2D SELF-DRIVING CAR SIM

### Submission

We will attach the form, where you can attach your submission. We ask that you put your code in a **Public GitHub Repository**.

Your design rationale can be submitted on the form

**The deadline for the code is 20th January 11:55 PM.**

**❗**[**SUBMISSION LINK**](https://forms.gle/FDBEqHBJTBqmK2CT9)**❗**

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If you have any questions feel free to email us. [jngu0113@student.monash.edu](mailto:jngu0113@student.monash.edu) (Jackie)

1. **Design Rationale**
   * Build 2d environment to simulates car driving
   * Use AI model called NEAT to train self driving

* WHY?
  + Learn about fundementals concepts of self-driving tech in 2d sim environment
  + Could further develop into 3d environment for better representing real world
  + After gaining good knowledge, could build real system with RC car
  + Ultimately, help reduce accidents made by human errors, free human from the stress of commuting via driving

1. Planning

* Game Assets/Graphics
  + Car: <https://marcusvh.itch.io/2d-cars>
  + Road:
    - <https://www.kenney.nl/assets/racing-pack>
    - <https://free-game-assets.itch.io/free-race-track-tile-set>

1. Documentation

Given the collaborative nature of the project, your code will be read over by others not just yourself. It is important that you are able to document your code well:

* Code segmentation
* Code readability
* Comments & doc-strings
* Effective usage of GitHub
* Meaningful Commits
* Time Complexity Analysis