

CMPE 202 - Lab #5 - Design Patterns Lab - Part 3 (10 Pts)

Apply the Decorator Pattern to the Counter Burger Problem (Fall 2014 Menu)

Requirements:

- Start with your Solution from Lab #4 and make modifications to support the new Business Rules (2014 Menu) from The Counter.
- Update your UML Class Diagram (from Lab #4) for your design and implement your solution in Java using BlueJ.
- Use the Sample Order (below) for your test data. Run the program to show the price/receipt.
- Make sure to read the provided Sample Menu and Implement the Calculation appropriate to the pricing rules.

Notes:

- Keep track of the changes to your design/code from Lab #4 by using Astah UML Notes to annotate the changes. These are the "pink boxes" with text notes inside. Make sure to link the notes to the appropriate class.
- Track the following type of changes in your UML Class Diagram:
 - New Classes Added
 - Updates to Classes (added methods, modified methods, changed Interfaces, etc...)
 - There is no need to track Classes Deleted

Grading/Submission:

- Updated UML Class Diagram Annotated with Comments (5 points).
- Screenshot of Console Output showing the Receipt which should include the Prices for the Custom Burgers. (5 points)
- Zip file of BlueJ/Java Source Code (will be used to access deductions)
- Zip file of modified version of your Lab#4 (optional)

Deductions:

- Your Pattern Design/Implementation Should be Robust. If there are "Major" changes between Lab#4 and Lab#5 there will be deductions up to **-10 points**.
 - If you feel that you need to reimplemented Lab#4 before attempting Lab#5, you must submit a new Zip Source and PDF of sample output from Lab#4 with this assignment. (name the file Lab4.zip)
- Turn-It-In Violation: Automatic Zero (Originality < 80%)
- Late Assignments: **- 5 points** (within the 24-hour Late window)
- Submissions not on Canvas before Assignment closes will not be considered.

The Sample Order: (Contains Two Custom Burgers)

Note: <https://www.thecounterburger.com/order/index.html> (<https://www.thecounterburger.com/order/index.html>)

Custom Burger #1:

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Palo Alto
369 South California Avenue
Palo Alto, CA 94306
[650] 321-3900

PICKUP ORDER

THE COUNTER®
CUSTOM BUILT BURGERS®

Sign In | Register

SIGN IN TO EARN LOYALTY REWARDS & VIEW RECENT ORDERS

MAIN MENU | RECENT ORDERS

BUILD YOUR OWN BURGER | STARTERS | SIGNATURE BURGERS | SIGNATURE BURGERS IN A BOWL
SANDWICHES | KIDS MENU | DESSERTS | SHAKES, FLOATS AND MALTS | BEVERAGES

STEP #1 Choose a Burger

Organic Bison* + 1/2lb. + On A Bun

<input type="checkbox"/> Hormone & Antibiotic Free Beef*	<input type="checkbox"/> 1/3lb. (\$9.00)	<input checked="" type="checkbox"/> On A Bun
<input type="checkbox"/> 100% Natural Chicken Breast	<input checked="" type="checkbox"/> 1/2lb. (\$12.00)	<input type="checkbox"/> In A Bowl (+\$1.00)
<input type="checkbox"/> 100% Natural Ground Turkey	<input type="checkbox"/> 1lb. (\$18.00)	<input type="checkbox"/> Seasonal Lettuce Blend

- Housemade Vegan Veggie
- Organic Bison* (+\$4.00)
- Ahi Tuna* (+\$4.00)

- Organic Mixed Greens
- Baby Spinach
- Kale
- Quinoa

STEP #2 Choose a Cheese (Extra Cheese +\$1.00)

Spicy Jalapeño Jack + Yellow American

- | | | |
|---|---|--|
| <input checked="" type="checkbox"/> Yellow American (l) | <input checked="" type="checkbox"/> Spicy Jalapeño Jack (l) | <input type="checkbox"/> Greek Feta |
| <input type="checkbox"/> Sharp Provolone | <input type="checkbox"/> Savory Swiss | <input type="checkbox"/> Tillamook Cheddar |
| <input type="checkbox"/> Horseradish Cheddar | <input type="checkbox"/> Smoked Gouda | |

