



CS F213 - Object Oriented Programming

J. Jennifer Ranjani

email: jennifer.ranjani@pilani.bits-pilani.ac.in

Chamber: 6121 P, NAB

Consultation: Appointment by e-mail

<https://github.com/JenniferRanjani/Object-Oriented-Programming-with-Java>



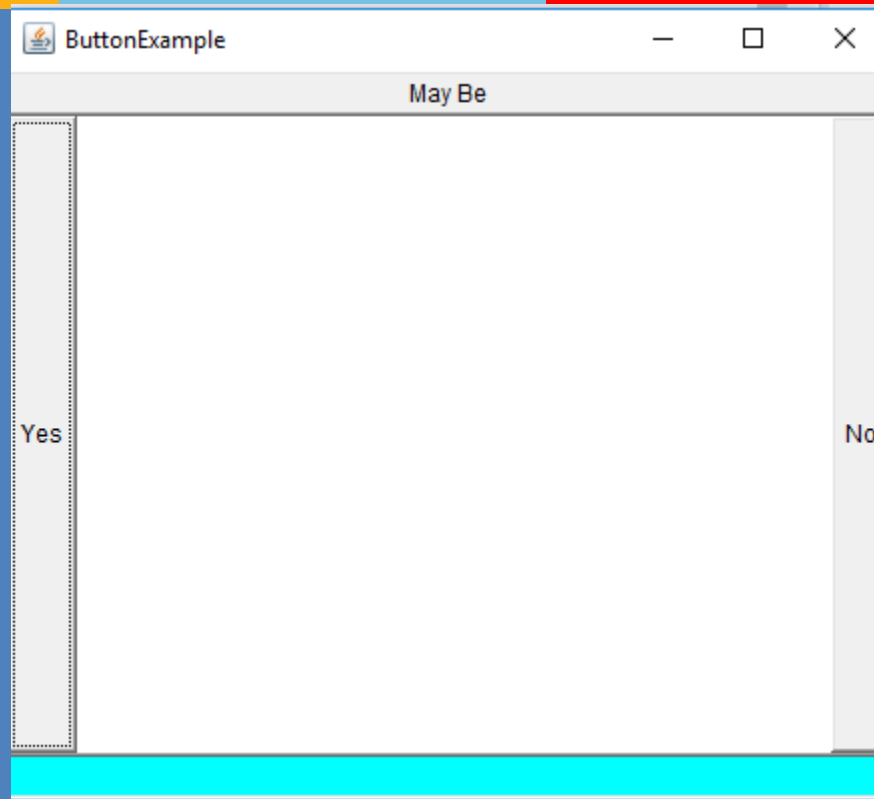
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Query asked during previous class



- Object `getSource()` – is the method in the `EventObject` class, which is the super class of all Event classes.
- How `b[0] = (Button) f.add(y);` worked without `instanceOf` operator?
 - Let's see the downcasting example again!!!

Border Layout - Example

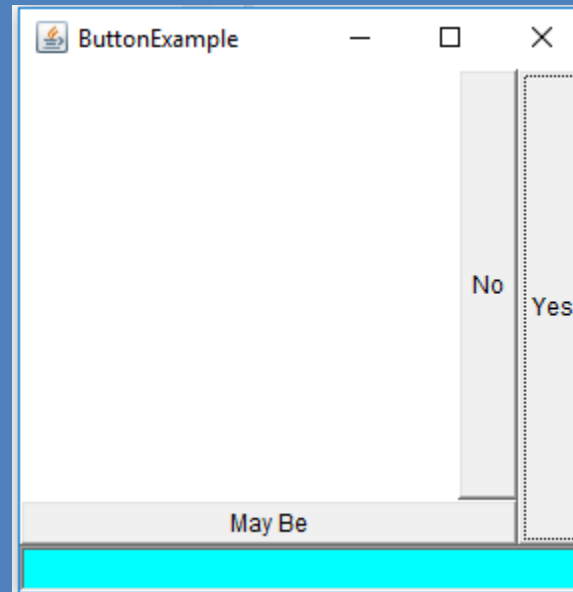


What will happen if we try to add more components in the same region?

Solution

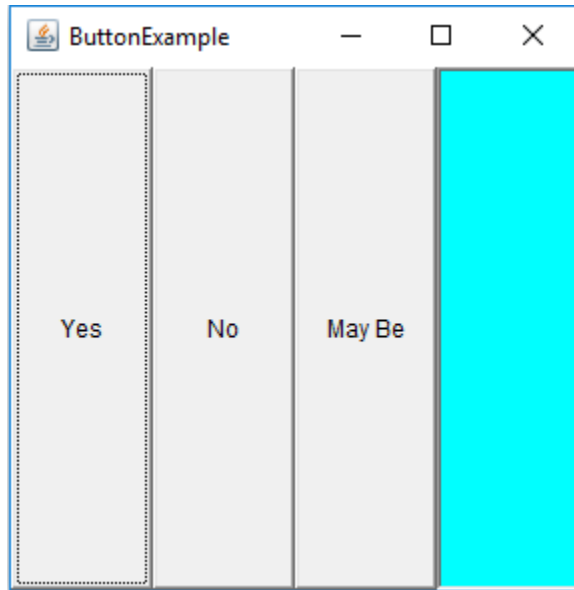


- Will adding two frames work?
- If not, what is the solution?

