

Answer Lab05

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Question: What are the differences between the Swing and AWT implementation?

1. Top-Level Containers:

- AWT:

- + The primary top-level container used in AWT is Frame. It represents a standard window with title, border, and buttons.

- + AWT top-level containers are heavyweight and depend on the native windowing system.

- Swing:

- + The primary top-level containers used in AWT are JFrame, JWindow, JDialog and JApplet. Swing top-level containers are lightweight and more flexible.

- + They provide pluggable look-and-feel (PLAF) and more control over component rendering.

2. Component Class Names:

- AWT: Component names are often generic, like Button, TextField, and Checkbox.

- Swing: Swing components have a more descriptive naming convention, like JButton, JTextField, and JCheckBox. This improves code readability and maintainability.

3. Event Handling:

- AWT: Relies on a single listener interface (EventListener) for all events. This can lead to cluttered code.

- Swing: Uses a more specific event model with dedicated listener interfaces for different events

- For example, ActionListener for button clicks, MouseListener for mouse interactions.

- => This improves code organization and clarity.

4. Appearance:

- AWT: The appearance of AWT components is determined by the native GUI toolkit of the platform they run on.

=> This means that AWT applications look different on different operating systems.

- Swing: Swing supports pluggable look-and-feel, which means you can change the appearance of your application to mimic different operating systems