### USE CASE (Template) – QR Code & Camera-Based Visitor System.

#### **SYSTEM** QR Code & Camera-Based Visitor System.

#### **Functionalities of Application:**

Provide seamless and secured entry process for visitors.

#### Interviewee (Visitor), Company HR, System Administrator **ACTOR**

#### Provide efficiency in time by Automated system and Secured Entry Process. **GOAL**

#### **PRECONDITIONS**

- The interviewee has received a link from the HR department prior to their scheduled interview.
- The company has installed a QR code scanner and a camera at the entrance gate.
- The visitor management system is equipped to generate and validate one-time passwords (OTPs) and receive real-time photos.

- **POSTCONDITONS** The interviewee has successfully entered the company premises without needing manual intervention from security personnel.
  - The receptionist has printed the visitor form with the interviewee's details and photo.
  - The visitor management system records the entry of the interviewee along with relevant details such as time, purpose of visit, and photo verification.

#### **EXTENSIONS**

- If the QR code scan fails or the pre-registration information does not match, the system prompts the interviewee to contact the HR department for assistance.
- If the OTP generation or validation process fails, the system alerts the administrator, and the interviewee is prompted to try again or seek assistance.
- In case of any technical issues or discrepancies, the interviewee may be required to go through manual verification by security personnel.

#### **USE CASE**

- The interviewee receives an email or message from the HR department containing a unique link for pre-registration.
- The interviewee clicks on the link, which opens a web page prompting them to enter their name in capital letters as their digital signature.
- After entering their name, the interviewee clicks on the "Send" button.
- Upon clicking "Send", the interviewee's smartphone automatically activates its QR code scanner and camera.
- The interviewee proceeds to the company's entrance gate and scans the QR code installed there using their smartphone.
- Simultaneously, the camera captures a real-time photo of the interviewee.
- The QR code contains encoded information about the interviewee and the scheduled interview.
- The visitor management system receives the scanned QR code data and the real-time photo.
- The system validates the QR code information against the pre-registration data provided by the HR department.
- Upon successful validation, the system generates an OTP and feeds it into the visitor management system.
- The real-time photo of the interviewee is sent to the receptionist's system.
- The entrance gate is automatically unlocked, allowing the interviewee to enter the premises.
- The receptionist receives the real-time photo and verifies it against the interviewee's identification.
- The receptionist prints the details of the interviewer along with the captured photo on the visitor form.
- The interviewee proceeds to the designated interview location within the company.

## <u>Use Case Description – Document:</u>

**Project:** QR Code & Camera-Based Visitor System.

**Date:** 2025-01-10

**Author:** Prashant Changdeo Mungase

**Version:** 1/Initial-Early stage

#### Introduction

This document outlines use case description for QR Code & Camera based visitors system for seamless and secure entry process for interviewees, minimizing manual intervention, enhancing security through multiple layers of verification, and facilitating efficient record-keeping for administrative purposes.

#### Actors

• Interviewee (Visitor), Company HR, System Administrator

**Scenario/Trigger:** A Visitor/Interviewee has Arrived to the company venue for a Visit/Interview.

#### • Preconditions:

- o The interviewee has received a link from the HR department prior to their scheduled interview.
- o The company has installed a QR code scanner and a camera at the entrance gate.
- The visitor management system is equipped to generate and validate one-time passwords (OTPs) and receive real-time photos.

#### Postconditions:

- o The interviewee has successfully entered the company premises without needing manual intervention from security personnel.
- o The receptionist has printed the visitor form with the interviewee's details and photo.
- The visitor management system records the entry of the interviewee along with relevant details such as time, purpose of visit, and photo verification.

#### • Extensions:

- o If the QR code scan fails or the pre-registration information does not match, the system prompts the interviewee to contact the HR department for assistance.
- o If the OTP generation or validation process fails, the system alerts the administrator, and the interviewee is prompted to try again or seek assistance.
- o In case of any technical issues or discrepancies, the interviewee may be required to go through manual verification by security personnel.

