Final Project Proposal: Creating an Interactive Spreadsheet Database Based on User Input

**Objective:** The objective of my project is to create an interactive spreadsheet where a user can select a variable based on a dataset, from a dropdown menu, giving them summarized data based on that selection. The dataset I will be creating this spreadsheet with is detailed data of US income in each of the 50 states. For example, from a dropdown menu a user could select any state, and this would provide them with statistics from that state (like median income).

**Deliverables:** This will consist of an interactive spreadsheet where there will be a dropdown menu where the user can select different variables. The first sheet in the spreadsheet will be the interactive part, and the second sheet will be the whole data set from which we are pulling information. This will require me to use formulas in the spreadsheet to make the interactive portion work for an actual user to operate. In regard to the visual aspect, I want to use appealing colors/labels and a design where it is straightforward to use.

**Resources:** For my dataset I pulled that from Kaggle.com which is a large data science community that allows users to find datasets they want to use. I also have started doing research to learn how to use Excel input formulas to get summarized data from the dataset. Additionally, I learned about Excel VBA, and potentially could use that to code and get more specific results.

**All links are listed below that I have used for my project:**

Group, G. O. R. (2018, April 16). *US household income statistics*. Kaggle. https://www.kaggle.com/datasets/goldenoakresearch/us-household-income-stats-geo-locations/

Zybooks. (n.d.). *Spreadsheet Basics*. https://learn.zybooks.com/zybook/GREATBAYCIS111Fall2023/chapter/5/section/2

Gupta, A. (2023, November 3). *Excel VBA: Power Tips to Revolutionize your data analysis*. Simplilearn.com. https://www.simplilearn.com/tutorials/excel-tutorial/excel-vba#what\_is\_vba

Microsoft. (n.d.). *Create a drop-down list*. Microsoft Support. https://support.microsoft.com/en-au/office/create-a-drop-down-list-7693307a-59ef-400a-b769-c5402dce407b