individual\_summary.docx – summarize the work you did (1 page at least)

1. **What did you use from class to design and implement your work?**

We used two classes to hold up the types of events that were going to happen, there were 4 types of event in total, which are enter, order, and receive food and leave. And the event class is what controlled those 4 types of event. It also controls other functions that manipulated the groups in the queue and the class that calculated the time that they spent on the queue, the money that they spent, the time that they got their food and when they left.

We also used class to calculate the groups/ customer class, this class mostly contains name of the customers that entered the simulation and the time when they entered the simulation

2. **What concept(s) from class were made more?**

I needed to add in the average foodtime where a range of numbers would be added to the quetime of each customer and be divided by the total number of customers that came in to provide the average foodtime. Average money: I made a random value that would enter money into the event function, the money would then be added anytime the order event occurs, and the total amount of money is then divided by the amount of customers that came to get the average money. Among all the concepts of class that were made , the one that were made more was the event class methods .

3. **What did you need to learn outside of class?**

I needed to learn more about manipulating vectors through the use of Google , I wanted to make a fucntion that would calculate the statistics of the code like the average money spent, average quetime , average foodtime and the amount of people that came into the restaurant . In one go but instead I just put everything in the order function and the main fucntion.

**4. What surprised you most about this work?**

When we were doing the project my biggest concern was how are we going to calculate the time of that everything would take place, until Noah came up with the fucntion group.setStart(time)” that helped start the time of each customer when they entered the simulation , the project also helped me understand more things in file input and file output and over loading.

5. **What would you do differently?**

I do not think I would have any plans to do anything different, I feel as if the work that was done was good on its own at the moment. Although they would be future developments but at the moment and at this level of my knowledge. I do not have anything that I would have done differently

6. **What would you do in “version 2” of your project?**

In version two of this project I would like to try and simulate the coffee shop over long period of times probably months or a year and collect the data which comprise of the people that walked in, the amount of time they stayed over, their exact prices, the time that they each stayed on the queue and, then probably put it in a .csv file and make a graph of it