Michael Chung

CS1300 Capstone Project: Formula 1 Roster 2000-2022

Faculty Sponsor: Jeff Huang, jeff_huang@brown.edu

Link: https://michaelchung27.github.io/capstone/

Abstract:

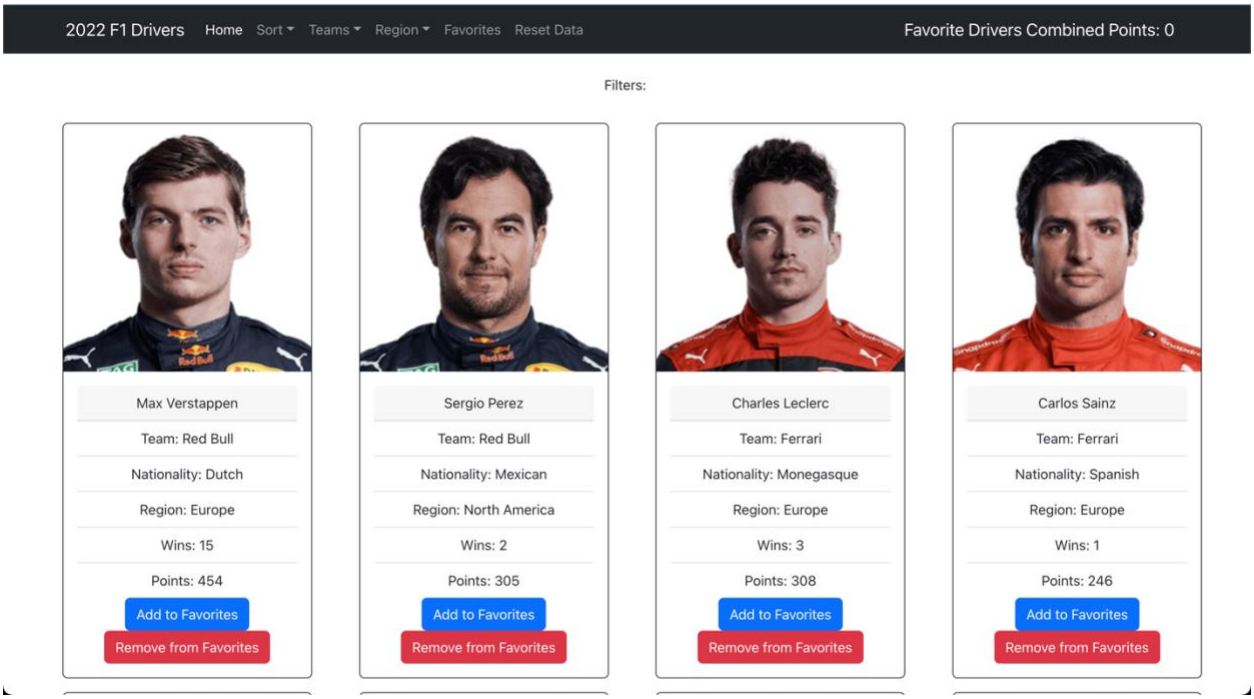
For my UI/UX capstone project, I decided to extend the Development project which was implemented in React. For this project, I was tasked with developing a list-based interactive interface that had sorting and filtering capabilities. The goal of this application is to provide users with basic career statistics and information (like teams, wins and points) of every driver that drove in a Formula 1 race during the 2000-2022 seasons (about 120 drivers).

