

977-270

Design Pattern Project

Semester 2/2561

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Learning Outcomes

- Can apply design pattern in Java software development

Instructions

- Develop a Java application as console or desktop application.
- Use your group design pattern and apply at least **3 additional design patterns**
- Write a short report
 - How to use the application
 - Why the selected design patterns are used
 - What is the benefit of using the design patterns



Example Café Ordering System

Requirement

- Customer can order drinks and food
- Each item has its own price
- When a customer order an item, staff can input a number for a selected menu.
- After finished ordering, the system calculate total price and display summary of order and total price on the screen.

Café Menu

Iterator for displaying Menu

Decorator for price calculation

Factory for create menu items

Singleton for counting all orders



BOSTON BARISTA

HOT DRINKS	Americano	\$4.99
	Cafe Mocha	\$5.99
	Cafe Latte	\$5.99
	Capuccino	\$6.75
	Espresso	\$3.00
	Vanilla Latte	\$4.75
COLD DRINKS	Orange Juice	\$2.99
	Apple Juice	\$2.00
	Iced Latte	\$5.99
	Iced Mocha	\$4.75
SAND WICHES	Ham and Cheese	\$4.00
	4 Cheese	\$6.75
	Egg and Ham	\$4.75

Submission

- Working in Group (same as presentation)
- Source code
- Short report as PDF file
- Upload files to
 - <https://drive.google.com/open?id=1QthIr0LpEoW9W80kFhwVwG7V09SOiVwu>
- Due date 12th May 2019