

Analysis of Graphical User Interface Framework and its Comparison of a Two Frame JavaFX and Swing

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Abstract: Interacts with a user application and website it is an important role of a development. It is with a customer and application attraction and smooth working of application. And focus a quality of application and it's uses it connected to a function of application and response of application.

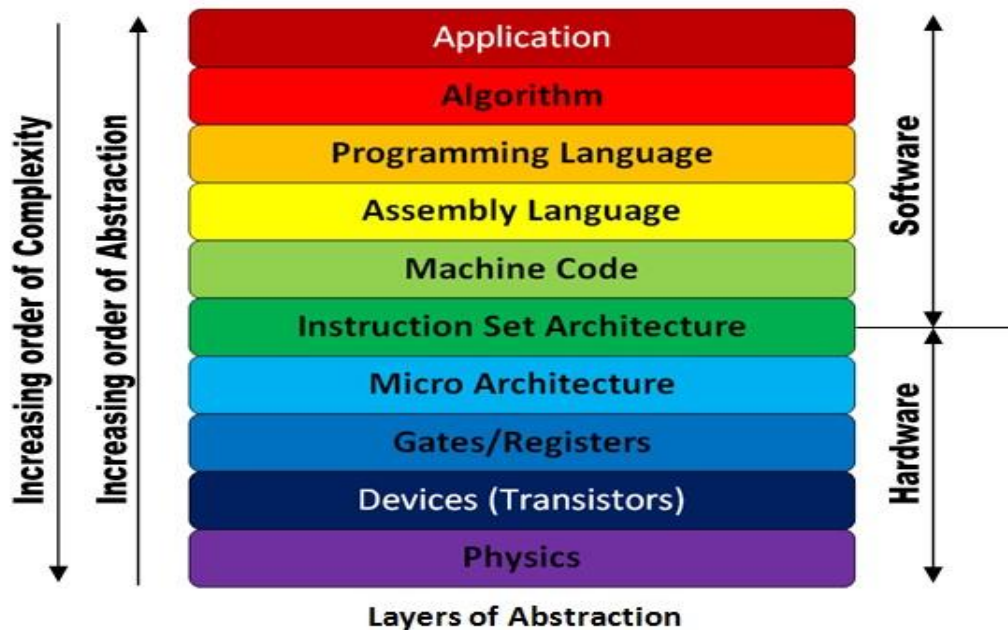
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I. INTRODUCTION

Graphical user interface (GUI) is a using to attract an application and user it is a crucial phase of development in software. Before a GUI it is more typical to attract with learner and user. People are using CUI in a development. GUI is a boom of its sector. GUI not only attracts with people but also attracts a people with computers.

GUI is a main aim not only attract with people but also help to easy to use an application and web development.

The same is true for GUIs: Folder icons are not real folders on your screen, and when you drag a file into your trash can, you are obviously not putting something in a real trash bin. These are merely abstractions of the underlying software code.



It is a main advanced concept of a graphical abstraction interface using of an instruction assembly code programming language algorithm using to attract with user and application. In this platform we are comparing with 2 frameworks: JavaFx, Swing.

JavaFx

JavaFX is a design and developed application GUI for a beginner and professional. It developed a Java application in this framework.

JavaFX is replaced with a swing framework It is a lightweight process and hardware accelerated it is supported varies OS system like windows mac and Linux it main features its own components

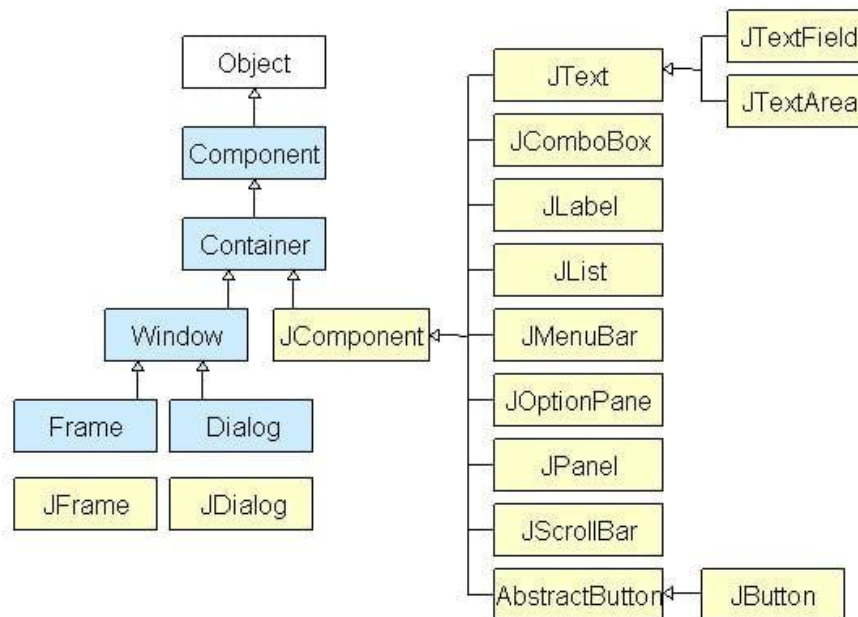
Features of JavaFX

- Java Library: it is many classes and interface that are written in java.
- FXML: it is a xml-based language to use a more enhance Gui user interface using coding.
- Scene Builder: Scene Builder generates FXML mark-up which can be ported to an IDE.
- Canvas API: canvas API is directed implement a area of java fxscene
- Graphic pipeline: JavaFX graphic are based on graphic pipeline it smooth graphic hardware accelerated.
- Self-contained application deployment model: Self-Contained application packages have all the application resources and a private copy of Java and JavaFX Runtime
- Integrated Graphic libraries: Integrated graphic libraries provide a it provides deals with 2d and 3d image.
- Swing interoperability: It provides a library to swing code in swing framework to better usability.

Swing

Swing is a java application for using graphic design toolkit for user a application for using a java application it is present a java foundation class for using a java application foundation it is a built on a java we can use simple java program component like button textbox etc.

Java swing class hierarchy diagram



All java swing component are added in container class they are known as Jcomponent.

Container class

Container class are those class that have another component using a java for we are using a java swing framework we need at least one container object they are mainly 3 types.

Panel

It is a pure container it is not a window in itself. It is a main purpose of panel to organise all component on to a window.

Frame

It is a fully function windows it is title and icon.

Dialog

It can be thought like a pop-up window and pop out window it is like frame it is not a fully function.

What is swing developer benefit for a java developer?

JavaFX Media Support

FXML is a xml-based language is used to create a java UI component is using a declarative approach but java swing never offered a declarative approach the declarative approach is practically suitable for scene graph.

Animation

Animation in JavaFX is a provide a dynamically webpage and a model view controller provide it is also providing a java swing framework but not a state forward. It contains a doubled buffer for contains a rendering model and painting. All alternations of object properties and a position with time render on dabled buffer if is painting completed when final result painted into the screen. JavaFX enable developer to graphical object in their application object to related a particular API design for specific purpose.

JavaFX Scene Builder

To help a builder a JavaFX Scene builder is a component to using a drag and drop facility offered. It is a developed a FXML code generated that can be used in a to enable a ide such as NetBeans and an eclipse.

HTML Content

For a long time, Swing developers have wanted the ability to render HTML content in Java applications. JavaFX brought this feature to life by providing a user interface component that has web view and full browsing functionality.

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