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Assignment 2

1. In this Assignment, I have four classes—public class ALaCarte, public class Parser, public class HashMap<K, V>,and public class Database. public class ALaCarte (found in ALaCarte.java) is the driver of the program. The class asks the user to input the item name or description, the size of the item, and how many quantities the user would like. If user has a valid input, the program focuses on one service and the others are eliminated. However, if the item is not found based on the name/description, size, or quantity, all services are still eligible and no services are eliminated. public class Parser (found in Parser.java) includes two parsers—a parser for the config file and a parser for the csv files. The config file parser parses by comma and equal sign. The csv file parses by comma and space. public class HashMap<K, V> is my implementation of a hash map that I used in order to create a functioning program.

public class Database (found in Database.java) has two hashmaps that stores the information read from the file into keys and values. One hashmap stores the name of the product as the key and description, size, and price as the value. The other hashmap stores the name of the service as the key and the service’s csv file and the service fee as the values.

1. The container data structure I implemented in this assignment was a hash map. My implementation stores data by making the name for the product—i.e. Lay’s, Fruity Pebbles—as the key and makes the description, size, and price the value—i.e. Wavy Original Potato Chips, 10 oz, and $1.88. Each key and value have the same index number, but the key and value are stored in two separated list. Based on the user’s input, the program grabs the key (the name of the product) and checks if the user’s input for size matches with the key’s value.