRD)

# 1. Introduction

## Purpose

To develop a secure and efficient QR-based office entry system that streamlines access control, enhances security, and simplifies staff information management.

## Target Audience

* Organizations of all sizes, including businesses, government agencies, educational institutions, and co-working spaces.
* System administrators and office managers responsible for managing staff access and security.

## Scope

* This PRD outlines the core features and functionalities for the initial launch of the mobile app.
* Future iterations will incorporate additional features and enhancements based on user feedback and market trends.

# 2. Features and Functionalities

## 2.1. QR Code-Based Entry

* Generate unique QR codes for each staff member, linked to their identity information.
* Allow staff to scan their QR codes at designated entry points using their mobile devices.
* Verify identity against a secure database and grant access upon successful verification.
* Support multiple entry points (e.g., doors, turnstiles, elevators).

## 2.2. Administrative Dashboard

* Provide a user-friendly dashboard for administrators to:
* Manage staff information (add, edit, delete, view).
* Generate QR codes.
* View entry logs.
* Manage access permissions.
* Set access schedules and restrictions.

## 2.3. Staff Information Management

Enable administrators to:

* Edit, add, delete, or replace staff information (name, designation, photo, contact details, access permissions).
* Update QR codes as needed.

## 2.4. Security and Privacy

* Implement robust security measures to protect sensitive data:
* Encryption for data storage and transmission.
* Secure authentication protocols.
* Regular security audits and updates.
* Compliance with relevant privacy regulations (e.g., GDPR, CCPA).

# 3. Technical Requirements

## 3.1. Mobile App Development

* Cross-platform compatibility (iOS and Android).
* User-friendly interface designed for both staff and administrators.
* Offline functionality for QR code scanning and basic features.
* Secure data storage and communication.

## 3.2. Backend Infrastructure

* Secure database for storing staff information and access logs.
* Server or cloud-based system to manage QR codes and access control.
* Integration with existing HR systems or payroll software (optional).

# 4. Non-Functional Requirements

## 4.1. Performance

* Fast and reliable QR code scanning.
* Quick identity verification and entry grant.
* Efficient data processing and retrieval.

## 4.2. Reliability

* High uptime and stability to ensure continuous access control.
* Robust error handling and recovery mechanisms.

## 4.3. Scalability

* Ability to accommodate a growing number of staff and entry points.
* Adaptable to future feature additions.

# 5. Approvals

This PRD requires approval from relevant stakeholders, including:

* Product managers
* Development team
* Security team
* IT infrastructure team
* Key decision-makers within the organization

# Key Features

## QR Code Generation

* Admins assign unique QR codes to each staff member, linking to their identity information.
* QR codes can be printed on badges, cards, or accessible via a mobile app.
* QR Code for Office Entry: [Image of QR code for office entry]

## Identity Verification

* Staff scan their QR code at a designated entry point (e.g., turnstile, door).
* System scans code verifies identity against a secure database.
* Upon successful verification, entry is granted.
* Scanning QR code for office entry: [Image of person scanning QR code for office entry]

## Administrative Dashboard

* Admins manage staff information:
* Add, edit, or delete staff records.
* Generate QR codes.
* View entry logs.
* Manage access permissions.

Admin dashboard for managing staff information: [Image of admin dashboard for managing staff information]

## Technical Considerations

Hardware

* QR code scanners or readers at entry points.
* Server or cloud-based system to store and process data.

Software

* QR code generation and scanning software.
* Secure database for storing staff information.
* User-friendly mobile app or web interface for staff and admins.

## Additional Features

Visitor Management

* Temporary QR codes for guests or visitors.
* Pre-registration and approval for visitors.

Time Tracking

* Record staff entry and exit times.
* Generate reports for attendance and timesheets.

Integration with Other Systems

* Integrate with existing HR systems or payroll software.
* Link with security systems for enhanced access control.

## Benefits

Enhanced Security

* Reduces unauthorized access.
* Prevents tailgating or piggybacking.

Streamlined Entry Process

* Quick and efficient for staff.
* Eliminates manual checks or paperwork.

Improved Data Management

* Accurate and up-to-date staff information.
* Real-time tracking of entries and exits.

Cost-Effective

* Eliminates need for physical keys or badges.
* Reduces administrative overhead.

## Development and Implementation

Planning

* Define system requirements and scope.
* Identify hardware and software needs.
* Address security and privacy concerns.

Development

Testing: Conduct thorough testing to ensure functionality and security.

Deployment

* Install hardware and software.
* Train staff on system usage.

## Continuous Improvement

Regularly review and update the system based on user feedback and evolving needs.