**Declaration of Original Work for CE/CZ2002 Assignment**

We hereby declare that the attached group assignment has been researched, undertaken, completed and submitted as a collective effort by the group members listed below.

We have honored the principles of academic integrity and have upheld Student Code of Academic Conduct in the completion of this work.

We understand that if plagiarism is found in the assignment, then lower marks or no marks will be awarded for the assessed work. In addition, disciplinary actions may be taken.

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Course  (CE2002 or CZ2002) | Lab Group | Signature/Date |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# Table of Contents

## Design Considerations and Assumptions

## UML Class Diagram

* Sequence Diagram
* Test Cases and Results

## **Design Considerations and Assumptions**

* Use of CSV files as persistent storage, e.g. database.
  + CSV file contents are read and loaded into memory upon initialization of individual controllers.
    - this.categoryController = new CategoryController();
  + On adding, updating, or removing either promotions or items on the menu, the individual controllers will update the respective files.
* The restaurant only has 12 tables, and each table can have a total of 15 reservations at any one point of time.
* Reservations expire 5 minutes past the allocated time.
* Reservations are checked whenever it returns to the main menu.
  + This assumes that the system is interacted with frequently and that the main menu is visited frequently.
* All tables are initially unoccupied and will be occupied once an order is made.
* Since, a promotion is technically an item on the menu. It extends the item class.
  + Inherits methods and attributes of the item class and overrides them. (Polymorphism)
    - public class Promotion extends Item{…}
* When an order of an item or promotion is added to a table’s invoice, a copy of the item or promotion is made and added to the invoice.
  + This is to prevent unhappy customers, when they find out that the cost of the item or promotion is changed after they ordered and before payment.
    - public Item copyItem(int id) {

Item toCopy = searchForItem(id);

return toCopy.copyOf();

}

## Diagram, schematic Description automatically generated**UML Class Diagram**

## **Sequence Diagram**

## **Test Cases and Results**