

Spring 2019 BBM 104: Programming Language II PROGRAMMING ASSIGNMENT 2

A first step towards Object Oriented Programming

Subject: Classes, objects, encapsulation, and inheritance¹

Teaching Assistant: Selim Yilmaz

Release Date: 3/27/2019 (from 23:59:59)

Due Date: 4/17/2019 (until 23:59:59)

1 Problem Definition

In this assignment, you are expected to implement a simplified restaurant management system using Java programming language and to get familiar with object oriented programming. The software that you will implement is going to fulfill some basic operations that are included in most of today's restaurant management systems. 1 Problem

2 Solution Approach

My solution approach is creating a class named Restaurant, and I create all the objects in here, do all the operations in this class. In Assignment2 class I only read input files.

3 Class Explanations

1. I have Assignment2 class which reads and splits input then gives them to the Restaurant class' methods.
2. I have Restaurant class which has methods like create_table, new_order, checkout; ArrayList Objects like Table, Employers, Item (Storage), Waiter.
3. The Worker class is the superclass of Employer and Waiter. It has all the function that both needs.
4. Table class has order class inside it.
5. Item class is used for two purpose first is Storage, second is a list holds tables' order's items.
6. Item class, has attributes like name stockAmount cost, and it has methods getter setter vs.
7. Order class has attributes like number of current Item in the Order, number of max Item it can hold; and methods.
8. Employer Class has specific method that calculates Employer salary.
9. Waiter Class has specific method that calculates Waiter salary.