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.
ACTOR	Interviewee (Visitor), Company HR, System Administrator
GOAL	Provide efficiency in time by Automated system and Secured Entry Process.
PRECONDITONS	• 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.

Use Case Description – Document:

Project: QR Code & Camera-Based Visitor System.

Date: 2024-02-25

Author: Prashant Changdeo Mungse

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:**

  - 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.

- **Postconditions:**

  - 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:**

  o The interviewee receives an email or message from the HR department containing a unique link for pre-registration.

  o 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.

  o Upon clicking "Send", the interviewee's smartphone automatically activates its QR code scanner and camera.

  o 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.

  o 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.

  o The system validates the QR code information against the pre-registration data provided by the HR department.

  o 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.

  o 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.
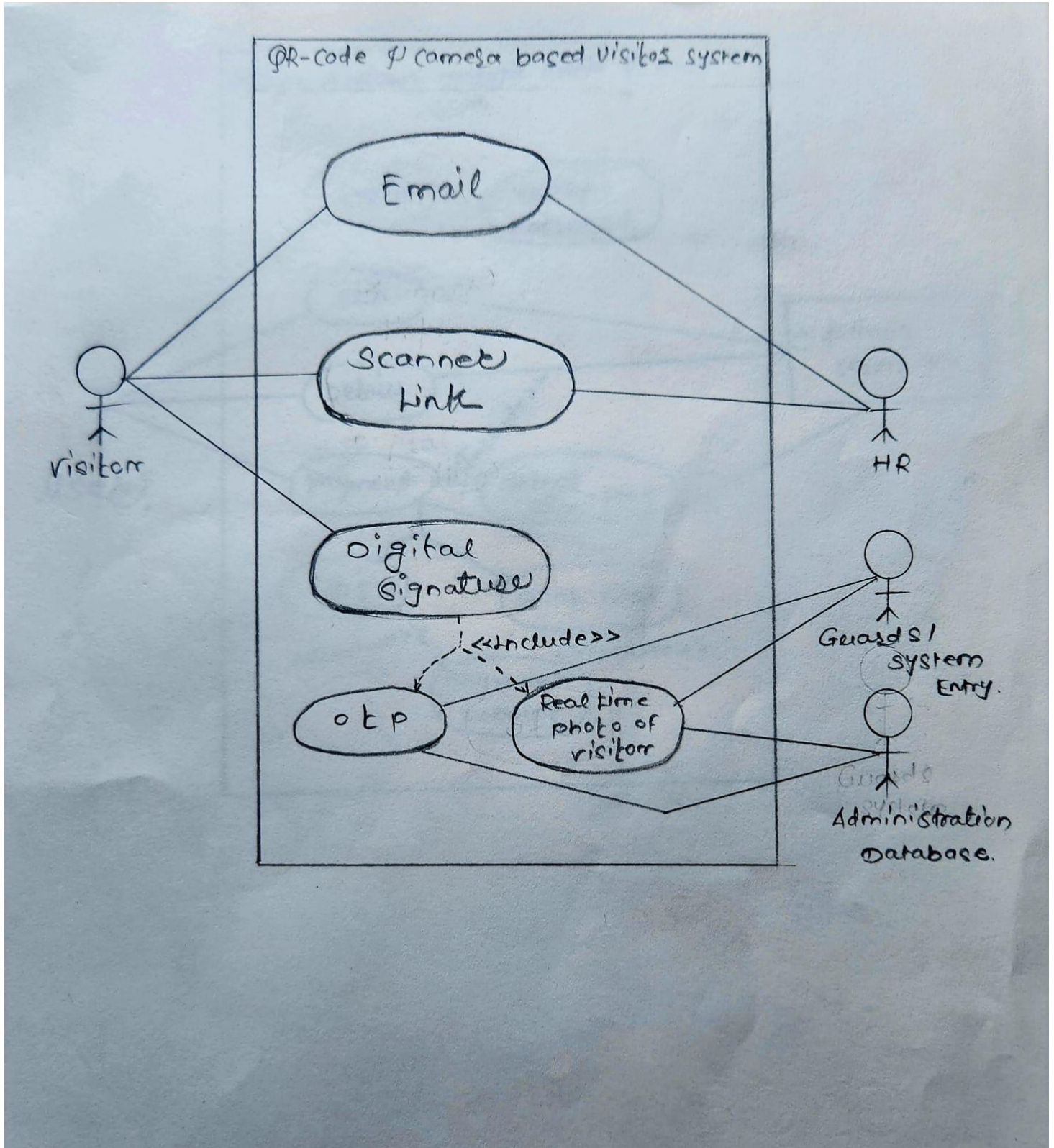
5. Conclusion:

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

QR-Code & camera based visitor system

- Email
- Scanned Link
- Digital Signature
- OTP
- Real time photo of visitor

Visitor

HR

Guards / system Entry.

Administration Database.

<<include>>

DETAILED USE CASE SCENARIO

Containing link to the digital signature & scanner

QR Code & camera System

EMAIL

visitor

Primary Actor

GUARDS system

Auto registration of otp & visitor

Secondary Actor: System and Security

SYSTEM

Visitor

HR

Primary Actor

Administration

Secondary Actor

OTP & Real Time Picture of Visitor

Database