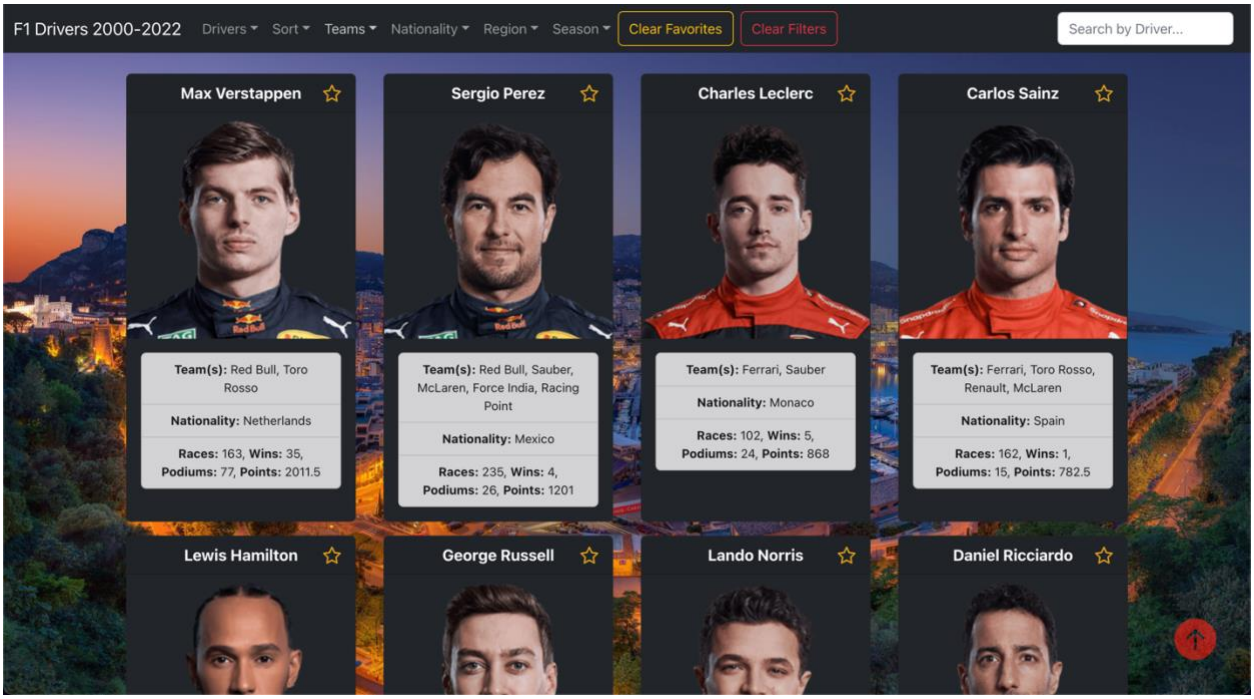
For data collection, I couldn't find an API nor a collection of API's that provided all the information needed, so a lot of data collection from different sources was required by hand. I also had to find an image for each driver and photoshop it in order to achieve some consistency in all the driver headshots.

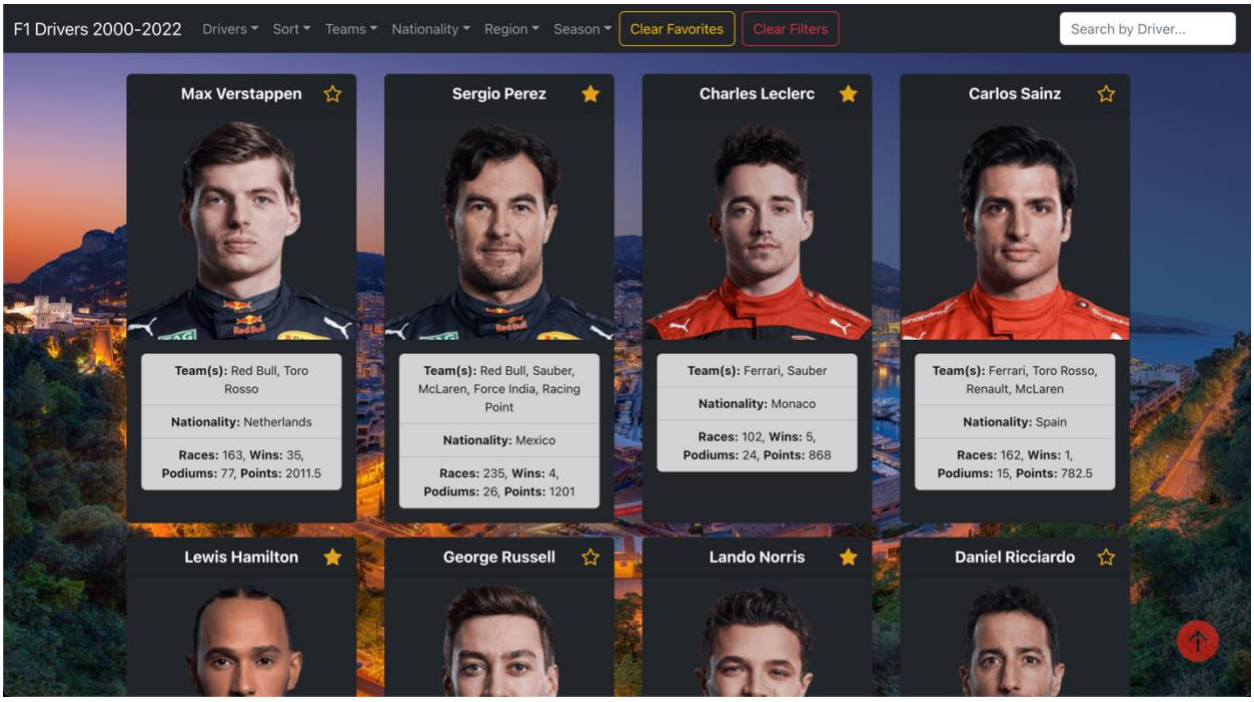
This project consists of 5 filtering categories, 5 different sorting features, a searching component and 3 buttons. The filtering categories include Drivers (All, World Champions, and Favorites), Teams, Nationality, Region, and Season drove in. The sorting features are both ascending and descending and consist of Last Name, Races, Wins, Podiums, and Points. There is a button on each driver card that add/removes it from the favorite drivers list, a clear favorites button that clears the favorite drivers list, and a clear filters button that resets all the filters. When stacking filters within the same category perform an OR operation and stacking different types of filters/sorts perform an AND operation. I also implemented a responsive component that changes to different screen sizes.