#### USE CASE:

- The interviewee receives an email or message from the HR department containing a unique link for pre-registration.
- The interviewee clicks on the link, which opens a web page prompting them to enter their name in capital letters as their digital signature.
- o After entering their name, the interviewee clicks on the "Send" button.
- Upon clicking "Send", the interviewee's smartphone automatically activates its QR code scanner and camera.
- The interviewee proceeds to the company's entrance gate and scans the QR code installed there using their smartphone.
- o Simultaneously, the camera captures a real-time photo of the interviewee.
- The QR code contains encoded information about the interviewee and the scheduled interview.
- o The visitor management system receives the scanned QR code data and the real-time photo.
- The system validates the QR code information against the pre-registration data provided by the HR department.
- Upon successful validation, the system generates an OTP and feeds it into the visitor management system.
- o The real-time photo of the interviewee is sent to the receptionist's system.
- o The entrance gate is automatically unlocked, allowing the interviewee to enter the premises.
- o The receptionist receives the real-time photo and verifies it against the interviewee's identification.
- The receptionist prints the details of the interviewer along with the captured photo on the visitor form.
- o The interviewee proceeds to the designated interview location within the company.

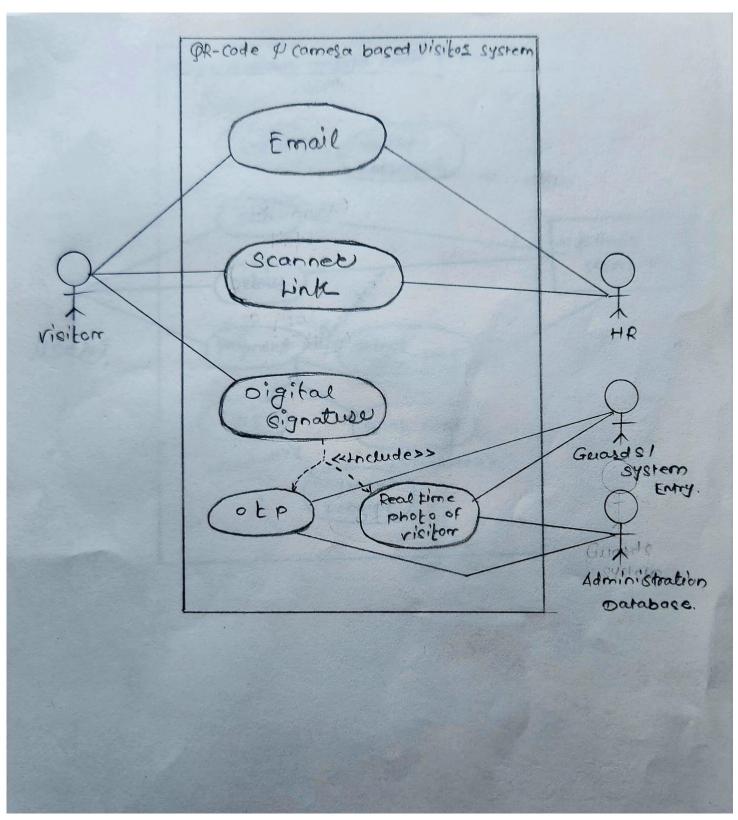
#### 5. Conclusion:

Overall, the system aims to provide a seamless and secure entry process for interviewees, minimizing manual intervention, enhancing security through multiple layers of verification, and facilitating efficient record-keeping for administrative purposes.

#### 6. Notes:

This document provides an understanding of Initial-Early stages of user interactions with the proposed QR Code & Camera-Based Visitor System for Interviewees/Visitors. Further analysis and refinement can be made once the systems use is commenced on regular basis, based on gathered data and potentials gaps.

# QR – Code & Camera based visitors system



# **DETAILED USE CASE SCENARIO**

