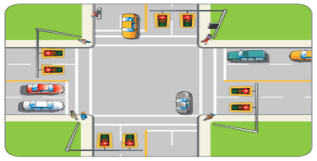

BVRIT HYDERABAD College of Engineering for Women

Traffic Light Simulation

Team-21

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Problem Statement

- It contains a 4-way traffic intersection with traffic signals,each signal has a timer on top of it which shows the time remaining for the signal to switch between yello,green,red colours.This simulation can be further used for data analysis or to visualize AI or ML applications

Approach

- Saving the respective images required for the simulation
- Defining constants used in movement of vehicles and controlling traffic signals
- Defining coordinates of vehicles and classes
- Move function to move vehicles and repeat the function to run simulation again

Technical Stack

- pygame
- Random
- Time
- Threading

Challenges

- Retreiving images using pygame.
- Resizing the images of traffic signals and vehicles.
- Pygame errors and conditions.

Learnings

- LaTeX
- GITLAB
- Using Pygame

Statistics

- Number of lines of code: 220
- Number of functions used in the code:4

GIT Repo

https://gitlab.com/traffic-light-stimulation-team-21/traffic-light-stimulation-team-21

Demo

References

- https://docs.python.org/
- https://devdocs.io/pygame/
- https://www.pythoninformer.com/python-libraries/pygame/sprite-class/
- https://realpython.com/intro-to-python-threading/

THANK YOU!