## Read Me

## **Notes**

- -Extract all from the zip folder
- -Necessary Libraries are TensorFlow, numpy, scipy, sys, time, pgzrun, pygame, pgzero, random, refer to the documentation for a full list of imports as well.
- -Ensure all libraries are installed, if not installed make sure to pip install missing ones
- -Video link found at the bottom
- -Codes were also uploaded to GitHub, link at the bottom
- -Make sure codes are being run out of the folder do not move to a new folder and run as this will break the code
- -Note: This lab has multiple videos, please read titles carefully and refer to the documentation file as necessary to understand each video.

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#### Part 1

- -Filename: Copy of CNN\_test.ipynb
- -To run this code make sure to open it in google collab, will not work on spyder as it is not .py file
- -code has a final accuracy of 83.5%
- -See videos and documentation for further information
- -Please Note, that the proof video for this section had some sections cut to shrink the video length otherwise it could not be uploaded to youtube, as per the lab manual, the final result is shown and was not cut.

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## Part 2

- -Filename:
- -To run this code make sure to open it in google collab, will not work on spyder as it is not .py file
- -The goal is to be able to recognize unrecognizable files
- -This code was able to identify a car but nothing else
- -See videos and documentation for further information

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# Part 3

- -Filename: balloons.py
- -To navigate to fille go to Lab 8 -> Chapter 8 Balloon Fight -> Game Files -> balloon.py and run in spyder
- -Do not remove any files from this directory as it will cause problems and possibly not work at all
- -4 new hacks were added to the game
  - a. More High Score
  - b. Speed It up
  - c. A different way to score
  - d. Multiple of each obstacle
- See documentation for how each was programmed

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-The link titled **Video Link** goes over all parts of the lab. The videos named part 1 proof video are simply there to show the code running on my computer. All commentary on these videos is done in the **Video Link**. Some videos will have a watermark, just ignore it

Video Link: https://youtu.be/RqRBv4PKUBc

Part 1 Proof Video:https://youtu.be/SFbm8jOaZqE

Github Link: https://github.com/nersahin/Lab8\_Ersahin\_Nuh