Daily Log

Monday September 16

Did more research towards how Darknet relates to the Yolo classifier, specifically how to write the config file and organize image files and set them up within the Darknet directory, and classified about 200 images.

Wednesday September 18

Finished the GUI by giving it full image display potential, can now draw bounding boxes for all images and display their classifications. Fixed some issues with Darknet commands having trouble running on a windows system.

Friday September 20

Annotated another 200 images and uploaded them. Wrote a small script to split up image data into testing and training sets, variable by percentage. Wrote config file for Darknet training module and installed all necessary components for testing (pre-trained weights file from Imagenet).

Timeline

Date	Goal	Met
September 9	Finish day/night classifier, continue annotating images(400ish), begin basic GUI program using tkinter	Yes, though might need to edit classifier in future, also started working early on Darknet program
September 16	Continue annotating images(400ish), finish GUI program, work on connecting GUI to Darknet in order to run YOLO classifier	Completed for the most part, GUI program still has some minor issues that I need to resolve
September 23	Be able to successfully run darknet on selected group of images, work on attaching Darknet commands to GUI	
September 30	Be able to run Darknet commands through GUI, begin work on trying to reach desired accuracy of 95%	

Reflection

I was able to complete the basic GUI system so that it can display the selected image from a directory, and sort a directory of images based on time taken. My next steps for the program are for it to be able to display a bar graph of how many night photos versus day photos there are in the selected directory, which would be good preparation for displaying statistics from the Yolo classification program, and to adjust the day/night classifier to split off annotation files from the images into separate folders; this would help with setting up the correct formatting for Darknet's detector. Pictured below is the updated GUI, with bounding box functionality.