

INSY 4306 ADVANCED SYSTEMS DEVELOPMENT

ASSINGMENT -2

20 points

1. INSTRUCTIONS

- For the late submissions, 5% of the total points will be deducted per hour automatically on Canvas.
- You can only use the techniques that you have learned so far. Other techniques will not be accepted. If you use other techniques, 10 pts will be deducted.
- Do not drag and drop components. It is not acceptable. You will get 0 point.
- In this assignment, upload the following file:
 - YourFirstNameLastName.zip/.rar [including
PizzaSelectionFrame.java, PaymentFrame.java,
PizzaSelectionTest.java, PizzaSelectionFrame.jar]
- Each question is **independent** of each other.
- Do not forget to add comments to explain how your codes are working!
Short comments are acceptable.
- **Write your codes individually! Do not copy of any of them from someone else!**
- NOTE: If you are using any IDE (Netbeans, Eclipse, etc.), please delete the statement **package xxxxx;** (and save it again), from your application.
Otherwise, I will get a compilation error, and you will lose 1 pt for each file giving a compilation error. It is your responsibility.

2. GRADING POLICY

- **Case 1:**

- For each question:
- I will compile your .java files. **If any compilation error occurs, 1 pt will be deducted from each file including compilation errors.**
- After that, I will check your algorithms whether they are correct or not. For example; if it says find odd and even numbers. I will check whether it really finds both even and odd numbers. **This part will be evaluated based on your work.**
- You can only use the techniques that you have learned so far. Other techniques will not be accepted. **For other techniques, 10 pts will be deducted.**
- Do not drag and drop components. **It is not acceptable. You will get 0 point.**
- Additionally, comments will be checked whether they clearly and briefly explain what you have done. **If comments are missing or not clear, enough, or brief 1 pts will be deducted.**

- **Case 2:**

- For each question:
- If there is not any compilation error:
 - I will try each case scenario as stated in each question. For example; if it says find odd and even numbers. I will try both even and odd numbers. **This part will be evaluated based on your work.**
 - You can only use the techniques that you have learned so far. Other techniques will not be accepted. **For other techniques, 10 pts will be deducted.**
 - Do not drag and drop components. **It is not acceptable. You will get 0 point.**
 - Additionally, comments will be checked whether they clearly and briefly explain what you have done. **If comments are missing or not clear, enough, or brief 1 pts will be deducted.**

- **Case 3:**

- **If you do not upload a .java file, I will not evaluate your answer.**

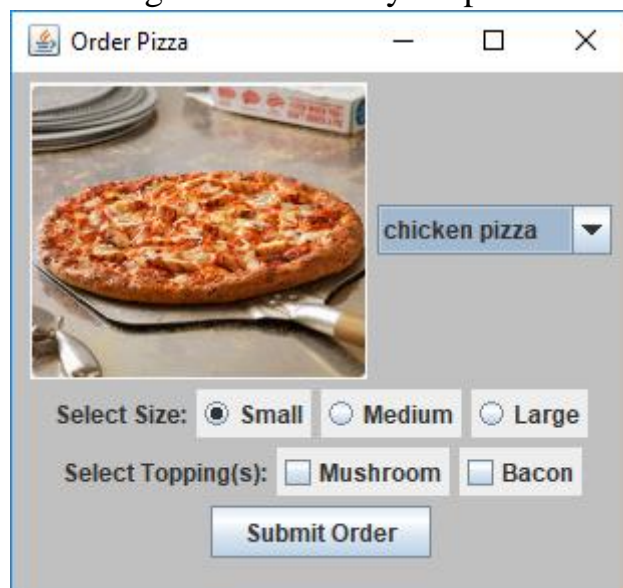
- **Case 4:**

- **If it is determined that you copy the codes from someone else, you will get 0 pt.**

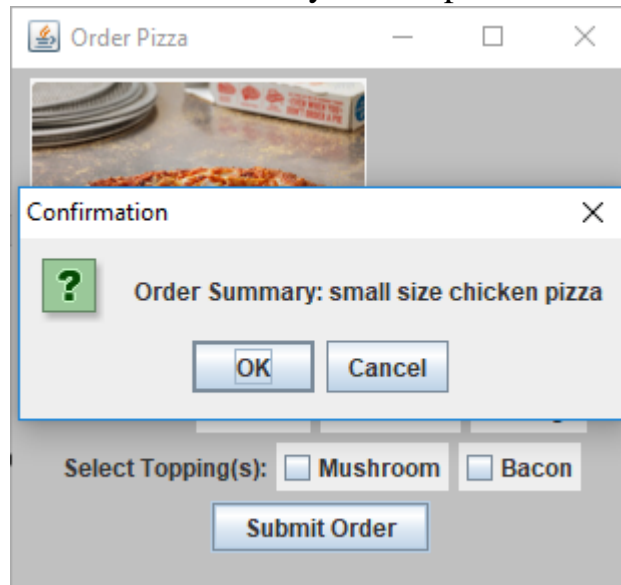
QUESTIONS

Note: In each question, assume that the user enters correct inputs. You do not handle exceptions. Do not drag and drop your components. You must create Java class, not Java Form. Do not drag and drop components!

