

## CST 183 Java Programming Programming Assignment 7 (30 pts)

**Purpose** To build a well-documented Java application focusing on GUI usage and development.

**Requirements**



Create a GUI application that assists a user buy skateboard components to construct a custom skateboard.

**Step 1: Understand the requirements.**

The skate shop sells the skateboard products listed in the following table:

Decks	Truck Assemblies	Wheels
The Master Thrasher \$40	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
The Judge \$60		61 mm \$28

In addition, the Skate Shop sells the following miscellaneous products and services:

- Grip Tape: \$10
- Bearings: \$30
- Riser Pads: \$2
- Nuts & Bolts kit: \$3
- Board shorts: \$38
- T-Shirts: \$21
- Band-Aids: \$5

Create an application that allows the user to select one deck, one truck assembly, and one wheel set from either list components or combo boxes. The application should also have a list component that allows the users to select one or more miscellaneous products. The application should display the subtotal, the amount of sales tax (based on Michigan at 6 percent), and the total of the order.

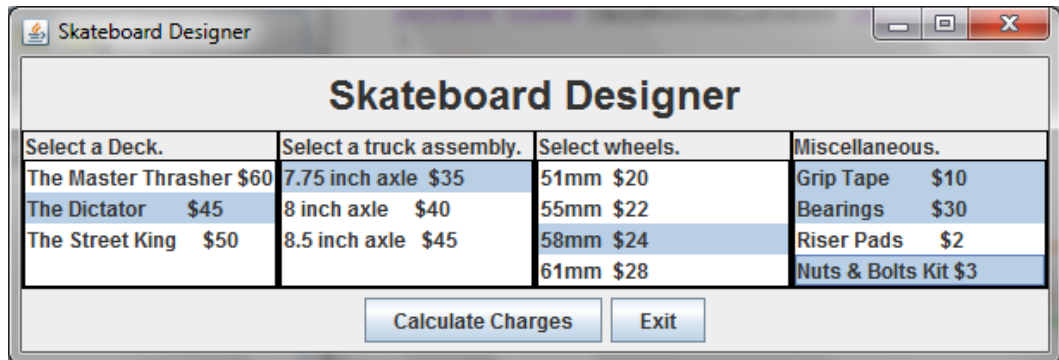
In addition, your application should also use an icon image to represent the The Skate Shop. You should also have a “Calculate Order” button and an “Exit” button that invoke appropriate ActionListener methods.

Be creative and have some fun with the look and feel.

## Step 2: Develop Logic Plan

Devise a “story board” for your application and draw a basic flowchart or write pseudocode that details your logic plan for solving this problem and helps you plan the program.

Consider the following example:



## Step 3: Code It

Use jGRASP or your IDE to write the Java program that addresses the assignment specifics.

**Type** in your program code

1. **Compile** your program and correct all the syntax errors
2. **Run** your program and evaluate the output for correctness

**Deliverables** Submit the Java source code file(s) (the class definition and driver .java files you completed) to the **Program 8 Dropbox** within the Delta eLearning System.

Create a hardcopy for turn-in and grading containing the following:

- a) Title Page
- b) Storyboard (hand drawn ok) and Flow chart or pseudocode for program
- c) Source Code (copy and paste from your IDE)
- d) Output (copy and paste from your IDE and/or do a screen capture to get the output window).