

# IS 380: Object-Oriented Programming Spring 2017

## Individual Assignment 5-1

Due Date: **3:59 PM, April 10, 2017** (Submit via WebCampus).

Weights: 2.5 % of total grades.

### NOTE:

1. Please zip the **.java** files and upload the zip file to WebCampus for submission.
2. Please provide proper comments to document your code, including the following:
  - a. Author's name;
  - b. Purpose of the program;
  - c. In-line comments for the statements.

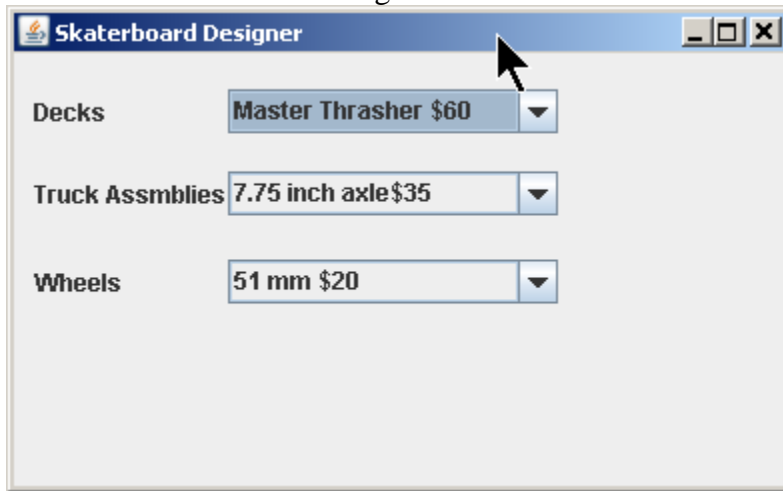
### QUESTION: Skateboard Designer

The Skate Shop sells the skateboard products listed in the table shown below:

Decks		Axle		Wheel	
The Master Thrasher	\$60	7.75 inch axle	\$35	51 mm	\$20
The Dictator	\$45	8 inch axle	\$40	55 mm	\$22
The Street King	\$50	8.5 inch axle	\$45	58 mm	\$24
				61 mm	\$28

Create an application with combo boxes that holds decks, axles, and wheel options. The user should select a deck design, an axle design, and a wheel design. The application should show the total cost.

- (1) Create a GUI as the following screenshot. Name each of the components properly.



- (2) In the application, represent the prices for the parts as named **constants**.

- (3) Implement the **Item Listener/Action Listener** of the combo boxes.  
When the selected item is changed (i.e., the user select one option from the combo boxes), calculate the total cost, based on the design option selected. Use **switch** statement in the program.  
Display the result in a **JLabel**.



*Grading criteria:*

- (1) Correctness
  - (a) The code can be compiled without any syntax error.
  - (b) Variables and named constants are used; i.e., each price for the design option is declared as named constants.
  - (c) The code can generate the requested results.
  - (d) The program is properly documented using comments (`/**.....*/` and `//.` )
- (2) Technique used
  - (a) **JFrame**, **JLabel**, and **JComboBox** are used, and named properly; i.e., the names of the objects should be descriptive.
  - (b) The JComboBox class's **getSelectedIndex()** method is used.
  - (c) **switch** statement is used.
  - (d) One **ActionListener** is implemented to handle the event of all combo boxes.