**Seth Russell**

*Problem: Quarantine Shopping/Elderly Shopping*

**Social Problem**

Understandably, the recent month and a half of quarantine has affected everyone in different ways. From universities and grade schools having to move to remote learning to finish out their respective semesters, to families needing to ration their shopping trips every week or other week. Therefore, I found it to be helpful to focus on this kind of issue that we are currently facing, and find a simpler solution to the current way families and specifically the elderly shop for their food, cleaning supplies, clothing, and miscellaneous items. The story of how I came up with this is because my grandmother cannot leave her house due to an immune disorder. My parents have to drive to her house with her groceries and it costs us more time and money to do so, and I feel as if it could be easier on the both of us.

**Vision**

As of right now, for instance, my family has a set order that we use every two weeks at Walmart and the local farm grocery store. While this system is pretty neat and decently well done, it lacks a form of delivery. My solution to this is to make a mostly universal program that takes the total number of people a family is shopping for, stores that to their name for future use, and calculates about how much a family of that size should need for each item input into the program by the customer. The details of what the program will do will be explained soon, but what this will be doing will be allowing a delivery driver selected by the program to pick up and deliver the items to the customers house, as to help keep them social distancing, or in the elderly’s case, allow them to shop from home if they cannot leave their place of residence.

**Goals**

*Safe:*

My first goal is to utilize an input and output file system to store the data for each user. This will be used for recurring orders as well as storing the name and number of the customer’s family. If an order is changed, the customer’s previous order saved will be overwritten to make space for a new one, unless they wish to change the name of their order. For now, I would just like to utilize this for grocery shopping, so just foods, drinks, alcohol, etc. The prices will be needed for this first, safe goal as to keep things as simple as possible. I will also try to implement a GUI if I have the time to, as to make the program feel user friendly.

*Stretch:*

My second, more self-learning goal would be to utilize multiple output tables for groceries, cleaning supplies, and clothing. These tables will hold the name of the product, the total of each product for the family, and the prices associated with each product. The prices will be a total from the total number of the product. At the bottom there will be a total, and this will be without taxes. Taxes can be implemented later on if I have enough time to implement them. Another part of this goal will be to utilize a driver selection system based upon the family’s location to which driver is available and closest to the family and store. This will be done by asking the family’s general location, which store they want to buy from, and if the driver is on duty.

**Map/Steps to Take**

* Start with file input and output: driver’s file, store location, and family orders and number
* Create table outputs and formatting
* Create arrays for storing the data input by customer
* Create input variables for customer item selection
* Work on creating a GUI for program
* Work to implement taxes based on state