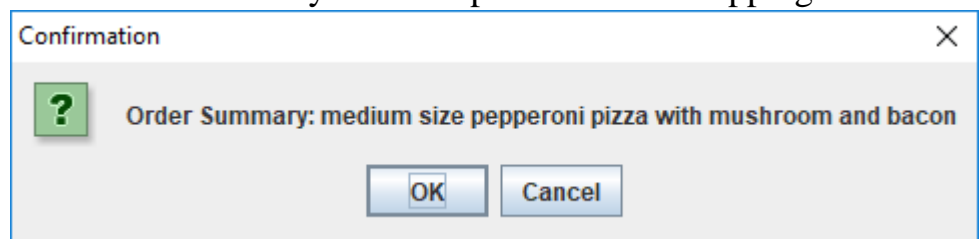
1. Write a simple pizza order application (**20 pts**). Please apply the following requirements for the application.
 - a. Create a PizzaSelectionFrame with FlowLayout. Do not forget that your components will be displayed in which order they are added.
 - b. Title of the frame will be “Order Pizza”.
 - c. You need a combo box which includes a list of pizza: chicken pizza, pepperoni pizza, and veggie pizza.
 - d. When a user selects a pizza from the list, display the related icon in a label. Icons are also uploaded with your assignment. (*Hint: you need to implement `ItemListener` interface and override `itemStateChanged` method*). By default, display any icon.
 - e. You need a label to display “Select Size:”.
 - f. You need three radio buttons (and a button group) to display the size of Small, Medium, and Large. Small size will be selected by default.
 - g. You need a label to display “Select Topping(s):”.
 - h. You need two check boxes to display the toppings of Mushroom and Bacon.
 - i. You need a “Submit Order” button.
 - j. Frame size will be 325 * 300.
 - k. You must set the background color of your pane as LIGHT_GRAY.



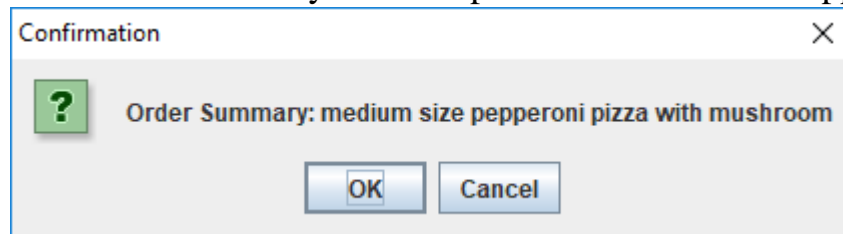
1. When a user clicks Submit Order button, you will display an Option Dialog.
 - i. A user can select any size of pizza without any toppings.



- ii. A user can select any size of a pizza with two toppings.



- iii. A user can select any size of a pizza with one of the toppings.



- iv. In your message, you will display “Order Summary: size of a pizza with the list of toppings (if any)”. (*Hint: you will only add an action listener for your button, so you will need Action Listener Interface and override actionPerformed method*).
- m. The syntax of Option Dialog is:
 - i. `JOptionPane.showMessageDialog(PizzaSelectionFrame.this, "Your Message", "Your Title", JOptionPane.OK_CANCEL_OPTION, JOptionPane.QUESTION_MESSAGE, null, null, null);`

- ii. If a user clicks “OK”, then he/she must view “PaymentFrame” and PizzaSelectionFrame must be closed.
- iii. If a user clicks “Cancel”, then he/she must view again “PizzaSelectionFrame”.
- iv. The syntax in i returns an int value. If it is “0”, it means that the user clicked “OK”. Otherwise, it means that the user clicked “CANCEL”.
- n. If a user clicks on OK, PaymentFrame will be displayed and SelectionFrame will be closed.
- o. In this frame, you will have five labels and five text fields (size is 20). Title of the frame is “Payment”.
- p. You need a GridLayout (6 rows, 2 columns, 5 px horizontal gap, 5 px vertical gap).
- q. You must set the background color of your pane as LIGHT_GRAY.
- r. You must set the size of the frame as 600*200.

- s. When a user clicks “Pay” button. You must display a message in a Message Dialog Box, and you must exit the system. (**Hint:** *System.exit(0);*)
- t. Additionally, if a user clicks “x” to close the window, you must quit the application.
- u. Your message will be “Your order will be delivered in 30 minutes”.