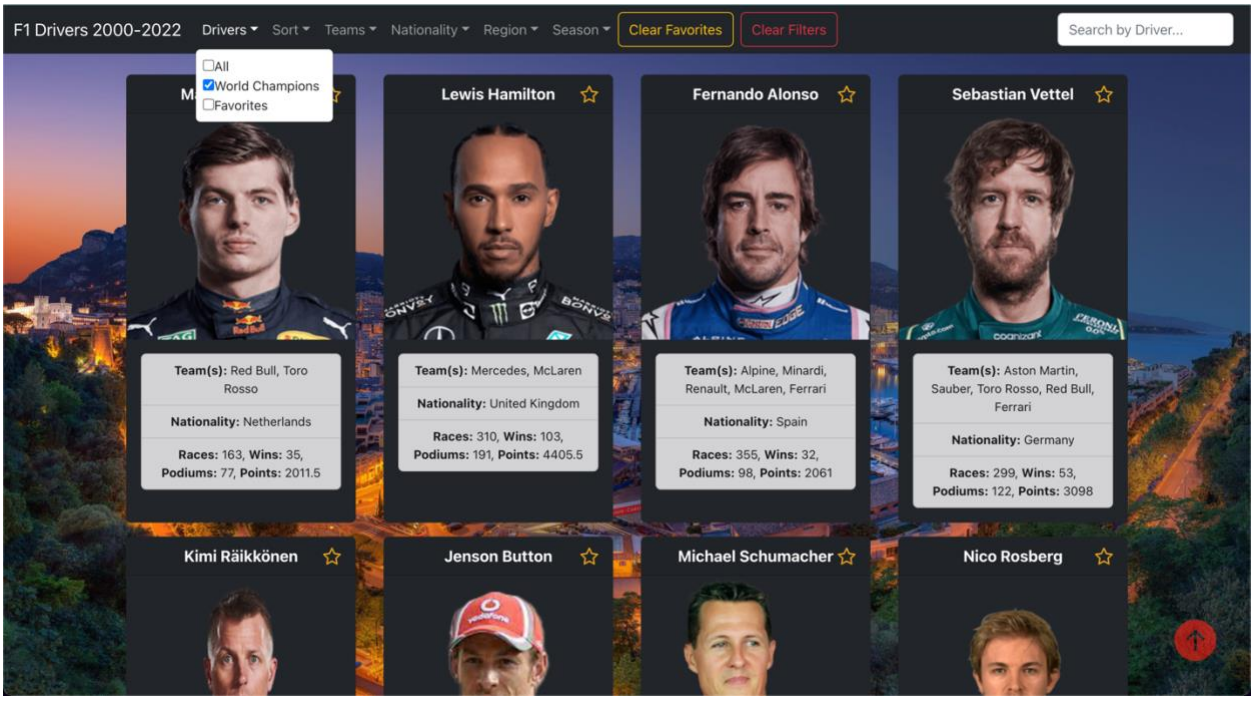
Images:

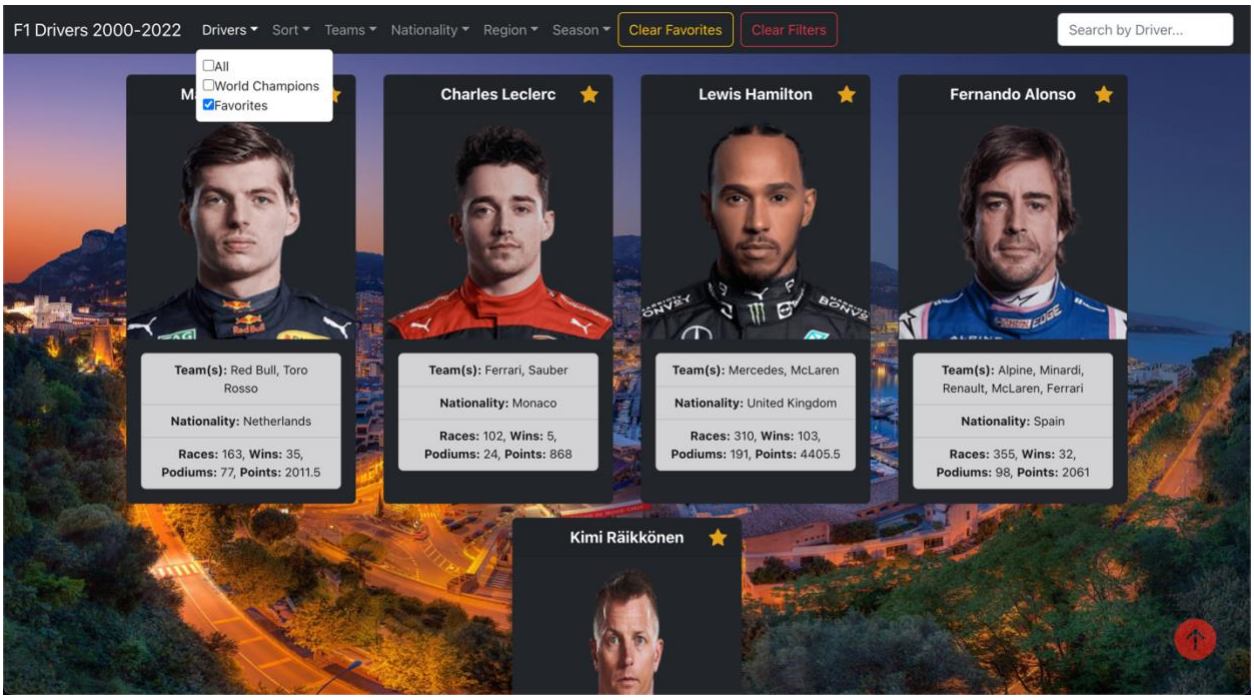
Original Project:






F1 Drivers 2000-2022
Drivers
Sort
Teams
Nationality
Region
Season
Clear Favorites
Clear Filters
Search by Driver...
Max Verstappen
Team(s): Red Bull, Toro Rosso
Nationality: Netherlands
Races: 163, Wins: 35, Podiums: 77, Points: 2011.5
Sergio Perez
Team(s): Red Bull, Sauber, McLaren, Force India, Racing Point
Nationality: Mexico
Races: 235, Wins: 4, Podiums: 26, Points: 1201
Charles Leclerc
Team(s): Ferrari, Sauber
Nationality: Monaco
Races: 102, Wins: 5, Podiums: 24, Points: 868
Carlos Sainz
Team(s): Ferrari, Toro Rosso, Renault, McLaren
Nationality: Spain
Races: 162, Wins: 1, Podiums: 15, Points: 782.5
Lewis Hamilton
George Russell
Lando Norris
Daniel Ricciardo


F1 Drivers 2000-2022
Drivers
Sort
Teams
Nationality
Region
Season
Clear Favorites
Clear Filters
Search by Driver...
All
World Champions
Favorites
Team(s): Red Bull, Toro Rosso
Nationality: Netherlands
Races: 163, Wins: 35, Podiums: 77, Points: 2011.5
Lewis Hamilton
Team(s): Mercedes, McLaren
Nationality: United Kingdom
Races: 310, Wins: 103, Podiums: 191, Points: 4405.5
Fernando Alonso
Team(s): Alpine, Minardi, Renault, McLaren, Ferrari
Nationality: Spain
Races: 355, Wins: 32, Podiums: 98, Points: 2061
Sebastian Vettel
Team(s): Aston Martin, Sauber, Toro Rosso, Red Bull, Ferrari
Nationality: Germany
Races: 299, Wins: 53, Podiums: 122, Points: 3098
Kimi Räikkönen
Jenson Button
Michael Schumacher
Nico Rosberg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Drivers
Sort
Teams
Nationality
Region
Season
Clear Favorites
Clear Filters
Search by Driver...
All
World Champions
Favorites
Charles Leclerc
Lewis Hamilton
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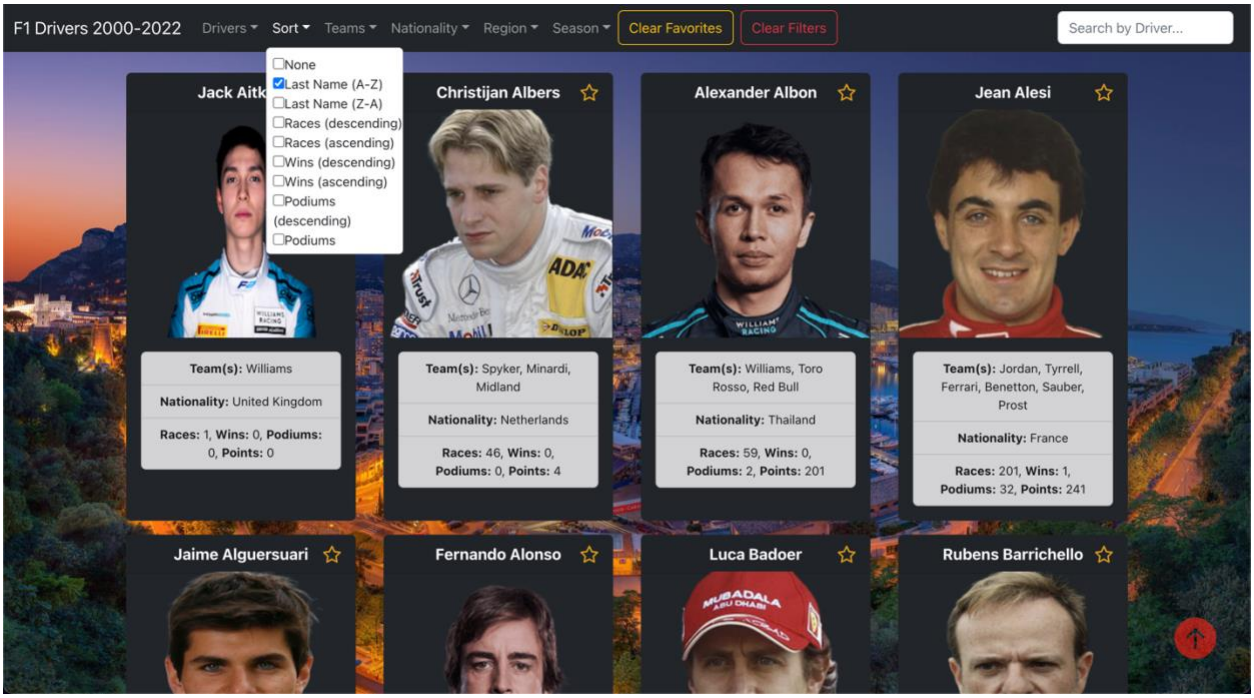
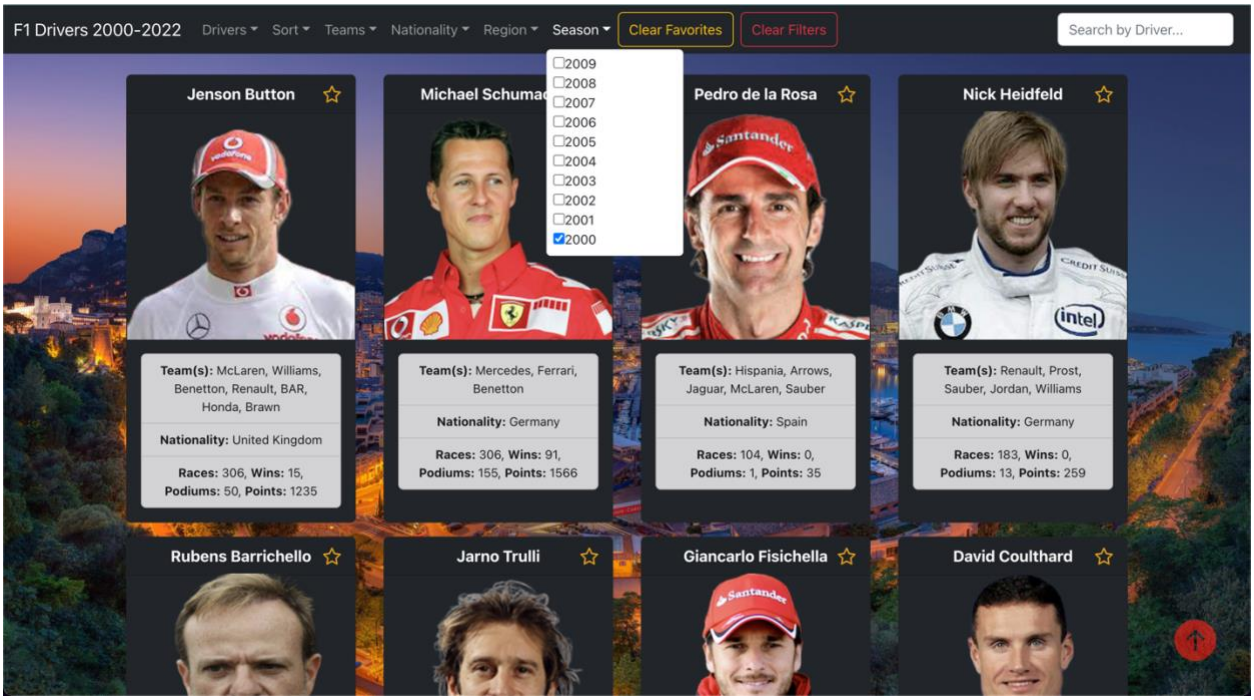
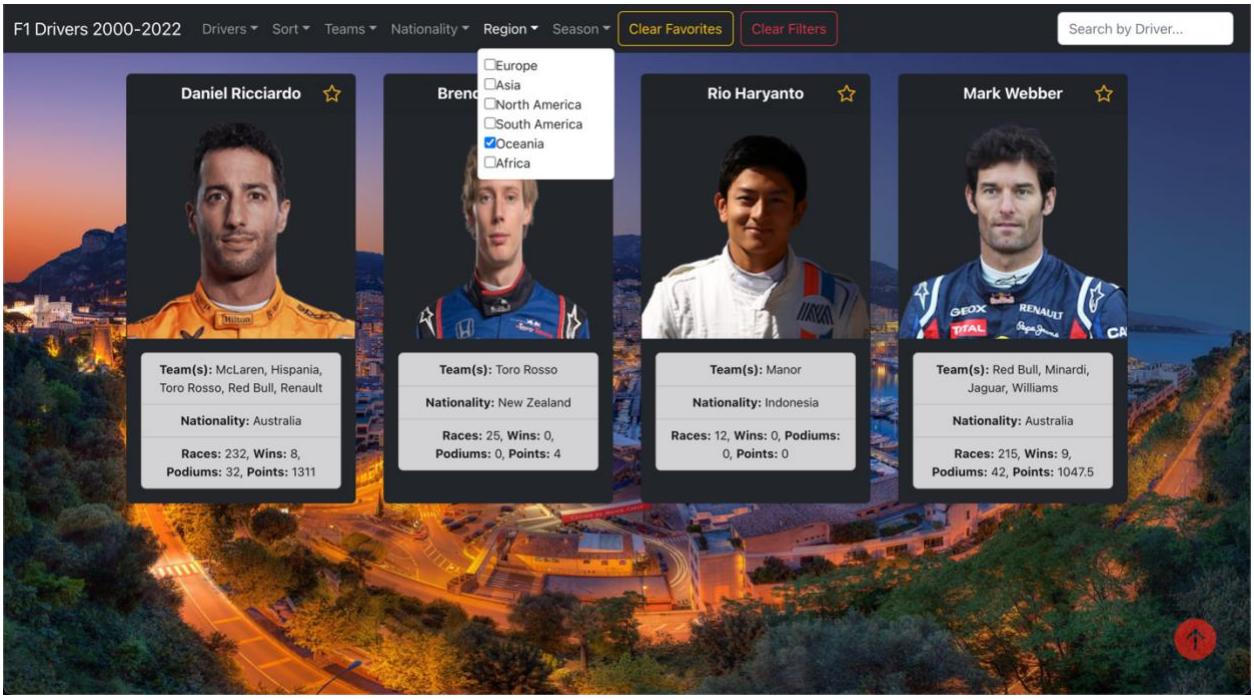
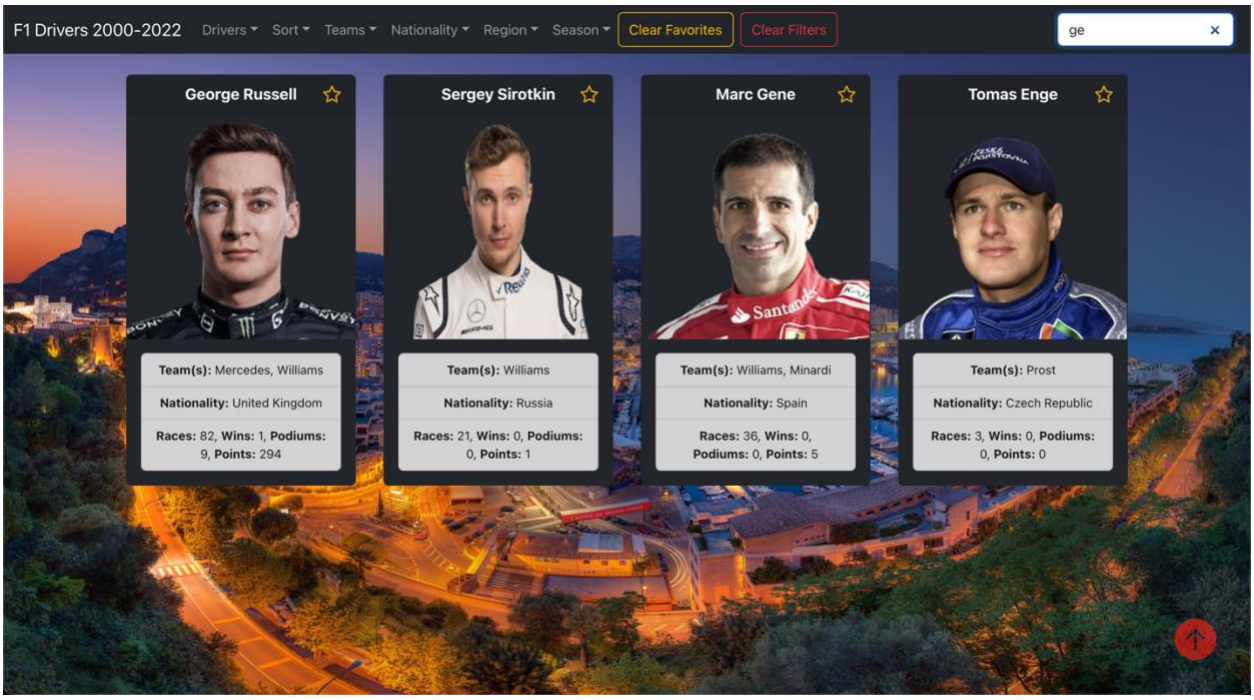
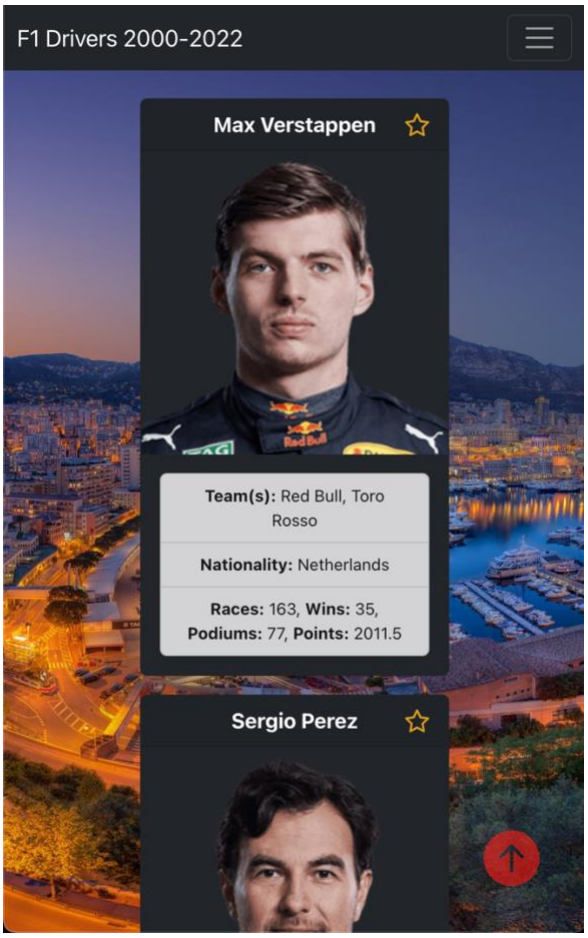
Team(s): Red Bull, Toro Rosso
Nationality: Netherlands
Races: 163, Wins: 35, Podiums: 77, Points: 2011.5
Team(s): Ferrari, Sauber
Nationality: Monaco
Races: 102, Wins: 5, Podiums: 24, Points: 868
Team(s): Mercedes, McLaren
Nationality: United Kingdom
Races: 310, Wins: 103, Podiums: 191, Points: 4405.5
Team(s): Alpine, Minardi, Renault, McLaren, Ferrari
Nationality: Spain
Races: 355, Wins: 32, Podiums: 98, Points: 2061
Kimi Räikkönen