Premium Cheese (+\$1.50 Per Selection Extra Cheese +\$1.50)

Danish Blue Cheese

- | | | | |
|--|--|--|--|
| <input checked="" type="checkbox"/> Danish Blue Cheese (l) | <input type="checkbox"/> Gruyère | <input type="checkbox"/> Vegan Cheddar | <input type="checkbox"/> Herbed Goat Cheese Spread |
| <input type="checkbox"/> Fresh Mozzarella | <input type="checkbox"/> Soft-Ripened Brie | <input type="checkbox"/> Manchego | |

STEP #3 Choose a Sauce (Extra Sauce +\$0.50)

Mayonnaise + Thai Peanut Sauce

- | | | | |
|---|--|---|---|
| <input type="checkbox"/> Red Relish | <input type="checkbox"/> Apricot Sauce | <input checked="" type="checkbox"/> Thai Peanut Sauce (l) | <input type="checkbox"/> Honey Dijon |
| <input type="checkbox"/> Horseradish Aioli | <input type="checkbox"/> Hot Wing Sauce | <input type="checkbox"/> Sweet Sriracha | <input type="checkbox"/> Lemon Vinaigrette |
| <input type="checkbox"/> Smoky Chipotle Aioli | <input type="checkbox"/> Signature Steak Sauce | <input type="checkbox"/> Habañero Salsa | <input type="checkbox"/> Dijon Balsamic Dressing |
| <input type="checkbox"/> Roasted Garlic Aioli | <input type="checkbox"/> Spicy Sour Cream | <input type="checkbox"/> Basil Pesto | <input type="checkbox"/> Sesame Ginger Dressing |
| <input type="checkbox"/> Housemade Tzatziki Sauce | <input type="checkbox"/> Tangy Thousand Island | <input type="checkbox"/> Creamy Caesar | <input type="checkbox"/> Sun-Dried Tomato Vinaigrette |
| <input type="checkbox"/> House Mustard | <input type="checkbox"/> Hickory BBQ Sauce | <input type="checkbox"/> Country Buttermilk Ranch | <input type="checkbox"/> Nori-soy Sauce |
| <input type="checkbox"/> Spicy Worcestershire | <input checked="" type="checkbox"/> Mayonnaise (l) | | |

STEP #4 Choose Unlimited Toppings

Black Olives + Dill Pickle Chips + Spicy Pickles

- | | | | |
|---|---|--|--|
| <input checked="" type="checkbox"/> Dill Pickle Chips (l) | <input type="checkbox"/> Carrot Strings | <input type="checkbox"/> Alfalfa Sprouts | <input type="checkbox"/> Onion Confit |
| <input type="checkbox"/> Organic Mixed Greens | <input type="checkbox"/> Pickled Carrots and Daikon | <input type="checkbox"/> Jicama | <input type="checkbox"/> Kale |
| <input type="checkbox"/> Sliced Cucumbers | <input type="checkbox"/> Fresh Jalapeños | <input type="checkbox"/> Grilled Pineapple | <input type="checkbox"/> Roasted Corn & Black Bean Salsa |
| <input type="checkbox"/> Spicy Pepperoncini | <input type="checkbox"/> Scallions | <input type="checkbox"/> Coleslaw | <input type="checkbox"/> Roasted Red Peppers |
| <input checked="" type="checkbox"/> Black Olives (l) | <input type="checkbox"/> Sliced Red Onion | <input type="checkbox"/> Dried Cranberries | <input type="checkbox"/> Quinoa |

Spicy Pickles (l) Baby Spinach Hard Boiled Eggs Housemade Garlic Croutons Seasonal Lettuce Blend Ripened Red Tomatoes Roasted Green Chiles Crushed Peanuts

