Report Findings

One major finding is the data being heavily skewed by most representations being done by just second and third years. We see distribution data being biased towards STEM while many students came from three major universities: Ball State University, Butler University, Indiana State University. I would suggest inputting both freshmen and seniors into the mix to get a better representation of the dataset. One could deduce that those in STEM could potentially think differently when it comes to guessing orders so a wider representation of other majors could potentially make our dataset stronger.

<u>Discussing ethical implications, business outcome implications, and technical implications of these factors.</u>

Ethical implications – one would need to ensure that consent forms were sent to involved parties in this analysis either through a google doc or a pdf consent form. This is important as it will allow them to be aware of their data being collected and used for research purposes. Transparency and accountability should follow ethical procedures as this will essentially get participants to see the reliability in this study as well as upholding the integrity of both parties.

We need to ensure the protection of the data stored by ensuring administrators who get access to these data and controls, we get to establish the appropriate security measures used in this data storage. In addressing data biases, looking at how heavily skewed the data is, we could say those who built this data came from certain universities and maybe gave preference to these universities, hence, identifying and mitigating these biases would at least ensure fairness to a certain extent, at least enough to have an accurate representation of our data.

<u>Business Outcome Implications</u> – incorrect data insights and data collection would lead to an inefficient and ineffective functioning of the FoodX app which could potentially lead to a loss of sales as orders are not efficiently processed. Ensured privacy and safety through data storage would potentially lead to increased customer satisfaction, loyalty, and retention. Increased engagement from customers would increase customer engagement with our application. By ensuring a significant reduction in data bias, there will be a significant reduction in customer complaints and potential lawsuits while also mitigating legal risks.

<u>Technical Implications</u> – there is usually a strong tendency for any programmer who collects this data to be biased in their approach. By addressing these biases, this helps with more accuracy and reliability of our predictive models. We can improve the user experience for participants who use the Food X app which helps with better resource utilization and effective management.

Considerations

The predictions corelate to features such as year, major, university, and time. The predicted values have unique classes from 0 to 9 which shows the possibility of guesses coming from any of these predictions. Going forward, we would need to analyze what each class corresponds to based on our numerical prediction.