F1 Drivers 2000-2022
Drivers
Sort
Teams
Nationality
Region
Season
Clear Favorites
Clear Filters
Search by Driver...
None
Last Name (A-Z)
Last Name (Z-A)
Races (descending)
Races (ascending)
Wins (descending)
Wins (ascending)
Podiums (descending)
Podiums
Christijan Albers
Alexander Albon
Jean Alesi
Team(s): Williams
Nationality: United Kingdom
Races: 1, Wins: 0, Podiums: 0, Points: 0
Team(s): Spyker, Minardi, Midland
Nationality: Netherlands
Races: 46, Wins: 0, Podiums: 0, Points: 4
Team(s): Williams, Toro Rosso, Red Bull
Nationality: Thailand
Races: 59, Wins: 0, Podiums: 2, Points: 201
Team(s): Jordan, Tyrrell, Ferrari, Benetton, Sauber, Prost
Nationality: France
Races: 201, Wins: 1, Podiums: 32, Points: 241
Jaime Alguersuari
Fernando Alonso
Luca Badoer
Rubens Barrichello


F1 Drivers 2000-2022
Drivers
Sort
Teams
Nationality
Region
Season
Clear Favorites
Clear Filters
Search by Driver...
2009
2008
2007
2006
2005
2004
2003
2002
2001
2000
Jenson Button
Team(s): McLaren, Williams, Benetton, Renault, BAR, Honda, Brawn
Nationality: United Kingdom
Races: 306, Wins: 15, Podiums: 50, Points: 1235
Michael Schuma
Team(s): Mercedes, Ferrari, Benetton
Nationality: Germany
Races: 306, Wins: 91, Podiums: 155, Points: 1566
Pedro de la Rosa
Team(s): Hispania, Arrows, Jaguar, McLaren, Sauber
Nationality: Spain
Races: 104, Wins: 0, Podiums: 1, Points: 35
Nick Heidfeld
Team(s): Renault, Prost, Sauber, Jordan, Williams
Nationality: Germany
Races: 183, Wins: 0, Podiums: 13, Points: 259
Rubens Barrichello
Jarno Trulli
Giancarlo Fisichella
David Coulthard


