# CPSC 304 Project Cover Page

Milestone #: 1

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Group Number: 36

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By typing our names and student numbers in the above table, we certify that the work in the attached assignment was performed solely by those whose names and student IDs are included above. (In the case of Project Milestone 0, the main purpose of this page is for you to let us know your e-mail address, and then let us assign you to a TA for your project supervisor.)

In addition, we indicate that we are fully aware of the rules and consequences of plagiarism, as set forth by the Department of Computer Science and the University of British Columbia

### **Project Description**

The domain of the application is a racing game. The database will model aspects of a racing game including characters, cars, special abilities, power ups, races, tournaments, locations and race tracks. Characters can own multiple cars and have special abilities. Characters can participate in races which are held at race tracks in different locations. Races are either circuits with multiple laps or time-trials with fixed time limits. Races also have power ups which characters can use to temporarily improve their car stats. Also, characters can participate in tournaments which have multiple races.

### **Database Specification**

The database will allow users to explore aspects of the racing game. For instance, users can view the characters in the game along with their special abilities and owned cars. Users can also see which races and race tracks are included in the game. Moreover, users can compile lists of races to create tournaments.

## **Application Platform**

The project will use PHP as the programming language and Oracle as the DBMS. We plan to use HTML and CSS for the front end.

### Comments to explain ER diagram

- All characters must participate in the owns relationship because characters cannot compete in races without a car.
- All tournaments must participate in the includes relationship because tournaments with 0 races is nonsensical.
- All races must participate in the participates relationship because a race with 0 characters is nonsensical.
- Tournaments does not have a total participation constraint in its relationship with characters because tournaments are a list of races.
- All races must participate in the hosts relationship because races must be held on race tracks.