Premium Toppings [+1.00 - \$3.00 Per Selection]

Marinated Tomatoes

 Sunny Side Up Egg* Black Forest Ham Grilled Red Onion Sliced Avocado Marinated Artichokes Grilled Anaheim Peppers Housemade Guacamole Sun-Dried Tomatoes Olive Tapenade Crispy Onion Strings Applewood Smoked Bacon Smoked Pickled Jalapenos Fried Pickle Chips Sautéed Mushrooms Oven Roasted Tomatoes Housemade Chili Marinated Tomatoes (+\$2.00) (l) Housemade Turkey Chili

STEP #5 Choose a Bun

Clabatta (Vegan)

 Brioche Style Bun Gluten-Free Bun (+\$1.00) Multigrain Bun Pretzel Bun (+\$0.50) Clabatta (Vegan) Hawaiian Bun (+\$1.00) English Muffin

STEP #6 Choose a Side [+3.00]

Shoestring Fries

 Shoestring Fries Lettuce Blend Side Salad Sweet Potato Fries Onion Strings Grilled Vegetable Skewers 2pcs Coleslaw No Side**CANCEL****ADD TO ORDER****Custom Burger #2:**

The Counter Custom Built Burgers website interface. At the top right is a sign-in/register button. Below it is a circular "SIGN IN TO EARN LOYALTY REWARDS & VIEW RECENT ORDERS" button. The main navigation menu includes links for THE COUNTER, Palo Alto location, pickup order, and main menu sections like BUILD YOUR OWN BURGER, STARTERS, SIGNATURE BURGERS, etc.

MAIN MENU | RECENT ORDERS

BUILD YOUR OWN BURGER | STARTERS | SIGNATURE BURGERS | SIGNATURE BURGERS IN A BOWL
SANDWICHES | KIDS MENU | DESSERTS | SHAKES, FLOATS AND MALTS | BEVERAGES

STEP #1 Choose a Burger

Hormone & Antibiotic Free Beef* + 1/3lb. + On A Bun

<input checked="" type="checkbox"/> Hormone & Antibiotic Free Beef*	<input checked="" type="checkbox"/> 1/3lb. (\$9.00)	<input checked="" type="checkbox"/> On A Bun
<input type="checkbox"/> 100% Natural Chicken Breast	<input type="checkbox"/> 1/2lb. (\$12.00)	<input type="checkbox"/> In A Bowl (+\$1.00)
<input type="checkbox"/> 100% Natural Ground Turkey	<input type="checkbox"/> 1lb. (\$18.00)	<input type="checkbox"/> Seasonal Lettuce Blend
<input type="checkbox"/> Housemade Vegan Veggie		<input type="checkbox"/> Organic Mixed Greens
<input type="checkbox"/> Organic Bison* (+\$4.00)		<input type="checkbox"/> Baby Spinach
<input type="checkbox"/> Ahi Tuna* (+\$4.00)		<input type="checkbox"/> Kale
		<input type="checkbox"/> Quinoa

STEP #2 Choose a Cheese (Extra Cheese +\$1.00)

Greek Feta + Smoked Gouda

<input type="checkbox"/> Yellow American	<input type="checkbox"/> Spicy Jalapeño Jack	<input checked="" type="checkbox"/> Greek Feta (i)
<input type="checkbox"/> Sharp Provolone	<input type="checkbox"/> Savory Swiss	<input type="checkbox"/> Tillamook Cheddar
<input type="checkbox"/> Horseradish Cheddar	<input checked="" type="checkbox"/> Smoked Gouda (i)	

Premium Cheese [+\$.50 Per Selection Extra Cheese +\$1.50]

Fresh Mozzarella

<input type="checkbox"/> Danish Blue Cheese	<input type="checkbox"/> Gruyère	<input type="checkbox"/> Vegan Cheddar	<input type="checkbox"/> Herbed Goat Cheese Spread
<input checked="" type="checkbox"/> Fresh Mozzarella (i)	<input type="checkbox"/> Soft-Ripened Brie	<input type="checkbox"/> Manchego	

