

# Introdução às tecnologias Web - ITW

Aula 10 – Apresentação do trabalho prático final

# Sumário

Apresentação do trabalho prático final

O que desenvolver?

Onde ir buscar a informação?

Resultado final esperado



# Trabalho prático final

## O que desenvolver?

Pretende-se com este trabalho prático juntar as diversas aprendizagens feitas ao longo do semestre.

Para tal, pretende-se que seja desenvolvida um site web que integre a informação dos diversos tipos

# Trabalho prático final

Onde ir buscar a informação?

Para o trabalho prático final deverão ser utilizados, como dados, **apenas** os serviços disponibilizados no endereço <http://192.168.160.58/Formula1>

Poderão ser utilizados outros serviços/API's externos para complementar o trabalho

O servidor [192.168.160.58] só está disponível na rede da Universidade de Aveiro. Para que possam aceder de casa, como se estivessem fisicamente na UA, deverão instalar o software disponibilizado em: [https://www.ua.pt/pt/stic/teletrabalho\\_vpn](https://www.ua.pt/pt/stic/teletrabalho_vpn)  
(disponível para Windows e iOS)

# Cenário: Formula1 API


<http://192.168.160.58/Formula1>

Home Page | F1\_API

Inseguro | 192.168.160.58/Formula1

Apps CSS & Fonts App Javascript Microsoft Stuff WhatsApp Google Tradutor EATIS - WebMail EATIS - WebSite Projects - Dashboar... Lista de leitura

F1 API



Form 1 ingressa à Sport TV em 2022  
0 aos 1007 Notícias em alta rotação

## Context

Formula 1 (a.k.a. F1 or Formula One) is the highest class of single-seater auto racing sanctioned by the Fédération Internationale de l'Automobile (FIA) and owned by the Formula One Group. The FIA Formula One World Championship has been one of the premier forms of racing around the world since its inaugural season in 1950.

The word "formula" in the name refers to the set of rules to which all participants' cars must conform.

A Formula One season consists of a series of races, known as Grands Prix, which take place worldwide on purpose-built circuits and on public roads.

## Content

The dataset consists of all information on the Formula 1 races, drivers, constructors, qualifying, circuits, lap times, pit stops, championships from 1950 till the latest 2021 season (not complete!).

### The database in numbers

● Circuit	77	● Nationality	43
● Constructor	211	○ Pit Stop	8:374
● Constructor Result	11.820	○ Qualifying	8:873
○ Constructor Standing	12.586	● Race	1.058
● Country	34	● Race Result	25.140
● Driver	853	● Season	72
● Driver Standing	33.125	● Status	137
○ Lap Time	501.506		

## Student Requests

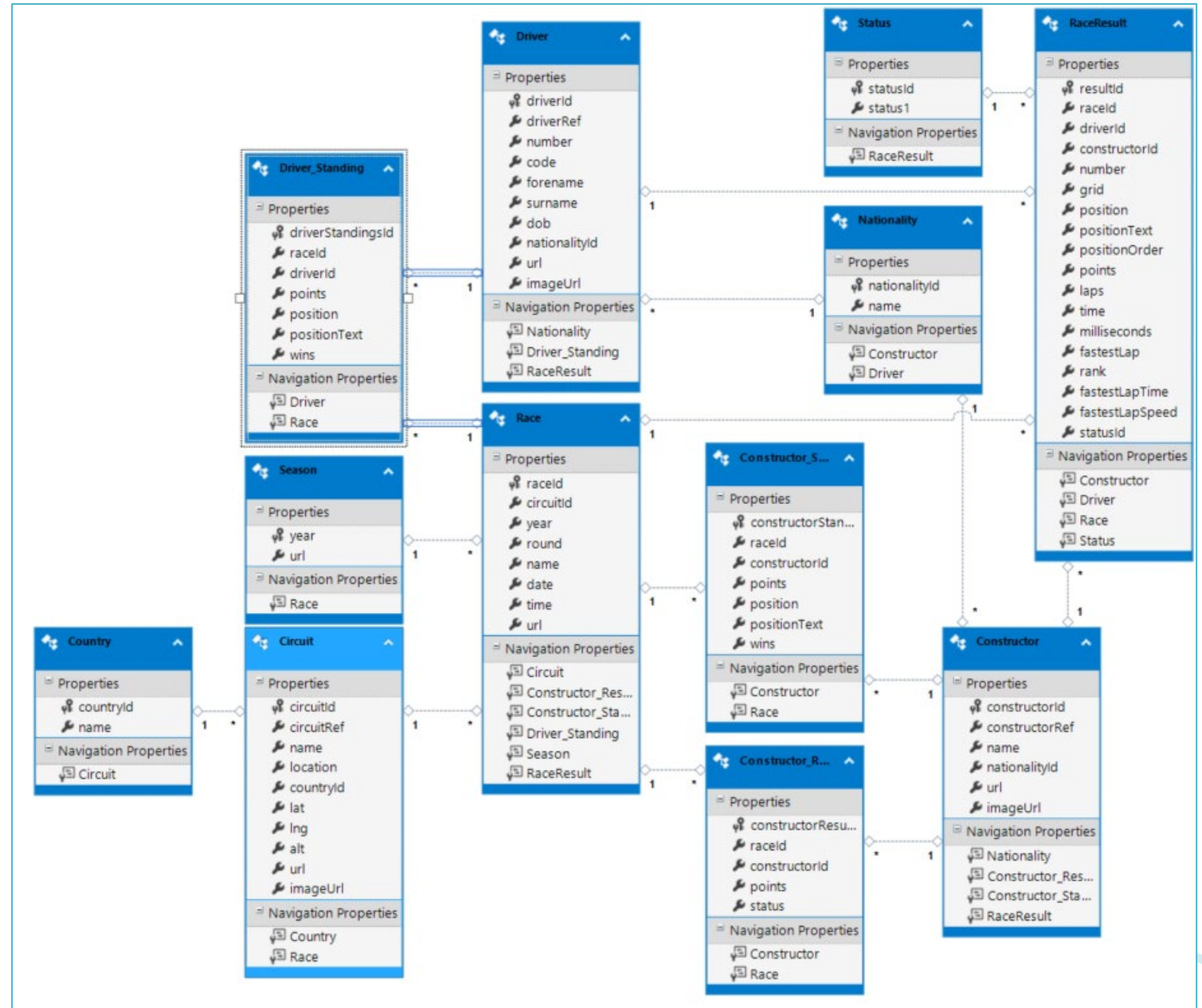
todo

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# Base de dados



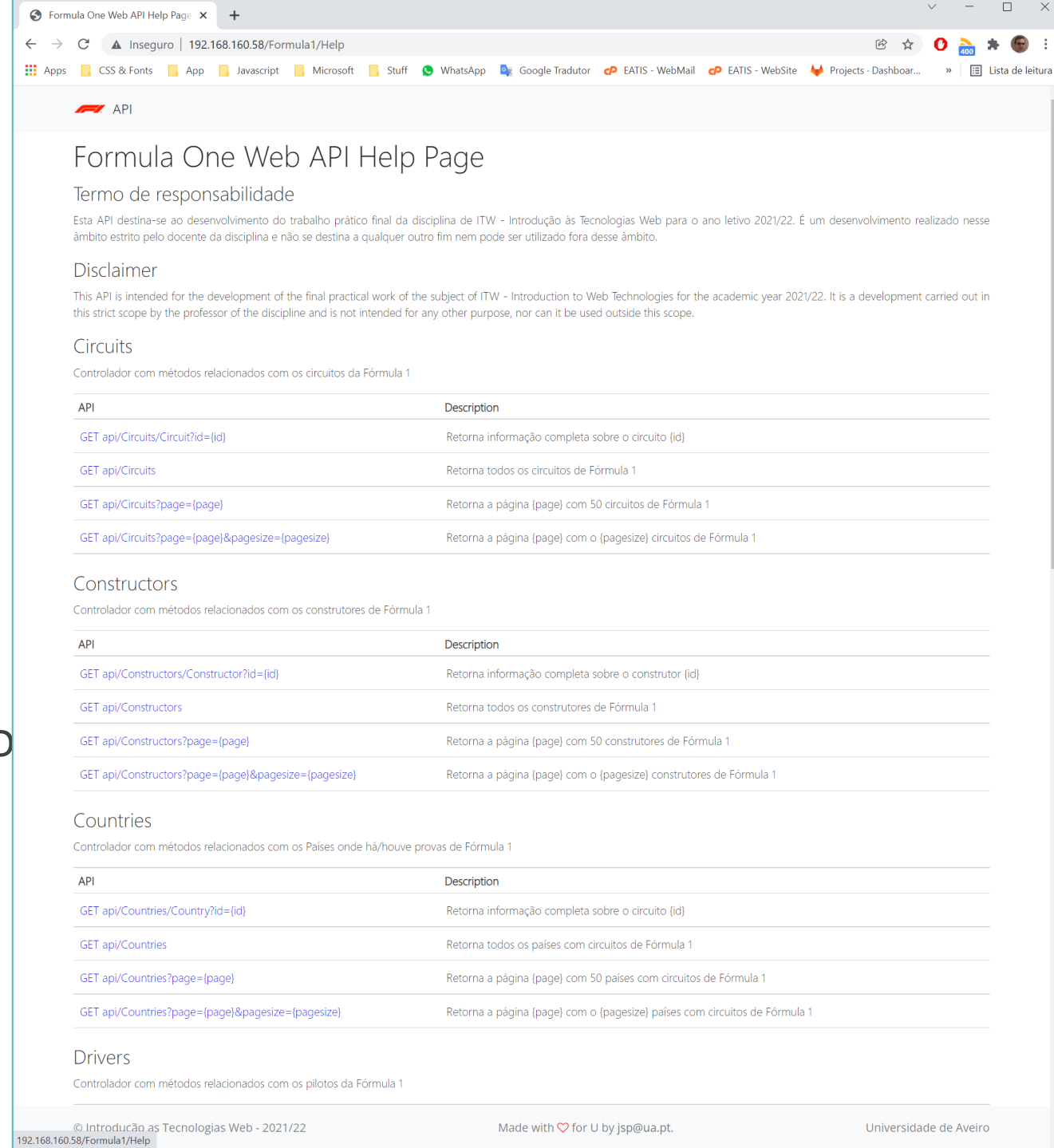
# Documentação técnica

<http://192.168.160.58/Formula1/Help>

34 métodos distintos

Material de testes  
disponibilizado no e-Learning

Aceito pedidos para desenvolvimento  
de novas funcionalidades.  
[Serão públicos e ficarão disponíveis para todos]



The screenshot shows a web browser window with the address bar displaying "192.168.160.58/Formula1/Help". The page title is "Formula One Web API Help Page". The content includes a "Termo de responsabilidade" (Disclaimer) section, a "Circuits" section with a table of API endpoints, a "Constructors" section with a table of API endpoints, a "Countries" section with a table of API endpoints, and a "Drivers" section. The browser's address bar shows the URL "192.168.160.58/Formula1/Help". The browser's tabs show "Formula One Web API Help Page". The browser's bookmarks bar shows "Apps", "CSS & Fonts", "App", "Javascript", "Microsoft", "Stuff", "WhatsApp", "Google Tradutor", "EATIS - WebMail", "EATIS - WebSite", "Projects - Dashboar...", and "Lista de leitura".

## Formula One Web API Help Page

Termo de responsabilidade

Esta API destina-se ao desenvolvimento do trabalho prático final da disciplina de ITW - Introdução às Tecnologias Web para o ano letivo 2021/22. É um desenvolvimento realizado nesse âmbito estrito pelo docente da disciplina e não se destina a qualquer outro fim nem pode ser utilizado fora desse âmbito.

### Disclaimer

This API is intended for the development of the final practical work of the subject of ITW - Introduction to Web Technologies for the academic year 2021/22. It is a development carried out in this strict scope by the professor of the discipline and is not intended for any other purpose, nor can it be used outside this scope.

### Circuits

Controlador com métodos relacionados com os circuitos da Fórmula 1

API	Description
<a href="#">GET api/Circuits/Circuit?id={id}</a>	Retorna informação completa sobre o circuito (id)
<a href="#">GET api/Circuits</a>	Retorna todos os circuitos de Fórmula 1
<a href="#">GET api/Circuits?page={page}</a>	Retorna a página (page) com 50 circuitos de Fórmula 1
<a href="#">GET api/Circuits?page={page}&amp;pagesize={pagesize}</a>	Retorna a página (page) com o (pagesize) circuitos de Fórmula 1

### Constructors

Controlador com métodos relacionados com os construtores de Fórmula 1

API	Description
<a href="#">GET api/Constructors/Constructor?id={id}</a>	Retorna informação completa sobre o construtor (id)
<a href="#">GET api/Constructors</a>	Retorna todos os construtores de Fórmula 1
<a href="#">GET api/Constructors?page={page}</a>	Retorna a página (page) com 50 construtores de Fórmula 1
<a href="#">GET api/Constructors?page={page}&amp;pagesize={pagesize}</a>	Retorna a página (page) com o (pagesize) construtores de Fórmula 1

### Countries

Controlador com métodos relacionados com os Países onde há/houve provas de Fórmula 1

API	Description
<a href="#">GET api/Countries/Country?id={id}</a>	Retorna informação completa sobre o circuito (id)
<a href="#">GET api/Countries</a>	Retorna todos os países com circuitos de Fórmula 1
<a href="#">GET api/Countries?page={page}</a>	Retorna a página (page) com 50 países com circuitos de Fórmula 1
<a href="#">GET api/Countries?page={page}&amp;pagesize={pagesize}</a>	Retorna a página (page) com o (pagesize) países com circuitos de Fórmula 1

### Drivers

Controlador com métodos relacionados com os pilotos da Fórmula 1

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# Um exemplo...

[<http://192.168.160.58/Formula1/api/Drivers?page=1&pagesize=20>]

```
{
  "CurrentPage": 1,
  "HasPrevious": false,
  "HasNext": true,
  "List": [
    {
      "DriverId": 750,
      "Name": "Adolf Brudes",
      "Nationality": "German"
    },
    {
      "DriverId": 698,
      "Name": "Adolfo Cruz",
      "Nationality": "Argentine"
    },
    {
      "DriverId": 167,
      "Name": "Adrián Campos",
      "Nationality": "Spanish"
    },
    {
      "DriverId": 16,
      "Name": "Adrian Sutil",
      "Nationality": "German"
    },
    {
      "DriverId": 88,
      "Name": "Aguri Suzuki",
      "Nationality": "Japanese"
    },
    {
      "DriverId": 538,
      "Name": "Al Herman",
      "Nationality": "American"
    },
    {
      "DriverId": 558,
      "Name": "Al Keller",
      "Nationality": "American"
    },
    {
      "DriverId": 371,
      "Name": "Al Pease",
      "Nationality": "Canadian"
    },
    {
      "DriverId": 550,
      "Name": "Alain de Changy",
      "Nationality": "Belgian"
    },
    {
      "DriverId": 117,
      "Name": "Alain Prost",
      "Nationality": "French"
    },
    {
      "DriverId": 689,
      "Name": "Alan Brown",
      "Nationality": "British"
    },
    {
      "DriverId": 178,
      "Name": "Alan Jones",
      "Nationality": "Australian"
    },
    {
      "DriverId": 390,
      "Name": "Alan Rees",
      "Nationality": "British"
    },
    {
      "DriverId": 421,
      "Name": "Alan Rollinson",
      "Nationality": "British"
    },
    {
      "DriverId": 502,
      "Name": "Alan Stacey",
      "Nationality": "British"
    },
    {
      "DriverId": 719,
      "Name": "Albert Scherrer",
      "Nationality": "Swiss"
    },
    {
      "DriverId": 647,
      "Name": "Alberto Ascari",
      "Nationality": "Italian"
    },
    {
      "DriverId": 244,
      "Name": "Alberto Colombo",
      "Nationality": "Italian"
    },
    {
      "DriverId": 761,
      "Name": "Alberto Crespo",
      "Nationality": "Argentine"
    },
    {
      "DriverId": 497,
      "Name": "Alberto Rodriguez Larreta",
      "Nationality": "Argentine"
    }
  ],
  "PageCount": 43,
  "PageSize": 20,
  "Total": 853
}
```



