

## 05430 FP4

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Website link: <https://bedwars-benchmark.vercel.app/>

Screen sizes: Regular laptop screen and mobile screen

Accessibility: See WAVE screenshots in Appendix

**NOTE:** Due to my website relying on the free-tier of public APIs with strict rate limits, please don't search too fast or repeatedly search the same names.

### Part 1:

Bedwars Benchmark is an advanced statistics comparison tool for the game Bedwars from the Minecraft server Hypixel. The tool streamlines the process of comparing Bedwars statistics between two to four players, eliminating the need to open multiple tabs and switch between them to compare players. The website displays the relevant statistics that competitive players are looking for in an orderly fashion and offers new insights into how the players' statistics relate to each other. It also saves the visitor's recent search history, minimizing the need for visitors to remember who they've searched before. The target audience are the gamers who play Minecraft Bedwars and are more competitive in nature or are just wanting to settle the debate of who's better. Current Bedwars statistics comparators often display information in an unorganized overwhelming way and only have the capacity to search 1 player at a time.

Bedwars Benchmark's clean and simple user interface allows the visitor to directly compare players on one site and filter game modes, reducing cognitive load on the visitor. It engages the audience through its green and black theme, a popular color scheme among gamers, and through using the Minecraft font for headings. Website wording was also chosen to hint at an edge of competitiveness, which keeps the content interesting. Visitors can use the website either on their computer while gaming at home or on their phone while on the road.

### Part 2:

homepage:

- point and click
  - click on a "Username" input textbox
- text input
  - type in a Minecraft username (username examples are "Technoblade", "ItsMooseCraft", "TBNRfrags", "UnspeakableGame", "Lioness\_Rising", "WarOG")
- point and click
  - click on the + button to add another username input textbox on the root page
- point and click
  - if there are more than 2 textboxes, click on any of the red X buttons to remove the associated textbox
- point and click
  - click on the compare button to move to the comparison page
- point and click
  - click on "clear history" to clear the recent search history

comparison page:

- scroll down
  - scroll down on the page to view the big comparison table and individual player tabs
- scroll left
  - if on mobile layout, scroll left to view the rest of the comparison table
- point and click
  - click on the dropdown to select which game mode you want to compare stats for
- point and click
  - towards the bottom of the page, click on different player names / avatars to see an individual view of the player

### Part 3:

- Name of tool: Hypixel's Public API
- Why I chose to use it: I chose this API because it is free with limitations. It offers all the data I need and is the official API of the game Bedwars as it's made by the same company. It has enough documentation that I was able to figure it out.
- How did I use it: I used node-fetch to execute a GET request from the API to get all the information for a player. I then mapped the data response to my own object and used that throughout the tool.
- What does it add: It adds the real-time data and the core functionality of the webtool. This API provides the data behind the entire tool, and without it, the tool would be pointless.

### Part 4:

A lot of thought went into how the user would input the player usernames. My first prototype had one big search bar and delimited usernames with a comma and my second prototype allowed the user to search just 1 or multiple players if they added more text boxes vertically. People liked the second prototype version better, but while I was implementing it I wanted to foster a more competitive feel to it so I structured it horizontally and put "vs." in between each input. The original theme was white and blue, but during implementation I felt like this didn't give off a very "Minecraft-y" or competitive feel, so I switched it to dark mode of green and black. I also found the Minecraft font, which really added to the Minecraft feel. For the tables, I found that highlighting the entire table cell green was a bit much, so I instead just made the text green.

### Part 5:

I had a hard time with API rate limits and it still limits my project a bit. Once a user searches a username, they can't search it for a bit because of it being a repeated request. The way around this is caching the earlier results, but I feel like that is very outside the scope of this project. I also had a hard time coding up the filterable comparison table with the dynamic mapping of data and structuring it in a way that is understandable.

## Appendix:

Home page:

The image shows two side-by-side screenshots of the WAVE web accessibility evaluation tool interface. The left screenshot is the 'Summary' view, and the right screenshot is the 'Details' view.

**Summary View (Left):**


- Header: WAVE logo, powered by WebAIM, web accessibility evaluation tool.
- Styles: OFF (toggle switch) ON.
- Summary Card:
  - Errors: 0 (red X icon)
  - Contrast Errors: 0 (red circle icon)
  - Alerts: 2 (yellow triangle icon)
  - Features: 4 (green checkmark icon)
  - Structural Elements: 8 (blue tree icon)
  - ARIA: 2 (purple cube icon)
- Buttons: View details >
- Message: Congratulations! No errors were detected! Manual testing is still necessary to ensure compliance and

**Details View (Right):**

- Header: WAVE logo, powered by WebAIM, web accessibility evaluation tool.
- Styles: OFF (toggle switch) ON.
- Details Card:
  - 2 Alerts
    - ☐ 1 X Skipped heading level
    - ☐ 1 X Noscript element
  - 4 Features
    - ☐ 1 X Linked image with alternative text
    - ☐ 2 X Form label
    - ☐ 1 X Language
  - 8 Structural Elements
    - ☐ 1 X Heading level 1
    - ☐ 1 X Heading level 2
    - ☐ 1 X Heading level 3
    - ☐ 1 X Heading level 5
    - ☐ 1 X Unordered list
    - ☐ 1 X Navigation
    - ☐ 1 X Main content
    - ☐ 1 X Footer
  - 2 ARIA
    - ☐ 1 X ARIA label
    - ☒ 1 X ARIA alert or live region

Compare page:


**NOTE:** Could not find where the contrast error was. Professor could also not find it and said it was okay.


 **WAVE**  
web accessibility evaluation tool


powered by [WebAIM](#)


Styles: OFF ☐ ON ☒


### Summary


**Summary**







**Details**


**Reference**


**Order**

**Structure**

**Contrast**

 <b>0</b> Errors	 <b>1</b> Contrast Errors
 <b>6</b> Alerts	 <b>9</b> Features
 <b>29</b> Structural Elements	 <b>1</b> ARIA


 [View details >](#)


 **WAVE**  
web accessibility evaluation tool


powered by [WebAIM](#)


Styles: OFF ☐ ON ☒


### Details


**Summary**


**Details**

**Reference**



**Order**


**Structure**

**Contrast**

☒ **1 Contrast Errors**

1 X Very low contrast


 

☒ **6 Alerts**

☐ 1 X A nearby image has the same alternative text

☐ 3 X Skipped heading level


☐ 2 X Noscript element

☒ **9 Features**

☐ 7 X Alternative text

☐ 1 X Form label

☐ 1 X Language

☒ **29 Structural Elements**

☐ 3 X Data table

☐ 13 X Table header cell

☐ 2 X Heading level 1


☐ 2 X Heading level 3

☐ 2 X Heading level 4

☐ 3 X Heading level 5

☐ 3 X Unordered list

☐ 1 X Footer

☒ **1 ARIA**

☐ 1 X ARIA alert or live region