STEP #3 Choose a Sauce (Extra Sauce +\$0.50)**Habañero Salsa**

- | | | | |
|---|--|--|---|
| <input type="checkbox"/> Red Relish | <input type="checkbox"/> Apricot Sauce | <input type="checkbox"/> Thai Peanut Sauce | <input type="checkbox"/> Honey Dijon |
| <input type="checkbox"/> Horseradish Aioli | <input type="checkbox"/> Hot Wing Sauce | <input type="checkbox"/> Sweet Sriracha | <input type="checkbox"/> Lemon Vinaigrette |
| <input type="checkbox"/> Smoky Chipotle Aioli | <input type="checkbox"/> Signature Steak Sauce | <input checked="" type="checkbox"/> Habañero Salsa (I) | <input type="checkbox"/> Dijon Balsamic Dressing |
| <input type="checkbox"/> Roasted Garlic Aioli | <input type="checkbox"/> Spicy Sour Cream | <input type="checkbox"/> Basil Pesto | <input type="checkbox"/> Sesame Ginger Dressing |
| <input type="checkbox"/> Housemade Tzatziki Sauce | <input type="checkbox"/> Tangy Thousand Island | <input type="checkbox"/> Creamy Caesar | <input type="checkbox"/> Sun-Dried Tomato Vinaigrette |
| <input type="checkbox"/> House Mustard | <input type="checkbox"/> Hickory BBQ Sauce | <input type="checkbox"/> Country Buttermilk Ranch | <input type="checkbox"/> Nori-soy Sauce |
| <input type="checkbox"/> Spicy Worcestershire | <input type="checkbox"/> Mayonnaise | | |

STEP #4 Choose Unlimited Toppings**Crushed Peanuts**

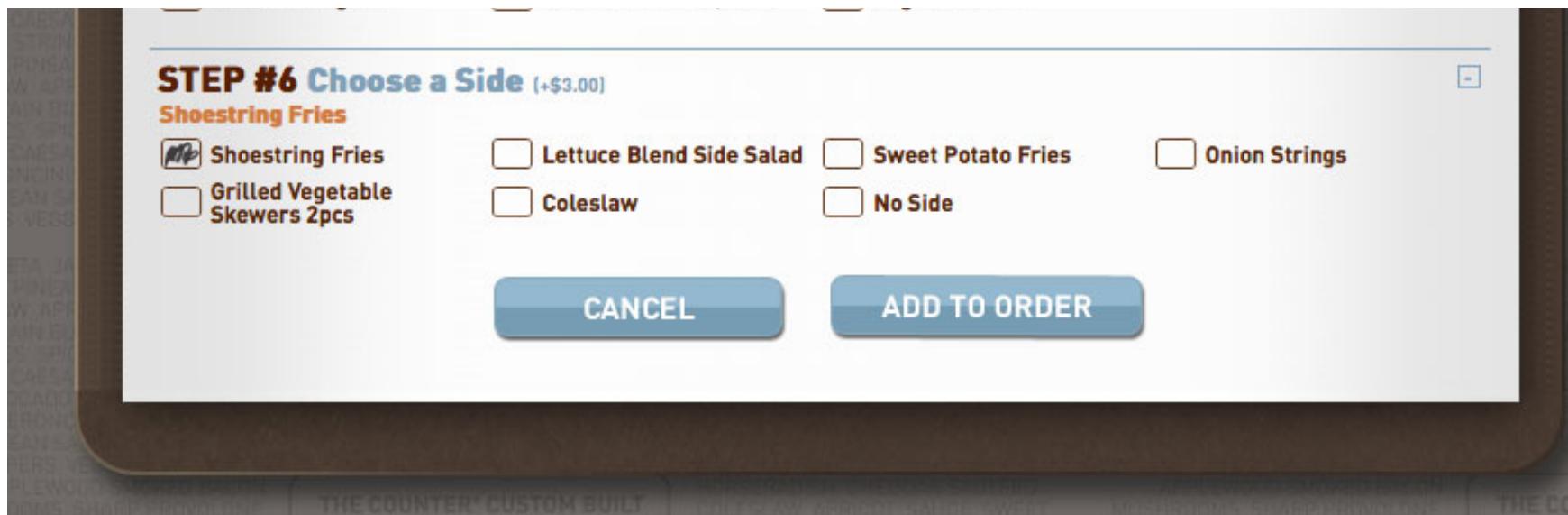
- | | | | |
|---|---|---|--|
| <input type="checkbox"/> Dill Pickle Chips | <input type="checkbox"/> Carrot Strings | <input type="checkbox"/> Alfalfa Sprouts | <input type="checkbox"/> Onion Confit |
| <input type="checkbox"/> Organic Mixed Greens | <input type="checkbox"/> Pickled Carrots and Daikon | <input type="checkbox"/> Jicama | <input type="checkbox"/> Kale |
| <input type="checkbox"/> Sliced Cucumbers | <input type="checkbox"/> Fresh Jalapeños | <input type="checkbox"/> Grilled Pineapple | <input type="checkbox"/> Roasted Corn & Black Bean Salsa |
| <input type="checkbox"/> Spicy Pepperoncini | <input type="checkbox"/> Scallions | <input type="checkbox"/> Coleslaw | <input type="checkbox"/> Roasted Red Peppers |
| <input type="checkbox"/> Black Olives | <input type="checkbox"/> Sliced Red Onion | <input type="checkbox"/> Dried Cranberries | <input type="checkbox"/> Quinoa |
| <input type="checkbox"/> Spicy Pickles | <input type="checkbox"/> Baby Spinach | <input type="checkbox"/> Hard Boiled Eggs | <input type="checkbox"/> Housemade Garlic Croutons |
| <input type="checkbox"/> Seasonal Lettuce Blend | <input type="checkbox"/> Ripened Red Tomatoes | <input type="checkbox"/> Roasted Green Chiles | <input checked="" type="checkbox"/> Crushed Peanuts (I) |

