Device Agnostic Facial Recognition

Proposal and time schedule.

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1. Background

In this project, we need to create facial recognition technology that will that can be deployed on a chrome browser. I need it to look for faces and compare them against 5 faces to see if there is a match. This software needs to run in real-time.

Apparently that a this project is a computer vision problem. Also we need to write a website for showing the results interactively.

2. Technical problems.

Since we wanna create a facial recognition technology comparing the faces, following problems should be solved:

2.1 Understanding and implementing the useful api. Here we use well-trained *face-api.js*. Since tensorflow could also be developed by javascript, all source codes should be written in javascript.

2.2 Develop a website for people to use. Everything should be written in javascript. A source website of mine could be found at *this link*.

2.3 Developing a website server using AWS or IBM cloud for running codes and deploying the facial recognition result.

3. Time Schedule

The project must be finished before March 29th. Thus, 3 weeks totally could we use for developing this demo. Here is the roughly schedule for developing the demo:

Time Schedule for demo development.	
March 15(Next Friday)	Developing a face recognition technique that could run locally(in Javascript).
March 23	Developing source code for website, plug the scripts into website.
March 26	Implementing the website into AWS server.
March 28	Testing the performance of demo.

4. Useful Links

a. Source codes https://github.com/justadudewhohacks/face-api.js#models-face-detection
b. Javascript for website: https://www.w3schools.com/howto/howto_website.asp
c. Another example: https://dev.to/programliftoff/create-a-basic-webpage-with-css-and-javascript--104i
d. Implementing a website using AWS and WordPress: https://amazonaws-china.com/getting-started/tutorials/launch-a-wordpress-website/?nc1=h_ls