**Java SWING**

The role of SWING in java is to allow the programmers and developers to create graphical user interfaces (GUI) with buttons, text areas and scroll bars etc. that will run independent to the windowing system on whatever operating system the user is using. Thus giving a more consistent look and feel across platforms such as if the user is using a Windows base system then the window frames and components will use the Windows style and the same as if the user use’s Linux or Mac.

There are a number of different components SWING uses to create a GUI’s such as JLabel, JCheckBox, JSlider, JComboBox, JProgressBar and JToggleButton.

SWING was created because AWT was too inconsistent across platforms while SWING was built on top of AWT it did not replace it. While AWT was faster when SWING was first introduced this is not something that is noticed nowadays with the speed of today’s devices. When creating a GUI, AWT components should not be mixed with SWING components and vice versa as it can cause problems.

The advantages of using SWING over AWT is,

* Swing provides additional components and functionality to its AWT equivalent
* The look and feel of the components been used match the platform that they are been used on
* Its lightweight and uses less resources