DOOR ENTRANCE SYSTEM
Problem Definition and Requirements

yokabicarpmaz

2 March 2020

1 Problem Definition

The main purpose of the entrance system design is to improve the experience of both the users and the administrator. This will include authentication checks when someone attempts to enter the lab while logging the relevant data. An interface will be used in order to provide communication between the user and the system. An entity will be placed to make the interaction more enjoyable.

2 Requirements

2.1 Access System:

- People should be able to enter via METU ID Card

- People should be enter via some means of face scanning

- It should be realized that the door remains open

- It should send notification to the administrator when the door remains open

- Required warning should be given to the user when the door remains open

- It should be able to count the number of people entering the lab and exiting the lab

- Door should be automatically unlocked upon exit

- Some subsystems of the access system should be deactivated in case of power cut

2.2 Administrator Panel:

- Administrator should be able to see the access system logs

- Administrator should be able to give or remove permissions

- Administrator should be able to write messages on magic mirror via panel

- Administrator should be able to access to the messages sent by people outside the lab

- Students should be able to send requests to administrator to write messages on magic mirror via panel

2.3   Puppet:

- It should be able to get into eye contact with people outside the lab

- It should be able to speak with people on an appropriate context

- It should contain lighting system

- Electrical connection should be hidden

- It should be deactivated in case of power cut

2.4   Magic Mirror:

- Administrator's message should be shown on the screen

- Information coming from other systems of the lab should be shown on the screen

- Information about the status of the class should be shown on the screen

- It should be able to record messages via microphone

- It should contain a button for simple interactions

- It should be deactivated in case of power cut

- Errors should not be shown to the users