ITW 2021/22 - Drivers List

localhost:61104/Formula1/drivers.html

Apps CSS & Fonts App Javascript Microsoft Stuff WhatsApp Google Tradutor » Lista de leitura

F1Web Drivers Constructors

## Drivers List

Page: 1 of 43  
Drivers: 1-20 of 853

1 2 3 4 5 6 7 8 9 → ←

Id	Name	Nationality		
750	Adolf Brudes	German		
698	Adolfo Cruz	Argentine		
167	Adrián Campos	Spanish		
16	Adrian Sutil	German		
88	Aguri Suzuki	Japanese		
538	Al Herman	American		
558	Al Keller	American		
371	Al Pease	Canadian		
550	Alain de Changy	Belgian		
117	Alain Prost	French		
689	Alan Brown	British		
178	Alan Jones	Australian		
390	Alan Rees	British		
421	Alan Rollinson	British		
502	Alan Stacey	British		
719	Albert Scherrer	Swiss		
647	Alberto Ascari	Italian		
244	Alberto Colombo	Italian		

14/12/2021  
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```

<table class="table table-striped table-sm small">
  <thead class="bg-dark text-light">
    <tr>
      <th scope="col">Id</th>
      <th scope="col">Name</th>
      <th scope="col">Nationality</th>
      <th scope="col" class="text-right"></th>
    </tr>
  </thead>
  <tbody data-bind="foreach: records">
    <tr>
      <td class="align-middle" data-bind="text:DriverId"></td>
      <td class="align-middle" data-bind="text:Name"></td>
      <td class="align-middle" data-bind="text:Nationality"></td>
      <td class="text-end">
        <a class="btn btn-default btn-light btn-sm"
          data-bind="attr: { href: './driverDetails.html?id=' + DriverId }">
          <i class="fa fa-eye" title="Selecione para ver detalhes"></i></a>
        <button class="btn btn-default btn-sm"><i class="fa fa-heart-o"
          data-bind="attr : { 'id': 'favourite_' + DriverId }"
          title="Selecione para adicionar aos favoritos"></i></button>
      </td>
    </tr>
  </tbody>
</table>

```

# Um exemplo ...

[<http://192.168.160.58/Formula1/api/Drivers/Driver?id=1>]

```
{"DriverId":1,"DriverRef":"hamilton","Number":null,"Code":null,"Name":"Lewis Hamilton","Dob":"0001-01-01T00:00:00","Nationality":"British","Url":"http://en.wikipedia.org/wiki/Lewis_Hamilton","ImageUrl":"https://www.formula1.com/content/dam/fom-website/drivers/L/LEWHAM01_Lewis_Hamilton/lewham01.png","Races":[{"RaceId":36,"CircuitName":"Albert Park Grand Prix Circuit","Year":2007,"Name":"Australian Grand Prix"},
```

...

