Facial Interpreter

09.01.2016

Victory Road

Kyle Rohlfing
Maggie Hollander
Brandon Trent
Wesley Vansteenburg

Table Of Contents

Overview

Goals/Deliverables

Development Timeline

Value

Challenges

Cost

Project Tracking

Risks

Payment Terms

Intellectual Property

Indemnification

Overview

Facial Interpreter is a mobile application that combines the ability of capturing images of people with that of a facial recognition algorithm to match faces together with those stored in a database. Information will then be overlayed on top of the image, which includes, but is not limited to, people's names, the last time they were seen, and any additional comments relating to each person.

Goals

1. Match facial object with database entry
2. Overlay name and when person was last seen with correct positioning over the image
3. Application can run in a mobile environment (such as a laptop or android phone)
4. When a face cannot be found within the database, the system prompts for input about the new person.

Value

Upon delivery this software will be most valuable to lecturers looking to build a closer connection with their audience. The system is mostly used to help professors remember the names of their students and to store information about them if needed.

Project Tracking

A github repository will be used to allow for simultaneous collaboration as well as version tracking and code review. All code will be uploaded and fixed via this repository. The project will also be broken down into small tasks represented by cards on a Trello board, which each developer can be able to complete quickly. Using this process, each developer can easily be able to see what is being worked on at any given time and what tasks need to be completed next.

Development Timeline

Due By	Estimated Hours	Task to be accomplished
September 5th	5-10 hours	APIs are selected and project is broken down into tasks assigned to each developer
September 7th	15-20 hours	Facial Recognition software incorporated within the project.
September 14th	30-50 hours	Working prototype, can show the ability to recognize faces and overlay information about the user.

Challenges

There are a couple challenges we will run into while writing this application. No one in the group has experience with facial recognition software, but that will be remedied by the use of Lambda Labs API, extensive research, and utilizing existing code where needed. We will also have to keep scalability in mind to ensure it can be scaled into a more user-friendly product after the initial implementation is complete.

Cost

Payment Terms

On September 14th upon delivery of the product, we will be compensated with a C+ grade. Following evaluation, additional credit will be given for quality based upon the specified customer requirements.

Payment Breakdown

Development equipment

- Engineering Work Stations
- Camera Enabled Windows Tablet or Laptop

API Costs

- Facial Recognition software from Lambda Labs

Prototype - Basic license $0

Full Product - $1449/Month

Development Time

Estimated 70 engineering hours at $135/hr

Total: ~70 hours * $135 = approximately **$9,450**

Intellectual Property

The right to utilize the application in any way remains with the client. The client has a full free-of-use license to the application itself. All development rights and permissions remain with Victory Road.

Indemnification

Victory Road will not knowingly infringe upon nor make use of open software with licenses incompatible with client's needs.