

REPORT

In this assignment, we are expected to write a simple pizza restaurant system and also we are expected to learn and get used to with object oriented programming, design patterns in java, reflections, inheritance, polymorphism, interface, arraylist, class structures and input output operations in java. In this assignment i started using interface and i implemented the method's of the interface to my toppings. So that when i call them and i can count all of the prices and names. Every class had its own overridden price and topping methods so that they are always updated at every constructor calls. Also they had 2 constructors. One is empty arguman and the other constructor is with object, when object comes to constructor i update the price and topping attributes with the object's attributes so that they are always updated. This way i can calculate the price of pizza and what pizza includes. This was basic of my decorating pattern. After that i have read the text files and stored them into their arraylist's. For example my customer class had name, surname, id, address, orderno, drink attributes. I have updated their default value with customer.txt and i have updated the other attributes while reading the input.txt. Also i have another class just to read files. The methods of that class return arraylist. After that i started to read my input file. If add customer comes i update my arraylist, if remove customer comes, i remove my customer and also i remove her/him order. When create order comes i update the given customer's order no with the given no so that i can reach and find whoever has that order. After that when add pizza arrives i used reflection to create new objects with the given toppings. I have three options. First is when one topping arrives second is when 2 toppings arrives and the third is when 3 toppings arrives. I check the number of toppings with the has next or next methods. My methods calculate the pizza's cost and toppings. And i update the order with the pizza so that i can reach it when i need it. When add drink part comes i just add the drink to that order and also calculate the cost again. I hold the order no because i need that value in paycheck part. When paycheck comes i find the order and i print the order with the

pizzas and drinks. When the list of customers comes i case sensitive sort my customer arraylist and i print that list with the id, name, surname, telephone no. This is how my program works and how classes interact with each other. Interface provides methods, classes provides its own attributes and methods. This is my decorator pattern, my interface and my classes. And this is my uml. (for my assignment i took pizza names like American topping names like pepper onion salami etc)

