Baruch College

CIS 3120 – Project #2

Group 7

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CIS 3120

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The goal of this project was to work collaboratively as a team to gather and analyze data to determine whether swimmers or volleyball players are taller on average. We collected athlete height data from multiple schools and compared results between the two sports to identify patterns and differences.

Ruben collected structured swimming datasets through an API and cleaned them using Pandas. Yuning scraped height data from various schools’ swimming and volleyball rosters and organized it in Pandas for merging. I calculated the average heights for each team and for each sport overall using Pandas, then created bar graphs in Matplotlib to visually compare the results.

We started by breaking the project into clear tasks, so everyone knew their role. Ruben worked on API data collection, making sure the swimming datasets were consistent and usable. Yuning scraped athlete heights from volleyball and swimming rosters across many schools, formatting everything so it could be merged with the API data. Once all the data was in place, I calculated average heights for men’s and women’s teams in each sport, then also combined them to get overall swimmer and volleyball player averages. Finally, I made a bar graph in Matplotlib to visually display the differences.

The findings compared the average heights of male and female swimmers and volleyball players. Men’s volleyball players had the highest average at about 71.98 inches, while women’s swimmers had the lowest at about 65.75 inches. Women’s volleyball players averaged 68.31 inches, and men’s swimmers averaged 71.23 inches. When combining both genders, volleyball players averaged 70.45 inches, compared to swimmers at 68.89 inches. This shows that volleyball players are taller on average in this sample.

The findings are representative of the data because the sample includes athletes from many different schools. This broad scope reduces bias and makes the results more reliable. Although volleyball players were found to be taller on average, the difference between the two sports was small. This suggests that while height may be more advantageous in volleyball, swimmers in this sample were not far behind in average height.

This project successfully compared the average heights of swimmers and volleyball players using data from multiple schools. Volleyball players were found to be slightly taller on average, but the margin was small. The results were consistent across the sample, making them representative of both sports. While height may offer some advantage in volleyball, swimmers in this dataset were not far behind in stature.

Average Heights:

* Men’s Swimming: 71.23 inches
* Women’s Swimming: 65.75 inches
* Men’s Volleyball: 71.98 inches
* Women’s Volleyball: 68.31 inches

Overall Averages:

* All Swimmers: 68.89 inches
* All Volleyball Players: 70.45 inchesA graph of a group of people

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