Facial-recognition Based Bus Pass - FaceBass

Version 1.0

Revision History

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| **Date** | **Version** | **Description** | **Author** |
| 17/Mar/2018 | 1.0 | Initial Specification | Radu Petrisel |
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# Introduction

The supplementary specification captures the system requirements that are not readily captured in the use cases of the use-case model. Such requirements include:

* quality attributes of the system to be built, including availability, performance, security, testability and usability.
* other requirements such as operating systems and environments, compatibility requirements, and design constraints.

# Non-functional Requirements

## Availability

The system is available for purchases and inspections 24 hours a day, 7 days a week, assuming an active internet connection is provided.

## Performance

The system performs as follows:

* recognizing a person: < 2 sec
* updating profile (includes editing contact info and changing photo): < 1 sec
* log in and log out: <1 sec

All times are strongly dependent on the internet connection speed.

## Security

All users of the system will have their own account, username and password based. Ticket inspectors will have their accounts created by a supervisor.

## Testability

The system is easily testable. Simply use a person’s photo and determine whether that person is found or not in the database and if he/she should or shouldn’t be found.

## Usability

The application is highly user friendly and should be usable by all English-speaking people.

# Design Constraints

The system is written in Swift and Python 3.x. It has a client-server architecture, MVC for the iOS application. The system only works on iOS 11 or newer devices.