Team Members {Team 8}:

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INSTRUCTIONS TO USE THE CODE:

1) Download all the files from the git repository (https://github.com/siddahant/Decision-Making-Strategy-on-Highway-for-Autonomous-Vehicles.git).

2) The preferred platform for executing this code is VScode.

3) Download all the dependencies:
         pip install highway-env
         pip install tensorboard
         pip install --user git+https://github.com/eleurent/rl-agents

4) We have already trained the environment, so to test the agent please change the folder to the "final_code" → "rl-agents" → "scripts" and run the following commands:

To test DQN agent for 10 episodes run:
python3 experiments.py benchmark DQN_agent.json --test --processes=4 --episode=10 --recover-from=out\HighwayEnv\DQNAgent\run_20221116-194032_5528\checkpoint-best.tar

To test Double DQN agent for 10 episodes run:
python3 experiments.py benchmark Double_DQN_agent.json --test --processes=4 --episode=10 --recover-from= out\HighwayEnv\DQNAgent\run_20221116-194032_15552\checkpoint-best.tar

To test Dueling DQN agent for 10 episodes run:
python3 experiments.py benchmark dueling_DQN_agent.json --test --processes=4 --episode=10 --recover-from= out\HighwayEnv\DQNAgent\run_20221116-194032_16060\checkpoint-best.tar

5) You can visualize the results on tensor-board.