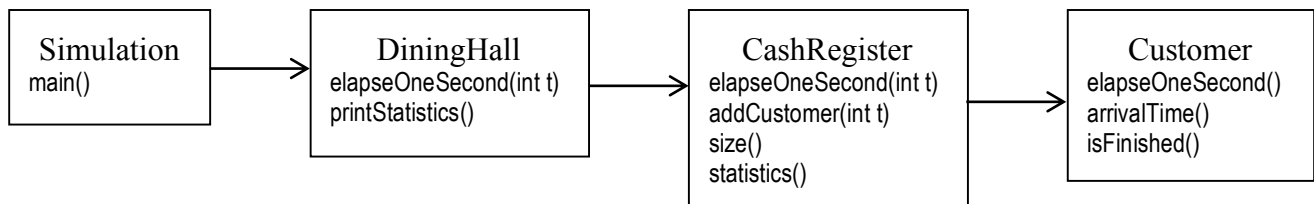


CSCI 3353 Object-Oriented Design

Solution to Homework Assignment 1

Here is my class diagram:



One design decision was whether *CashRegister* should mediate *Customer*, or whether customers should be accessible from *DiningHall*. I initially had the client class *DiningHall* create each new *Customer* object and send them to *CashRegister*, which makes a lot of sense when you think about how things work in real life. But I then noticed that the dining hall never uses the *Customer* objects it creates, which meant that the design would have lower coupling if *CashRegister* creates the *Customer* object.

Another design decision concerned the printing of statistics. My code has each cash register format its statistics and send the formatted string to the dining hall for printing. Another possibility is to have the dining hall request the statistics from each cash register, format them, and print them. The first way follows the Most Qualified Class rule more closely.