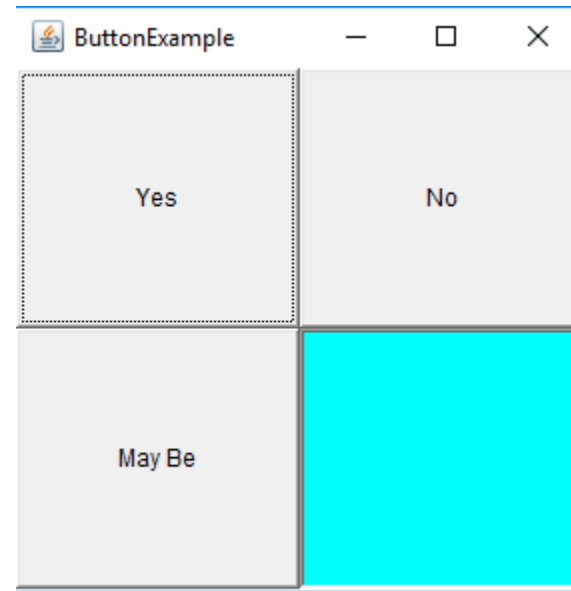


Grid Layout

- Lays the components in a two dimensional grid



No argument constructor



Two argument constructor

Review Question



- Design the mine sweeper game using 25 buttons arranged in a 5 x 5 grid layout.

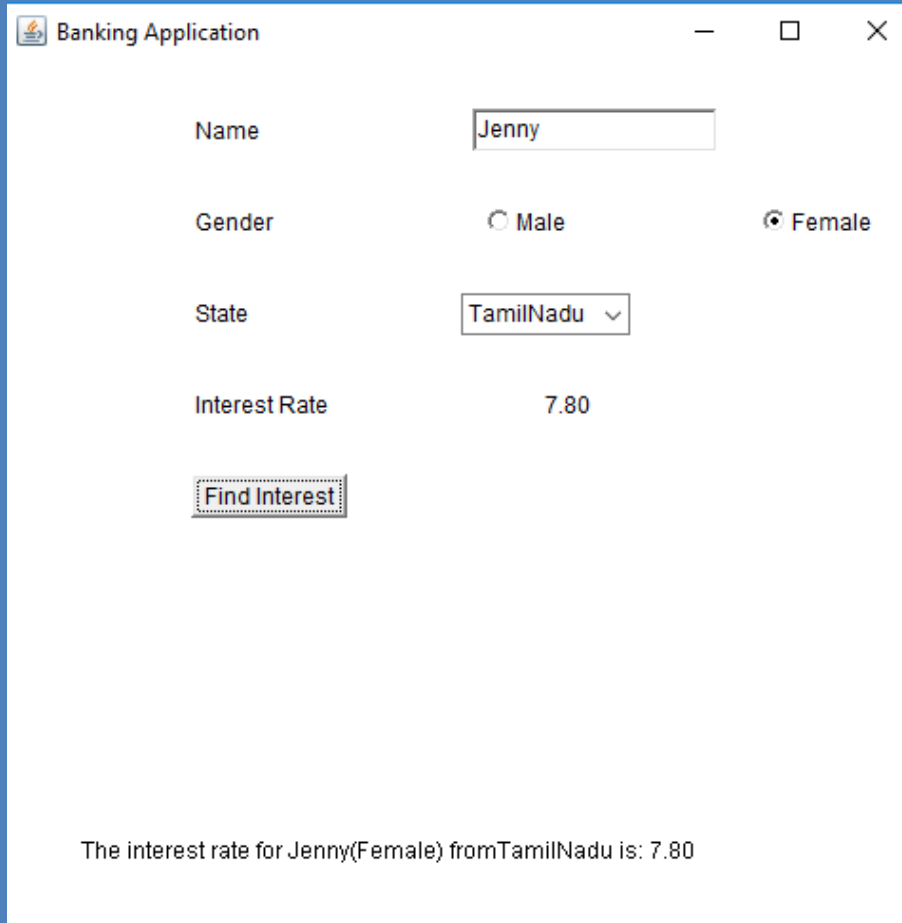
Let's put things together

innovate

achieve

lead

(code available on : <https://github.com/JenniferRanjani/Object-Oriented-Programming-with-Java>)



Banking Application

Name: Jenny

Gender: ☐ Male ☒ Female

State: TamilNadu

Interest Rate: 7.80

Find Interest

The interest rate for Jenny(Female) fromTamilNadu is: 7.80

Review Question



Update the Banking Application to display an error message when the user tries to submit the form before entering the name or selecting the gender or the state. The initial appearance of the GUI is shown below

A screenshot of a Java Swing window titled "Banking Application". The window contains a form with the following elements:

- Name:** A text input field with the placeholder text "Enter your name".
- Gender:** Two radio buttons labeled "Male" and "Female".
- State:** A dropdown menu currently showing "None".
- Interest Rate:** A text input field containing the value "0.0".
- Find Interest:** A button at the bottom of the form.

Grid Bag Layout



- It places components in a grid of rows and columns, allowing specific components to span multiple rows and columns
- Not all rows and columns necessarily have the same height and width respectively.
- It has more control over how the components are arranged.
- Location and size of each component is determined by a set of constraints linked to it.

Grid Bag Layout



- Refer the GitHub link for an example code. Play with it to understand the impact of the grid bag constraints.