Introduction to GUI

* GUI – Graphical User Interface
* GUI is a type of user interface that allows users to interact with the screen using graphical components (visual indicator) rather than text commands.

Two APIs (Application Program Interface):-

* There are two sets of java APIs for graphics programming
* AWT (Abstract Windrowing Toolkit)
* Swing
* FX

AWT:-

* It only consists 12 packages
* Only 2 packages java.awt and java.awt.event are commonly used

Classes in AWT:-

The java.awt package contains the core AWT graphics class

* GUI container classes (such as Frame, Panel, Dialog and ScrollPane)
* GUI components classes (such as button, Textfield and Label)
* Layout manager (such as FlowLayout, BordrLayout and GridLayout)
* Custom Graphics clsses (such as Graphics, color and Front)

AWT events:-

The java.awt.event packages support event handling

* Event classes(such as ActionEvent, MouseEvent and WindowEvent)
* Event Listener Interface( such as ActionListener, MouseListener, KeyListener and WindowListener)

Container:-

* A Frame is the top-level container of an AWT GUI program
* A Frame has a title bar (containing an icon, a title and the minimize/maximize(restore-down/close button) an optional menu bar and the content display area.
* A panel is a rectangular area (or patition) used to Group related GUI component
* In a GUI program, a component must be kept in a container
* Every container has a method called add(Component c)
* Every GUI program has a top level container the commonly used top level container in AWT are Frame, Dialog, and Applet.

