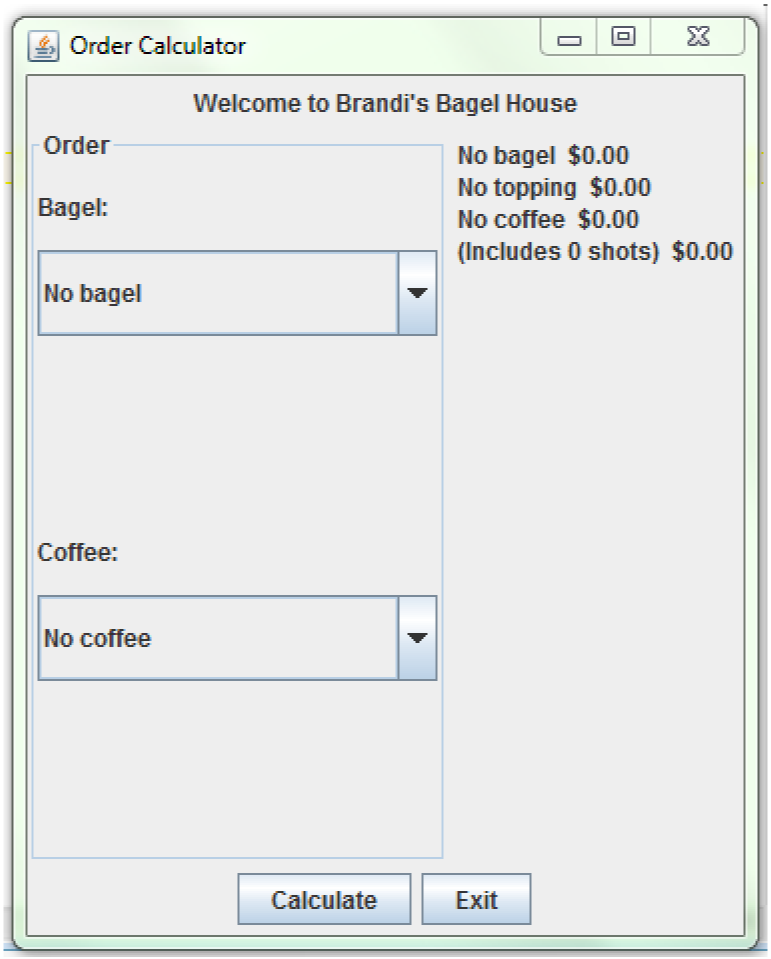
COMI 2510 Advanced Programming and Design
Assignment 3

You are going to modify the Brandi's Bagel House example from Chapter 12 as follows:

- Bagel orders, toppings orders, and coffee orders will be combo boxes rather than radio buttons and check boxes.
- There are three kinds of bagels (white, wheat, and sesame), as well as "No bagel."
- There are four coffee orders (regular, decaf, cappuccino, redeye), as well as "No coffee."
- There are four toppings orders (cream cheese, butter, peach jelly, blueberry jam), as well as "No topping."
- If there's no bagel order, then there's no topping order, and the user shouldn't see the toppings combo box.
- If the user chooses a "redeye" coffee, then they are presented with a slider from 0-5 indicating the number of espresso shots. (If there's no redeye order, then there's no shots order, and the user shouldn't see the shots slider.)
- The program has an order summary panel which shows each option plus the subtotal, tax, and total (except when there's no order at all, in which case there's no summary).
- Prices are the same. New prices are $0 for "No bagel," "No coffee," "No topping," and no shots. The sesame bagel is $1.50. The redeye is $1.50, and each shot is an additional $0.50.

Here is the program when it first starts:



Bagel:

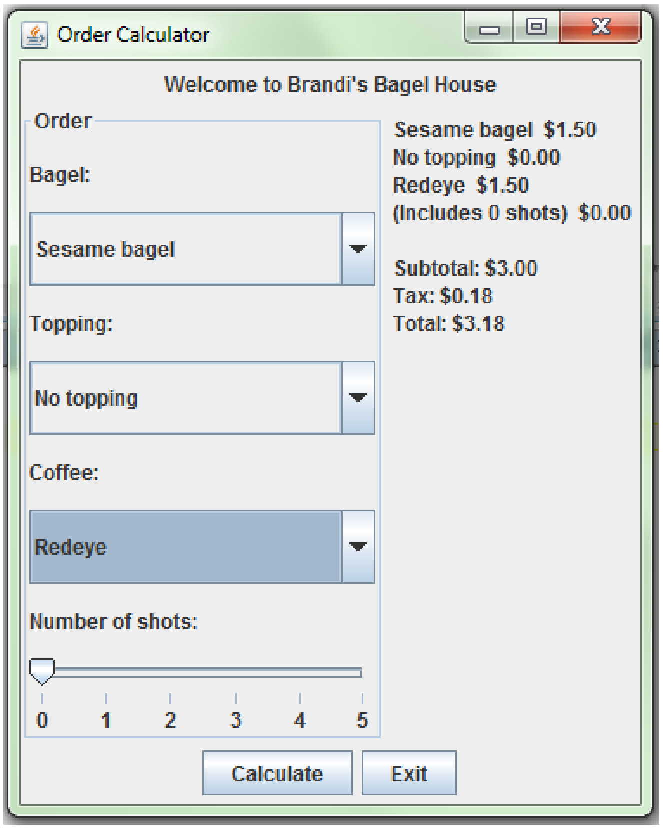
No bagel

Coffee:

No coffee

```
No bagel  $0.00
No topping  $0.00
No coffee  $0.00
(Includes 0 shots)  $0.00
```

Here is the program after the user has chosen a bagel and a redeye:



Welcome to Brandi's Bagel House

Order

Bagel: Sesame bagel

Topping: No topping

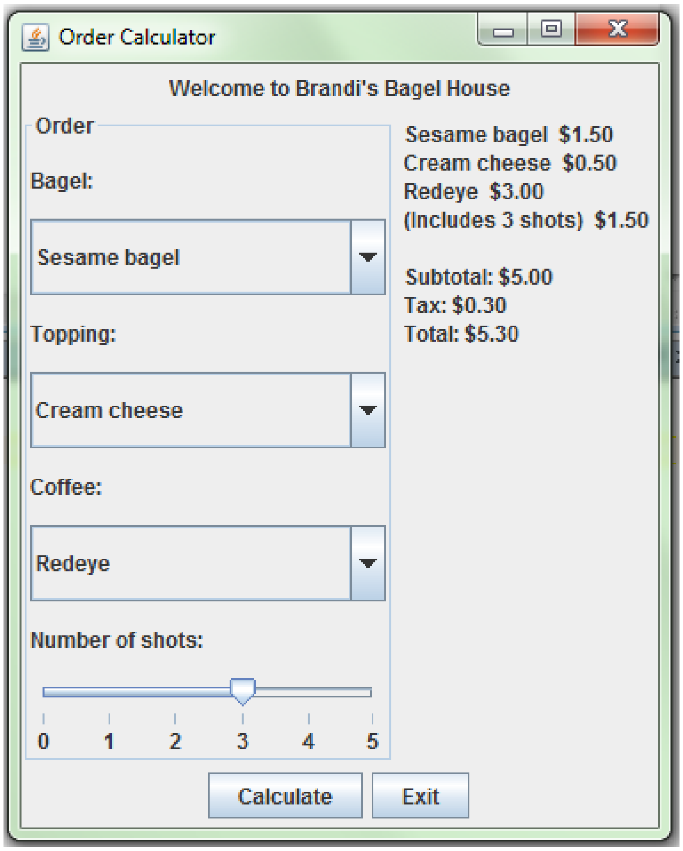
Coffee: Redeye

Number of shots: 0 1 2 3 4 5

```
Sesame bagel  $1.50
No topping  $0.00
Redeye  $1.50
(Includes 0 shots)  $0.00

Subtotal: $3.00
Tax: $0.18
Total: $3.18
```

Here is the program with a topping and three shots now chosen:



Welcome to Brandi's Bagel House

Order

Bagel: Sesame bagel

Topping: Cream cheese

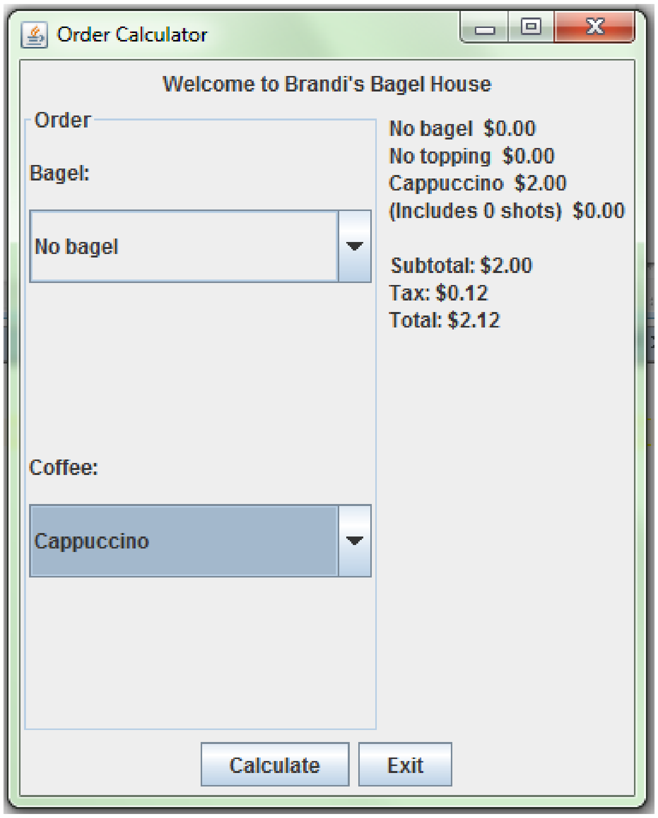
Coffee: Redeye

Number of shots: 0 1 2 3 4 5

```
Sesame bagel  $1.50
Cream cheese  $0.50
Redeye  $3.00
(Includes 3 shots)  $1.50

Subtotal: $5.00
Tax: $0.30
Total: $5.30
```

And here is the program after the user has switched to “No bagel” and a cappuccino:



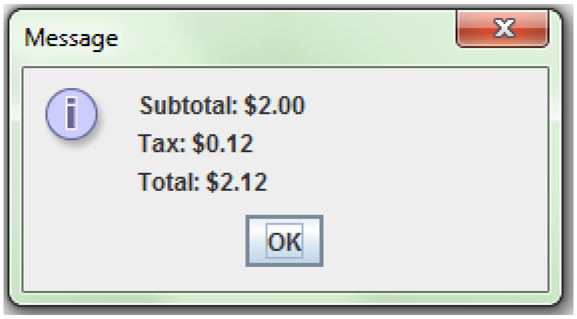
Bagel: No bagel

Coffee: Cappuccino

```
No bagel  $0.00
No topping  $0.00
Cappuccino  $2.00
(Includes 0 shots)  $0.00

Subtotal: $2.00
Tax: $0.12
Total: $2.12
```

Note that the summary panel on the right updates immediately when the user makes a choice on the left. The user does not need to press the Calculate button for the summary panel to update. The summary panel should always reflect what’s in the order panel. The Calculate button works exactly as before:



```
Subtotal: $2.00
Tax: $0.12
Total: $2.12
```

(Which is superfluous information, but there’s no need to remove it.)

Hand in your completed project code.

Assignment 3 Rubric

		Quality			
		Exceptional	**Acceptable**	**Amateur**	**Unsatisfactory**
Component	**Run-time specifications** **63%**	63 pts: The program meets all of the run-time specifications, with no additional unspecified functionality.*	50 pts: There is additional unspecified functionality or the program produces incorrect results in no more than 5% of the customer's tests.	25 pts: The program produces incorrect results in no more than 10% of the customer's tests.	10 pts: The program produces incorrect results in more than 10% of the customer's tests.
	Design specifications **25%**	25 pts: The program is a well-designed object oriented system using appropriate interface elements and listeners.	20 pts: Design is mostly well-designed but is awkward in no more than one place.	12 pts: Design is awkward in multiple places.	5 pts: Design is awkward and doesn't match the general structure outlined in the text or another consistent structure that follows principles of information hiding.
	Documentation **12%**	12 pts: The program contains comments including the programmer’s name and date. Javadoc comments are included as shown in the text for all classes. There are block comments (as many as necessary) for each distinct block of code which accurately describe what the block is accomplishing.	9 pts: The header comment is incomplete but contains name and date, and/or the block comment(s) aren’t clear. Javadoc comments are missing components less than 10% of the time.	6 pts: The documentation partially meets the exceptional guidelines with several poorly written comments and/or missing comments or missing components less than 25% of the time.	2.5 pts: 25% or more of the comments are missing or unhelpful.

*If you want to change the functional specifications of the program in any way, you must clear it with your customer (the instructor) in writing prior to making the changes. Include documentation of the specification changes when you submit your program.