

Part 1

The purpose of my website is to show the final results/standings of the 2022 F1 Season for both the Drivers and the Constructors. The Driver's Standings and Constructor's Standings pages both show the final results as well as some additional information in the dropdown menu. The Fun Visualizations page shows the cumulative points total of each driver as the season progresses. It is interesting and engaging for newcomers of F1 to learn a little bit about how the 2022 season went and to learn a little bit about each driver and their teams.

In terms of resizable/scalability, both the Driver's and Constructor's standing pages should work at both 1200px and 460px widths.

Part 2

NOTE: 1. Ergast API access seems to be blocked when opening it through GitHub (was loaded over HTTPS, but requested an insecure XMLHttpRequest endpoint) but not locally. I've gotten around this by in both clicking the lock icon next to the URL → "site settings" → "insecure content" → "allow". 2. Ergast API pull requests are sometimes blocked for me. The Constructor's standings page is coded manually and is basically the same as Driver's Standings which uses data from the API.

- On the Landing Page, users can click through the image carousel or let it play since it is on a timer.
- Driver's Standings and Constructor's standings, the user can click on the horizontal tabs to reveal more information.
- The user can also click the hamburger menu in the upper left to reveal other pages. To exit the hamburger menu, the user can click on the hamburger menu or the "x".
- On all pages, the user can click on the F1 Logo at the top of the page to return to the main page(Landing Page).
- On web, the cursor should change to a mouse upon hovering over the tabs, the hamburger menu as well as the F1 Logo to suggest interaction.
- For the Fun Visualizations page, I could not get the visualization to update its size dynamically. However, after reloading the page, the size of the visualization should update accordingly.

Part 3

Ergast.com API

- I needed information on the 2022 F1 Driver's points, wins etc. Ergast is a relatively comprehensive source of Formula 1 data which had all of this information.

- Ergast categorizes it's data so I sent an API request for the data I needed. I created a HTML template of the data I wanted to display and filled it with the Ergast data by using a constructor.
- This API adds the detail that a user needs to understand the Driver and Constructor standings for the 2022 F1 season.

D3

- I wanted a way to visualize each driver's points tally throughout the entire 2022 season. D3 was a good way of taking the points data and representing it visually.
- I initially wanted to use data from Ergast and have D3 read it, however, I encountered too many issues with that. Instead, I manually created a CSV that logged the cumulative points total of each driver after each race. Then I created a multi-line graph using D3.
- D3 helps the user to see the points disparity between the drivers and just how dominant of a season Verstappen had. It is also another way of understanding the driver's points standings information from the homepage.

Part 4

In the first few sketches, I was focused on ideas that I would actually want to develop or ideas that I would have some fun developing. So, I was pretty pleased that much of the feedback I got seemed to favor the F1 idea.

From there, the higher fidelity prototypes as well as the initial rounds of user testing focused on features that I would want to include. Core features like Driver's and Constructor's standings have not changed from this stage. I wanted to include a visualization early on as well, however, I needed to change the type of visualization because the data that I initially wanted to use was not readily available.


From here, most of the coding was about refining the visual design of the page; the feature set was largely set in stone. I did, however, add a landing page as a means of introducing people to the website and generally explaining the content they will see.

Part 5

It was my first time using an API as well as D3 so, I generally encountered a lot of challenges implementing what I wanted to do. Ergast had a tendency to not work - often blocking me from getting pull requests which was really frustrating. With D3, I would find examples online or follow video tutorials, however, I think the syntax wasn't compatible with the current version of D3 so large swaths of code were unusable.

Screenshots of each page

Landing Page


 **WAVE**
web accessibility evaluation tool

powered by
[WebAIM](#)


Address: <https://bvwel3.github.io/hwv3-hw-pul/Final-F>

Styles: OFF ☐ ON ☒


Summary

 0


Errors

 0


Contrast Errors

 2


Alerts

 7

Features

 0

Structural Elements

 2

ARIA

[View details](#)

Congratulations! No errors were detected! Manual testing is still necessary to ensure compliance and optimal accessibility.

×

☰




Driver's Championship



Constructor's Championship


Fun Visualizations

Return to Landing Page

The following apply to the entire page:


  



Max Verstappen winning the Abu Dhabi GP

Welcome to my Final Project for PUI. In this website, I'll be showing some content about the F1 2022 season. You'll find information about where driver and constructor stood at the end of the season. As well as a visualization on how each driver performed as the season progressed.
Hope you enjoy.

 **WAVE**
web accessibility evaluation tool

powered by
[WebAIM](#)

Address: <https://bvwel3.github.io/hwv3-hw-pul/Final-F>

Styles: OFF ☐ ON ☒

Details

☒ 2 Alerts

☒ 1 X No heading structure

☒ 1 X No page regions

☒ 7 Features

☒ 5 X Alternative text

☒ 1 X Linked image with alternative text

☒ 1 X Language

☒ 2 ARIA

☒ 2 X ARIA hidden

If an icon does not appear within the page, turn off Styles above to view it.

×

☰




Driver's Championship



Constructor's Championship


Fun Visualizations

Return to Landing Page

The following apply to the entire page:



All drivers on the F1 2022 grid

Welcome to my Final Project for PUI. In this website, I'll be showing some content about the F1 2022 season. You'll find information about where driver and constructor stood at the end of the season. As well as a visualization on how each driver performed as the season progressed.
Hope you enjoy.

