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HMWK 2

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1.

The mistakes I found in the document were as follows:

Moved up deadline without consulting programmers

Added featured without consulting programmers

Allowed personality problems to derail project

Didn’t test early enough

Set deadlines they could not commit to

Underestimated bugs

Underestimated size of project

What I learned about potential mistakes we could make in our senior project would be to over estimate what we can get done in 9 months. We have to be careful to come up with a solid MVP, and to build on it if we have time. Another thing I learned was to not allow anyone to add features to the project without the permission of the developers.

2.

We began to finalize what out project would be about. Our idea is create a classifier for facial recognition that can be trained to high levels of accuracy with the minimal amount of data so that it practical for everyday use. To learn about what kind of dataset we will need for training I looked at what other projects had done before us. I found that for each person to be recognized the images of that person must very greatly for the highest level of accuracy. For instance, the images should include different shirts, haircuts, facial expressions, lighting, and angles. Other important elements include glasses/piercing on/off, tans, and facial hair. These are all elements that can change from day to day, so it should all be represented in the training and testing data. The problem with this is that more of these features you wish to account for, the more data you need to train with, which is runs in opposition to our goal of minimalizing the necessary data to train. A potential solution to this problem would be to train the classifier to recognize and not include hair in classification.

I am starting to realize that the requirements for what aspects the facial classifier is instructed to use and not to use, and how the subject poses for recognition will be just as important as the algorithms behind the technology. We must find a way to classify without paying too much attention to day to day changes.

Here are list of links to datasets I found that meet our requirements as I understand them now.

<http://www.cl.cam.ac.uk/research/dtg/attarchive/facesataglance.html>

<https://www.bioid.com/About/BioID-Face-Database>

<http://www.vision.caltech.edu/html-files/archive.html>

<https://sites.google.com/a/nd.edu/public-cvrl/data-sets>

<http://cswww.essex.ac.uk/mv/allfaces/index.html>