F1 Drivers 2000-2022
Drivers
Sort
Teams
Nationality
Region
Season
Clear Favorites
Clear Filters
Search by Driver...
Europe
Asia
North America
South America
Oceania
Africa
Daniel Ricciardo
Team(s): McLaren, Hispania, Toro Rosso, Red Bull, Renault
Nationality: Australia
Races: 232, Wins: 8, Podiums: 32, Points: 1311
Team(s): Toro Rosso
Nationality: New Zealand
Races: 25, Wins: 0, Podiums: 0, Points: 4
Rio Haryanto
Team(s): Manor
Nationality: Indonesia
Races: 12, Wins: 0, Podiums: 0, Points: 0
Mark Webber
Team(s): Red Bull, Minardi, Jaguar, Williams
Nationality: Australia
Races: 215, Wins: 9, Podiums: 42, Points: 1047.5


F1 Drivers 2000-2022
Drivers
Sort
Teams
Nationality
Region
Season
Clear Favorites
Clear Filters
ge
George Russell
Team(s): Mercedes, Williams
Nationality: United Kingdom
Races: 82, Wins: 1, Podiums: 9, Points: 294
Sergey Sirotkin
Team(s): Williams
Nationality: Russia
Races: 21, Wins: 0, Podiums: 0, Points: 1
Marc Gene
Team(s): Williams, Minardi
Nationality: Spain
Races: 36, Wins: 0, Podiums: 0, Points: 5
Tomas Enge
Team(s): Prost
Nationality: Czech Republic
Races: 3, Wins: 0, Podiums: 0, Points: 0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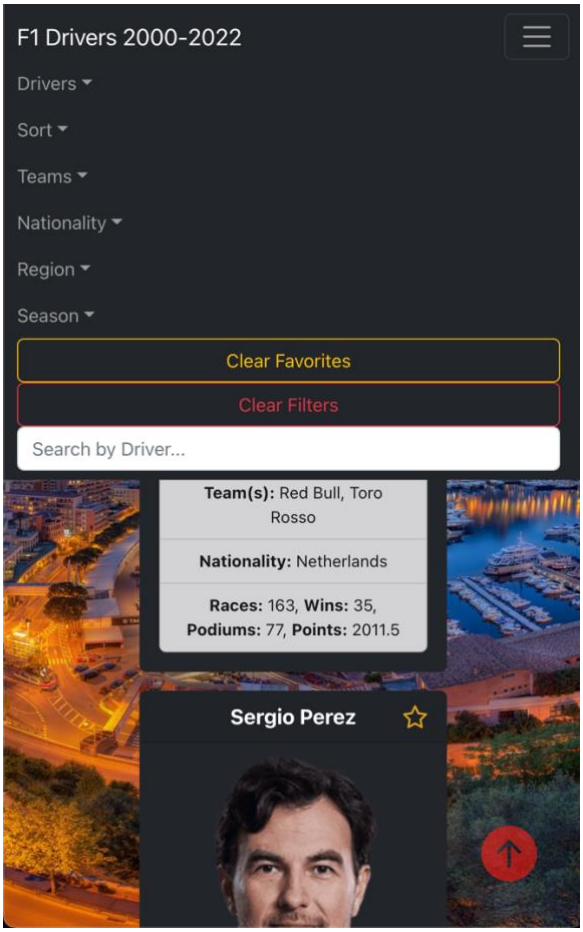
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