

# CSE 20212: Fundamentals of Computing II

## Group Project Proposal

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### 1. Software Concept

The team plans to build a 3D motorcycle racing game, inspired by the game *Road Rash* and the movie *Tron: Legacy* (2010). A player of the game will drive a motorcycle that resembles those in the *Tron* movie and race against other motorcyclists in different cities. During the course of a race, the player may be able to kick or punch another motorcyclist, crash with cars and other obstacles, and even risk being arrested by the police that may appear at certain places in a city. The game will be constructed using OpenGL and SDL. For now, the game will only be a single player game.

### 2. Concerns

- Unfamiliarity with OpenGL and SDL  
The team needs to spend one week or two to get familiar with the libraries.
- Modelling and rendering 3D objects  
The team may need to learn Blender or other 3D modeling softwares.
- Graphics capability of the Linux machines  
The game may not display as perfectly as expected.
- Design of the characters and especially the race maps  
Making awesome graphics needs tons of creativity.

### 3. Project Timeline

Proposal deadline: Friday, February 7, 2014

Project due: Late April

Project length: Around 10 weeks

- Week 1-3: try to simplify the entire project and learn opengl and blender
- Week 4: model the characters and the maps and try to load them
- Week 5-6: program the game
- Week 7: design maybe one or two maps and verify that the motorcycles run correctly
- Week 8-due: debug and polish