

## What Have We Learned?

(15 & 16-OOD Post-read)

- TUI versus GUI
  - TUI
    - Software tends to control sequence of user actions
    - Data entry?
      - Software forces entry of data in a specific order
  - GUI
    - Software allows user to determine sequence of actions
    - Data entry?
      - User may enter data in any order they choose, based on GUI controls in window
- Impact on MVC?
  - TUI
    - Controller tells view what to do next
  - GUI
    - View tells controller what the user has done

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Slide 1

## What Have We Learned?

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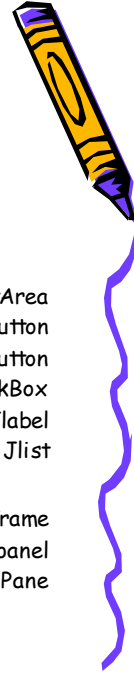
- GUI concepts (using Java terminology)
  - User controls
    - Aka graphical components/objects
    - Generally one of two types
      - A graphical object that the user interacts with
      - A graphical object that contains other graphical objects
  - User events
    - Aka user messages
    - E.g., mouse click, mouse movement, keyboard press
  - Listener methods
    - Reacts to user events
    - Code reacts to any user event the software "cares about"

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Slide 2

# What Have We Learned?

(15 & 16-OOD Post-read)



- GUI concepts (using Java terminology)

- Types of user controls

- |                                    |                       |
|------------------------------------|-----------------------|
| • Text box                         | JTextField, JTextArea |
| • Push button                      | JButton               |
| • Radio button (aka option button) | JRadioButton          |
| • Check box                        | JCheckBox             |
| • Labels                           | JLabel                |
| • List box                         | JList                 |

- Container user controls

- |                            |             |
|----------------------------|-------------|
| • Window                   | JFrame      |
| • Part of a window         | Jpanel      |
| • Scrollable area of widow | JScrollPane |