Driver's Championship

*I don't understand why there are contrast errors when the code is virtually identical to the landing page. It even passes the contrast test on WAVE as well...

WAVE powered by WebAIM web accessibility evaluation tool

Address: <https://bweil3.github.io/hw3-hw-pul/Final-F>




Styles: OFF ☐ ON ☒

Summary

0 Errors	5 Contrast Errors
2 Alerts	2 Features
1 Structural Elements	0 ARIA

[View details](#)

The following apply to the entire page:

-   

[Driver's Championship](#)

F1 2022 Driver's Championship Standings

Position	Name	Wins	Points
----------	------	------	--------

[Constructor's Championship](#)

[Fun Visualizations](#)

[Return to Landing Page](#)

WAVE powered by WebAIM web accessibility evaluation tool

Address: <https://bweil3.github.io/hw3-hw-pul/Final-F>




Styles: OFF ☐ ON ☒

Details

<input checked="" type="checkbox"/> 5 Contrast Errors 5 X Very low contrast	<input checked="" type="checkbox"/> 2 Alerts 1 X No page regions 1 X Missing first level heading	<input checked="" type="checkbox"/> 2 Features 1 X Linked image with alternative text 1 X Language	<input checked="" type="checkbox"/> 1 Structural Elements 1 X Heading level 2
--	--	--	--

If an icon does not appear within the page, turn off Styles above to view it.

The following apply to the entire page:

-   

[Driver's Championship](#)

F1 2022 Driver's Championship Standings

Position	Name	Wins	Points
----------	------	------	--------

[Constructor's Championship](#)

[Fun Visualizations](#)

[Return to Landing Page](#)

W

WAVE

web accessibility evaluation tool

powered by WebAIM

Address: <https://bxwei3.github.io/tbwei3-hw-pul/Final-F>

Styles: OFF ON

Contrast

Summary

Details

Reference

Structure

Contrast

Click a Contrast icon below or within the web page to view details.

Foreground Color

#FFFFFF

Lightness

Background Color

#4A1010

Lightness

Contrast Ratio: 15.29:1

Text Size:

Normal Text: Sample

AA: Pass

AAA: Pass

Large Text: Sample

AA: Pass

AAA: Pass

Desaturate page

Contrast is not tested when background gradients, transparency, etc. are present. A CSS background color that provides sufficient contrast must be defined when a background image is in place. This provides fall-back contrast in case images or CSS do not display.

Driver's Championship

Constructor's Championship

Fun Visualizations

Return to Landing Page

h2

F1

Positi

Constructor's Championship

W

WAVE

web accessibility evaluation tool

powered by WebAIM

Address: <https://bxwei3.github.io/tbwei3-hw-pul/Final-F>

Styles: OFF ON

Summary

Summary

Details

Reference

Structure

Contrast

0

Errors

5

Contrast Errors

12

Alerts

22

Features

1

Structural Elements

0

ARIA

View details

Driver's Championship

Constructor's Championship

Fun Visualizations

Return to Landing Page

The following apply to the entire page:

ent

h1

main logo

F1 2022 Constructors's Championship Standings

Position	Name	Wins	Points
1	Red Bull	16	759
2	Ferrari	4	554
3	Mercedes	1	515

powered by [WebAIM](#)

Address: <https://bweil3.github.io/bweil3-hw-pui/Final-F>

Styles: OFF ☒ ON

Details

Summary Details Reference Structure Contrast

5 Contrast Errors

5 X Very low contrast

12 Alerts

1 X No page regions

1 X Missing first level heading

10 X Layout table

22 Features

20 X Alternative text

1 X Linked image with alternative text

The following apply to the entire page:

Driver's Championship

Constructor's Championship

Fun Visualizations

Return to Landing Page

F1 2022 Constructors's Championship Standings

Position	Name	Wins	Points
1	Red Bull	16	789
2	Ferrari	4	554
3	Mercedes	1	515
4	Alpine	0	173

Fun Visualizations

powered by [WebAIM](#)

Address: <https://bweil3.github.io/bweil3-hw-pui/Final-F>

Styles: OFF ☒ ON

Summary

Summary Details Reference Structure Contrast

0 Errors

0 Contrast Errors

2 Alerts

2 Features

1 Structural Elements

0 ARIA

[View details](#)

Congratulations! No errors were detected! Manual testing is still necessary to ensure compliance and optimal accessibility.

The following apply to the entire page:

Driver's Championship

Constructor's Championship

Fun Visualizations

Return to Landing Page

Fun Visualizations

Driver Points Total

Race Name

VER, LEC, PER, RUS, SAI, HAM

Styles: OFF ON

Details

Summary Details Reference Structure Contrast

2 Alerts

- 1 X No page regions
- 1 X Missing first level heading

2 Features

- 1 X Linked image with alternative text
- 1 X Language

1 Structural Elements

- 1 X Heading level 2

If an icon does not appear within the page, turn off Styles above to view it.

The following apply to the entire page:



Driver's
Championship

Constructor's
Championship

Fun
Visualizations

Return to
Landing Page

Fun Visualizations

