# Project Charter

## Mobile App for Face Training

## CU Psychology Department

**Contents**

[1. Introduction](#_p97zxnhud0xv)

[2. Objective and Scope](#_xp65qpkrtdq8)

[3. Project Plan](#_tax9j2kqtu8l)

[4. Key Stakeholder Roles & Responsibilities](#_1keajtjcti1y)

## **1. Introduction**

In 2017, the New York State Court of Appeals in the United States issued a decision that jurors be educated about the unreliable nature of eyewitness testimony in all cases involving cross-race eyewitnesses. Research surrounding cross-race facial recognition suggests that although we are accurate at identifying faces within our own racial group, it can be much more difficult to identify the faces of those in different racial groups. This deficit between the accuracy of identifying faces within our own racial group in comparison to those in other racial groups is referred to as the cross-race deficit (or CRD). We know that training can work to reduce this deficit. This project aims to be another helpful training to assist users in reducing their own CRD. In addition to training end-users’ cross-race facial recognition, this project is intended to aid researchers in the CU Psychology Department with making sense of races, and how processes are influenced by race through data collection within the app.

## **2. Objective and Scope**

Business Objectives

● Create a mobile app that provides the following exercises at various difficulties :

o Matching name and face

o “Memory”

o Who’s new

o Shuffle

● In addition, before and after training the following tasks will be used to evaluate progress:

o “Forced choice” task is the daily assessment

o “Encode-Recognition” High Level Requirements

● A mobile app to train users and reduce the CRD. The tasks are bundled into lessons and are gamified to increase user engagement.

● Research mode: User progress is recorded, and made available to the CU Boulder Psychology Department for review in a research setting

● expand the racial and gender group

● Task difficulty is increased dynamically through machine learning algorithms.

● Game mode to compete with other users.

Project Scope

In Scope:

● An iPhone and Android app that includes the aforementioned tasks, bundled into short lessons of progressing difficulties. These lessons will contain hand-curated faces, as opposed to randomly selected ones. Each lesson should be short enough for the user to complete one in a sitting.

● The gamification of each of the tasks, so as to maximize user engagement.

● A method to store the data gained from app-usage on a server in the Psychology department.

● A Knowledge Management Solution that captures and shares knowledge from the following business areas:

o Product Quality Assurance Lab testing procedures

o Manufacturing equipment problem diagnosis

o Analysis of advertising campaign success

o Application software maintenance and support

● The hardware and software necessary to implement a Knowledge Management Solution for these business areas.

● Associated process/procedure improvements in these business areas as needed to support the KM initiative.

Out of Scope:

● Any products beyond those mentioned above

● Future applications of the CU Psychology department

## **3. Project Plan**

The following table outlines the project milestones and projected deliverable dates:

|  |  |
| --- | --- |
| Milestone | Deliverable Date |
| Prototype | Mid October |
| Database Designing | Mid November |
| Interface Designing/Changing | Mid December |
| Database Building | Mid January |
|  |  |

## 

## **4. Key Stakeholder Roles & Responsibilities**

|  |  |
| --- | --- |
| Stakeholder | Role/Responsibility |
| Joshua Correll | Project Owner |
| Chelsea Chandler | Course TA |
| Madison Rivas | Front-End Developer |
| Liyang Ru | Back-End Developer |
| Alvaro Santillan | Front-End, Mobile-App Lead Developer |
| Guangshi Xu | Machine Learning Lead Developer |
| Siyu Yao | Front-End Lead Developer |