

# CS 451 Final Project

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## 1 Cover Page

- **Author:** Zane Globus-O'Harra
- **Project Title:** Formula 1 Database
- **Connection Information**
  - **Port Number:** 3372
  - **Host Name:** ix
  - **Guest Account Login & Password:**  
login: guest  
password: guest
  - **Database Name:** f1db
- **Project URL:** TODO
- **Highlights:** TODO

## 2 Summary

### 2.1 High Level Overview

The world that will be modeled will be a simplified version of a Formula 1 (F1) car-racing season. This will include the drivers, the teams the drivers are in, the races, and the results of those races.

### 2.2 Kinds of Data

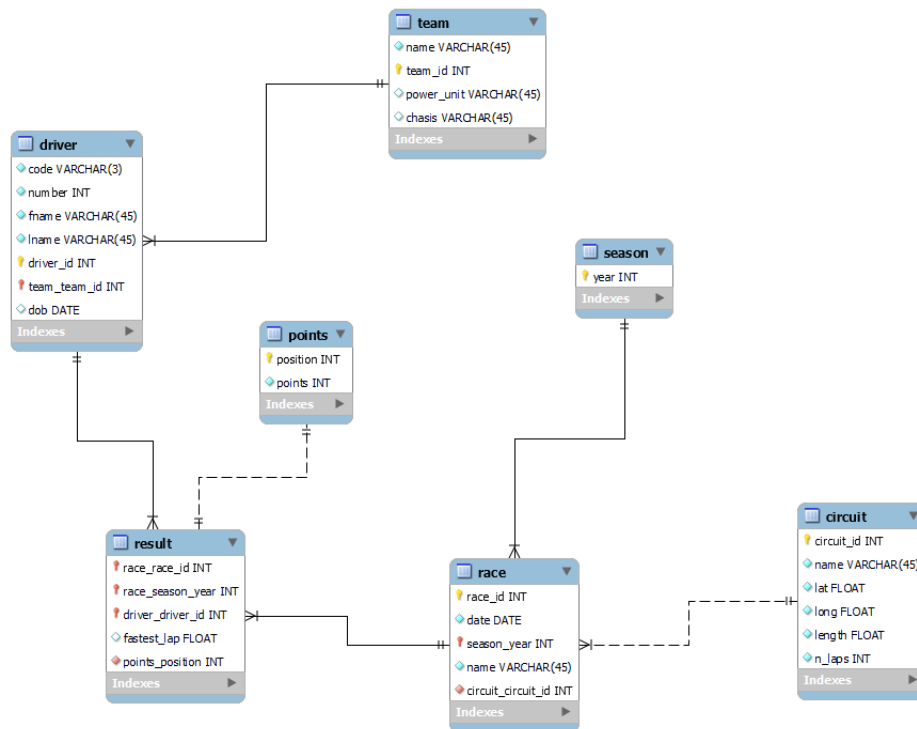
The kinds of data that will be stored will be about the drivers, the teams, and the results that those drivers receive in the races that they participate in. I'm not sure how in-depth you want me to go when discussing kinds of data, but I think that the high level overview and the ER diagram in the Logical Design section make it fairly clear the kinds of data that I will be keeping track of.

## 2.3 Application Programs

The application programs that are desired are a way to summarize the results in a season, and determine who was the champion for that season. I also want to look at the average results of each driver, and give a summary of their best and worst races in a season (if I add data for multiple seasons, then I will also be able to look at their results across their career).

Each team will have two drivers, and I will have a way to compare the drivers of one team. I will also have a way to look at the results of a team over a season (the team's results is the sum of the results of its drivers), and the results of that team over its tenure in F1.

## 3 Logical Design



## 4 Physical Design

Table names are in **bold and CAPITALIZED**, primary keys are underlined, and foreign keys are *italicized*. If an attribute is a primary key and a foreign key, then

it is *underlined and italicized*. Not null requirements are indicated. Primary keys and foreign keys are always not null.

- **TEAM:** team\_id, name, power\_unit, chasis
  - not null: power\_unit, chasis
- **DRIVER:** driver\_id, *team\_team\_id*, code, number, fname, lname, dob
  - not null: code, number, fname, lname
- **RESULT:** *race\_race\_id*, *race\_season\_year*, *driver\_driver\_id*, *points\_position*, fastest\_lap
- **POINTS:** position, points
  - not null: points
- **RACE:** race\_id, *season\_year*, *circuit\_circuit\_id*, date, name
  - not null: date, name
- **SEASON:** year
- **CIRCUIT:** circuit\_id, name, lat, long, length, n\_laps
  - not null: name, lat, long, length, n\_laps

## 5 List of Applications

TODO

## 6 User's Guide

TODO

## 7 Contents of Tables

TODO

## 8 Implementation Code

TODO

## 9 Conclusion

TODO