```
{"RaceId":1054,"CircuitName":"Autódromo Internacional do Algarve","Year":2021,"Name":"Portuguese Grand Prix"}, {"RaceId":1055,"CircuitName":"Circuit de Barcelona-Catalunya","Year":2021,"Name":"Spanish Grand Prix"}, {"RaceId":1058,"CircuitName":"Red Bull Ring","Year":2021,"Name":"Styrian Grand Prix"}]}
```

F1Web Drivers Constructors

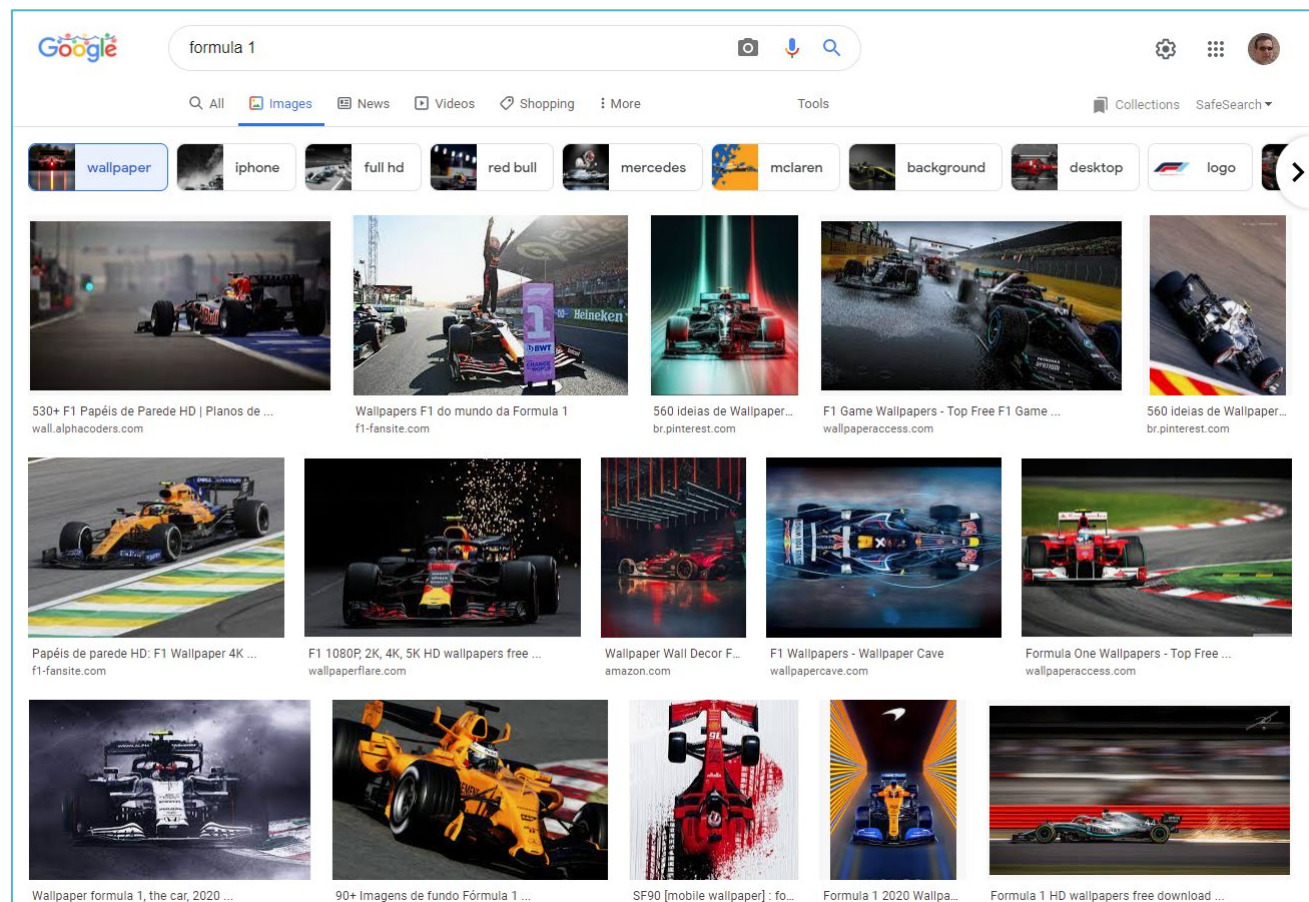
## Lewis Hamilton [1]

Driver Id	1
Nickname	hamilton
Image	 [https://www.formula1.com/content/dam/fom-website/drivers/L/LEWHAM01_Lewis_Hamilton/lewham01.png]
Name	Lewis Hamilton
Nationality	British
Url	[http://en.wikipedia.org/wiki/Lewis_Hamilton]

### Races [275]

Australian Grand Prix (2007) (36)	Bahrain Grand Prix (2007) (38)	Belgian Grand Prix (2007) (49)	Brazilian Grand Prix (2007) (52)	British Grand Prix (2007) (44)	Canadian Grand Prix (2007) (41)
Chinese Grand Prix (2007) (51)	European Grand Prix (2007) (45)	French Grand Prix (2007) (43)	Hungarian Grand Prix (2007) (46)	Italian Grand Prix (2007) (48)	Japanese Grand Prix (2007) (50)
Malaysian Grand Prix (2007) (37)	Monaco Grand Prix (2007) (40)	Spanish Grand Prix (2007) (39)	Turkish Grand Prix (2007) (47)	United States Grand Prix (2007) (42)	Australian Grand Prix (2008) (18)
Bahrain Grand Prix (2008) (20)	Belgian Grand Prix (2008) (30)	Brazilian Grand Prix (2008) (35)	British Grand Prix (2008) (26)	Canadian Grand Prix (2008) (24)	Chinese Grand Prix (2008) (34)
European Grand Prix (2008) (29)	French Grand Prix (2008) (25)	German Grand Prix (2008) (27)	Hungarian Grand Prix (2008) (28)	Italian Grand Prix (2008) (31)	Japanese Grand Prix (2008) (33)
Malaysian Grand Prix (2008) (19)	Monaco Grand Prix (2008) (23)	Singapore Grand Prix (2008) (32)	Spanish Grand Prix (2008) (21)	Turkish Grand Prix (2008) (22)	Abu Dhabi Grand Prix (2009) (17)
