**DAILY LEARNING LOG**

Student Name: Rayan Wali

Teacher: Ms. Lorena (Period 5)

Project Name: Facial Biometric Recognition

Tuesday January 15, 2019

Goals:

Today, I am going to sign up for Microsoft Azure and begin the process of setting up the Cognitive Services API.

Today I accomplished…

Today, although I wasn’t able to sign up for Microsoft Azure, I did some extra practice coding in C# to get me comfortable for coding my program in Visual Studio that trains the model, and for understanding the sample already-trained code for a different attribute, which is provided in C#.

My next steps are…

1. Set up the packages on Visual Studio associated with my project (C#).
2. Get started on making a Microsoft Azure account
3. Link Visual Studio to Microsoft Azure (web server with all the Cognitive APIs, which I will use)
4. Pass in a sample image to Visual Studio and print out desired attributes for the image.
5. Take a complex step: train my own attribute to test, for e.g. detecting facial expressions and even more complex operations.

My most important concerns, problems or questions are…

1. Sign up for Microsoft Azure.
2. Setting up needed classes and tools I am going to need to make my project, and planning how I am going to train the recognition with sample data.
3. Using the correct packages to accurately train the model.
4. Uploading the data collected from the computer to the cloud.

Monday January 14, 2019

Goals:

I am going to perform a test of image recognition and trying to pass in a sample test image to the code and connect it to Microsoft Azure through a product key, and use the predefined libraries that already contain trained fields - such as recognizing age, hair color, etc. from an imported picture. When I am finished with that, I will research how to train the image, and what methods it takes to complete the training process.

Today I accomplished…

I was able to find a model in Visual Studio that had already trained the age, height, and hair color attributes. However, I couldn’t use the Cognitive Services feature in Microsoft Azure because it requires a subscription, so I am going to look for alternatives to Azure that use cognitive services or use a free trial that works.

My next steps are…

1. Make a Microsoft Azure account
2. Link Visual Studio to Microsoft Azure (web server with all the Cognitive APIs, which I will use)
3. Pass in a sample image to Visual Studio and print out desired attributes for the image.
4. Take a complex step: train my own attribute to test, for e.g. detecting facial expressions and even more complex operations.

My most important concerns, problems or questions are…

1. Setting up needed classes and tools I am going to need to make my project, and planning how I am going to train the recognition with sample data.
2. Using the correct packages to accurately train the model.
3. Uploading the data collected from the computer to the cloud.

Friday January 11, 2019

Goals:

Today, I am going to start exploring how the Cognitive Services API works in Microsoft Azure and how it connects to Visual Studio to detect individual pixels of an image.

Today I accomplished…

I set up the packages on Visual Studio, and I am coding in C#. I saw a demo online where with Microsoft Azure’s already trained models, it was able to link to Visual Studio with a product key and then identify chosen attributes, such as displaying the age, height from an image, which is all done through an Azure’s default already-trained model.

My next steps are…

1. Make a Microsoft Azure account
2. Link Visual Studio to Microsoft Azure (web server with all the Cognitive APIs, which I will use)
3. Pass in a sample image to Visual Studio and print out desired attributes for the image

My most important concerns, problems or questions are…

1. Sign up for Microsoft Azure.
2. Setting up needed classes and tools I am going to need to make my project, and planning how I am going to train the recognition with sample data.
3. Using the correct packages to accurately train the model.
4. Uploading the data collected from the computer to the cloud.

Thursday January 10, 2019

Goals:

Today, I am going to work on my project proposal, and research interesting applications of this topic.

Today I accomplished…

Today, I completed my project proposal, and made some changes to my topic proposal after further research on this topic. I also did research on this topic (its applications and how the computer processes individual pixels to recognize an image) to get a better understanding of the steps I am going to take to get to my final product, which is to train an image passed accurately.

My next steps are…

1. Set up the packages on Visual Studio associated with my project (C#).
2. Make a Microsoft Azure account
3. Link Visual Studio to Microsoft Azure (web server with all the Cognitive APIs, which I will use)
4. Pass in a sample image to Visual Studio and print out desired attributes for the image

My most important concerns, problems or questions are…

1. Sign up for Microsoft Azure.
2. Setting up needed classes and tools I am going to need to make my project, and planning how I am going to train the recognition with sample data.
3. Using the correct packages to accurately train the model.

Wednesday January 09, 2019

Goals:

To finalize on the topic of my project for this semester, and start filling out the topic proposal.

Today I accomplished…

I decided to choose the facial biometric recognition option and am finished with the topic proposal, but I may come back and add to/edit it. I also saw what packages I am going to use: Visual Studio and Microsoft Azure – the cloud server with the APIs I’m going to use.

My next steps are…

1. Complete the project proposal and do some extra research on this topic.
2. Set up the packages on Visual Studio associated with my project (C#).
3. Get started on making a Microsoft Azure account
4. Link Visual Studio to Microsoft Azure (web server with all the Cognitive APIs, which I will use)

My most important concerns, problems or questions are…

1. Sign up for Microsoft Azure.
2. Setting up needed classes and tools I am going to need to make my project (in Visual Studio), and planning how I am going to train the recognition with sample data.

Tuesday January 08, 2019

Goals:

To think of a project I am going to work on this semester, and finish the topic and project proposals by the end of this week.

Today I accomplished…

Today I was able to think of the general strand of my project (cognitive services), but I am still deciding whether to do facial recognition or text recognition.

My next steps are…

1. Work on the topic proposal
2. Work on the project proposal
3. Research into the topic
4. Make all necessary classes and set up the programs I will use

My most important concerns, problems or questions are…

1. Thinking of a topic that I find interesting and complex enough that I will learn enough from.