Purpose

* What is the purpose of F.R.A.M.E?
  + Mark students as attended in their required course.
  + Sends information to teacher via email
  + See face, recognise it, store face, send to end
* Describe the system in terms of functional and non-functional requirements
* Must be written in easy to understand language (no tech terminology).
* tests

Audience

* Customer
  + Educational Schools, Universities, Schools
  + Hospitals, Security
* Users
  + Faculty, Those in attendance
* Project Management
* Developers

**Introduction**

* Purpose
* Scope
  + Prototype Scope –
    - Store images of person(s) needed to recognise for individual events.
    - Recognise faces against stored images
    - Notify user if a face is unrecognised
    - Basic GUI for interpretability
  + In Scope –
    - Recognise the faces of individuals the camera sees
    - Store Picture & Keep logs of attended individuals tied to events
    - Appropriately Deal with unrecognised faces of people (register them as new students to the event or ensure they’re in the right place via lecturer intervention)
    - Display names of individuals recognised back to them on the monitor with a welcome message
    - Store important information in a database that is updated at regular intervals
      * Data may include; timestamp on arrival, image of face taken at arrival, student name, student id, event in question
    - Modelling and Design of back-end database infrastructure for storing and relaying relevant information for each event back to the user.
    - Ensure fast run-time of facial recognition to avoid congestion on entry of lecture events. (under 5 second operation time from camera on -> message displayed)
  + Potential Future implementations (Out of Scope) -
    - Lateness mark function for timer after event start-time
    - Blacklist of person(s) not supposed to be at event
    - Asking user to remove obscurities in order to facilitate recognition (hats, hair in face, scarfs etc.
    - Update image storage of users over time in order to continuously calibrate the Facial Recognition software as that individual changes in appearance across time.
* Objectives
* Definitions, Acronyms, Abbreviations
  + F.R.A.M.E
* References
  + Python libraries, hardware

**Proposed System**

* Analysis of the new system
* Potential problems

**Overview**

**Functional requirements**

**Non-functional requirements**

* Usability
* Reliability
* Performance
  + Speed
* Supportability
* Implementation
* Interface
* Legal

**System models**

* Use Cases
* Flow Chart
* Entity Relationship Diagram
* Lo-fi design
* Hi-fi design
* Database Design