Premium Toppings (+\$1.00 - \$3.00 Per Selection)**Marinated Tomatoes + Sunny Side Up Egg***

- | | | | |
|--|--|---|---|
| <input checked="" type="checkbox"/> Sunny Side Up Egg* (I) | <input type="checkbox"/> Black Forest Ham | <input type="checkbox"/> Grilled Red Onion | <input type="checkbox"/> Sliced Avocado |
| <input type="checkbox"/> Marinated Artichokes | <input type="checkbox"/> Grilled Anaheim Peppers | <input type="checkbox"/> Housemade Guacamole | <input type="checkbox"/> Sun-Dried Tomatoes |
| <input type="checkbox"/> Olive Tapenade | <input type="checkbox"/> Crispy Onion Strings | <input type="checkbox"/> Applewood Smoked Bacon | <input type="checkbox"/> Smoked Pickled Jalapenos |
| <input type="checkbox"/> Fried Pickle Chips | <input type="checkbox"/> Sautéed Mushrooms | <input type="checkbox"/> Oven Roasted Tomatoes | <input type="checkbox"/> Housemade Chili |
| <input checked="" type="checkbox"/> Marinated Tomatoes (+\$2.00) | <input type="checkbox"/> Housemade Turkey Chili | | |

STEP #5 Choose a Bun**Gluten-Free Bun**

- | | | | |
|--|---|---|--|
| <input type="checkbox"/> Brioche Style Bun | <input checked="" type="checkbox"/> Gluten-Free Bun (+\$1.00) | <input type="checkbox"/> Multigrain Bun | <input type="checkbox"/> Pretzel Bun (+\$0.50) |
| <input type="checkbox"/> Ciabatta (Vegan) | <input type="checkbox"/> Hawaiian Bun (+\$1.00) | <input type="checkbox"/> English Muffin | |



Final Bill/Receipt:

