What's the Rush?:

#Training #BetterHabits #Simulation #RacingGame #Education

Project Brief:

The Australian people are thought of as laid-back, easy-going, "no-worries", and friendly (at least according to our tourism industry). So why do Australians drive the way they do? There is quite a bit of evidence that shows that Australian Drivers undertake dangerous driving practices, with mass tailgating, speeding (including going any speed over the posted limit), and people inconsistently following the rules (link).

In this project, your goal is to design and develop an arcade experience that allows users to reflect on their bad driving habits through simulating the Australian driving experience. You will design and develop a unique arcade racing game concept with physical controls that simulates a typical driving experience on Australian roads. The level of "Realism" can be adjusted from Racing game to real simulation to crazy novel experience, but the overall goal of self-reflection is the same.

Problem Space:

While there are many examples of projects that attempt to solve peoples bad driving practices, meaningful change needs to come from self-reflection. People tend to be defensive when they are accused of bad behaviour and the goal of this project is to create a simulated experience that forces users to mentally address their bad habits. The arcade experience will require you to balance the simulation/game with the learning outcome.

Success Criteria

A Physical Arcade Simulation/Game that recreates an experience of driving and through this experience force users to reflect on their own bad driving practices.

This Application MUST Have

- Simulated arcade driving experience.
- Physical controls (No Keyboard and Mouse).
- Learning outcome/reflection on bad driving habits.
- One driving scenario that tackles a specific bad behaviours (tail gating, speeding, etc).

This Application COULD Have

- Realistic visuals and environment.
- Multiple driving scenarios that tackle more than one bad driving behaviour.
- A full-size arcade cabinet/construction.

Expected Skills

- Physical Fabrication (Arduino, Wood Working, 3D Printing, etc).
- Game Engine (Unity, Unreal, Etc).
- Microcontrollers (Arduino, sensors, etc).
- Basic understanding of 3D modelling (Online Assets are allowed).