Australian Grand Prix (2009) (11)	Bahrain Grand Prix (2009) (4)	Belgian Grand Prix (2009) (12)	Brazilian Grand Prix (2009) (16)	British Grand Prix (2009) (8)	Chinese Grand Prix (2009) (3)
European Grand Prix (2009) (11)	German Grand Prix (2009) (9)	Hungarian Grand Prix (2009) (10)	Italian Grand Prix (2009) (13)	Japanese Grand Prix (2009) (15)	Malaysian Grand Prix (2009) (2)
Monaco Grand Prix (2009) (6)	Singapore Grand Prix (2009) (14)	Spanish Grand Prix (2009) (5)	Turkish Grand Prix (2009) (7)	Abu Dhabi Grand Prix (2010) (355)	Australian Grand Prix (2010) (338)
Bahrain Grand Prix (2010) (337)	Belgian Grand Prix (2010) (349)	Brazilian Grand Prix (2010) (354)	British Grand Prix (2010) (346)	Canadian Grand Prix (2010) (344)	Chinese Grand Prix (2010) (340)
European Grand Prix (2010) (345)	German Grand Prix (2010) (347)	Hungarian Grand Prix (2010) (348)	Italian Grand Prix (2010) (350)	Japanese Grand Prix (2010) (352)	Korean Grand Prix (2010) (353)
Malaysian Grand Prix (2010) (339)	Monaco Grand Prix (2010) (342)	Singapore Grand Prix (2010) (351)	Spanish Grand Prix (2010) (341)	Turkish Grand Prix (2010) (343)	Abu Dhabi Grand Prix (2011) (858)
Australian Grand Prix (2011) (841)	Belgian Grand Prix (2011) (852)	Brazilian Grand Prix (2011) (859)	British Grand Prix (2011) (849)	Canadian Grand Prix (2011) (847)	Chinese Grand Prix (2011) (843)
European Grand Prix (2011) (848)	German Grand Prix (2011) (850)	Hungarian Grand Prix (2011) (851)	Indian Grand Prix (2011) (857)	Italian Grand Prix (2011) (853)	Japanese Grand Prix (2011) (855)

Será fortemente valorizada a criatividade e a imaginação.



Boa sorte e bom trabalho! Mãos à obra.