University of British Columbia, Vancouver
Department of Computer Science
CPSC 304 Project - The Formula for Success
Milestone #: 1
Date: October 6, 2023
Group Number: 51

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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 email 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:

What is the domain of the application?

The domain of our application is sports data management. More specifically, our application focuses on Formula One (F1), a form of international motorsport (see *Further Comments* for more information about F1). The application will store statistics and results for fans to reference and explore.

What aspects of the domain are modeled by the database?

The database will model important components of the F1 system including Drivers, Constructors (i.e. "teams"), Circuits, Races, Standings and additional ones to accurately represent the intricacies of F1's structure. In addition, the database will model relationships between them such as which races drivers compete in, the results of those races, the overall performance of a team in a given season, and many more. Our project focuses on these core components of F1 as the database is intended to support fan engagement and activities, such as F1 betting and fantasy leagues.

Database Specifications:

What functionality will the database provide?

The database will store information about the central components of F1 such as drivers and constructors. This will allow for the exploration of statistics between drivers, across teams, across circuits, across seasons, etc. Some examples of driver statistics include total points, points per race, and current position in the standings. The database will allow for fans to analyze trends such as how positions and performance of the cars are changing. We are also including details about technical aspects of the cars so fans can see how design can affect performance. Unlike other F1 analytics platforms, users can also view information about team sponsors and viewership statistics per Grand Prix (race).

Application Platform:

We will be using the department provided Oracle for the DBMS, PHP for programming the backend of our database, and CSS or HTML for the frontend implementation. We will also be using Github to support our collaboration and progress.

Further Comments:

What is Formula One (F1)? F1 is arguably the highest class of motorsport (car racing) in the world. There are 10 teams (called "constructors") in the competition each year. Each team has two drivers who drive the race cars and hundreds of employees who engineer the car, build the car, strategize the races, and market the team. The cars race at 23 different race tracks ("circuits") around the world each year. Each race is called a Grand Prix. The car that finishes the Grand Prix in the quickest time wins (often referred to as "P1"). A driver's finishing place determines how many points they get. Constructors and drivers accumulate points over the course of all the Grand Prixs. At the end of the year, the constructor with the most points wins the F1 Constructor's Championship, and the driver with the most points wins the F1 Driver's Championship.

The sport was initially popularized in Europe but has been expanding its audience in recent years to Asia and North America. The increasing audience has also led to increasing money in the sport. Companies can sponsor teams to have their brand be visible on the car. The increasing audience has also led to an increase in media attention to the personal lives of the drivers. One area of frequent attention is the dating lives of the drivers. The partners have become a central part of the drivers' celebrity status. For more information about the structure of F1, check out this fun video.

"The Formula for Success"