

Course Number	CSci 120
Descriptive Title	Object-oriented Programming
Programming Language	Java

Activity Type	Final Project
Activity Title	PizzaBase Restaurant

Objective

In this exercise you will develop a running Java GUI application as a solution to a computing problem. The application must incorporate OOP concepts and techniques.

Problem

The PizzaBase restaurant wants to automate the ordering of pizzas by customers. Each table will be fitted with a touch-sensitive screen which customers can use to browse the pizzas on offer and select their choice. Two basic types of pizza will be offered: the Do-it-Yourself will have a base with tomato sauce only and then customers can choose any number of toppings, at a fixed price per topping; the Prefab will come in several varieties, each with a fixed set of toppings. Every pizza can be ordered with a deep crust or crispy base, and three sizes are available: 6 inch, 9 inch and 12 inch. Customers will also be able to order from a fixed set of drinks, such as cola and lemonade flavors, each in large or small size. Once customers have confirmed their order, they will be shown the final price and, thereafter, the screen will display the progress of their food as it is being prepared and cooked. At the end of a meal, payment will be made in the conventional way.

Directions

1. Single out distinct objects in the problem.
2. Create and design class diagrams by applying appropriate associations, inheritance, polymorphism, abstract classes, or exceptions based on the relationship of the classes and objects in the problem.
3. Design the UML of the problem using Dia and generate a PNG image after finalizing the UML design of your project.
4. Strictly implement your UML design using Java PL GUI and add as much additional features necessary for your application to function efficiently.
5. Submit the UML design in PNG format and your project in ZIP format 1 week before presenting this during Final Project Presentation.