JAVAFX 2.0
THE PREMIER PLATFORM FOR RICH ENTERPRISE CLIENT APPLICATIONS

RICH CLIENT APPLICATION DEVELOPMENT MADE EASY

KEY FEATURES

- Java APIs for JavaFX
- FXML - an XML-based markup language for defining user interfaces
- Seamless integration into Swing applications
- High-performance hardware accelerated graphics
- Embedding of web content into JavaFX
- High-performance media engine
- Improved UI controls library

KEY BENEFITS

- Leverage your existing Java skills and tools to develop JavaFX applications.
- Clean separation of application UI and logic simplifies code maintenance
- Integrate Web content and media seamlessly in your Java application
- Create scalable, graphics-rich applications without performance penalties
- Build sophisticated user interfaces and extend existing Swing applications
- Deploy applications in browser, as desktop applications, or Web Start applications

JavaFX 2.0 is the next step in the evolution of Java as a rich client platform. It is designed to provide a modern Java environment that shortens the development time and eases the deployment of data driven business and enterprise client applications. Starting with version 2.0, JavaFX applications are completely developed in Java, which has become ubiquitous with over 9 million developers worldwide.

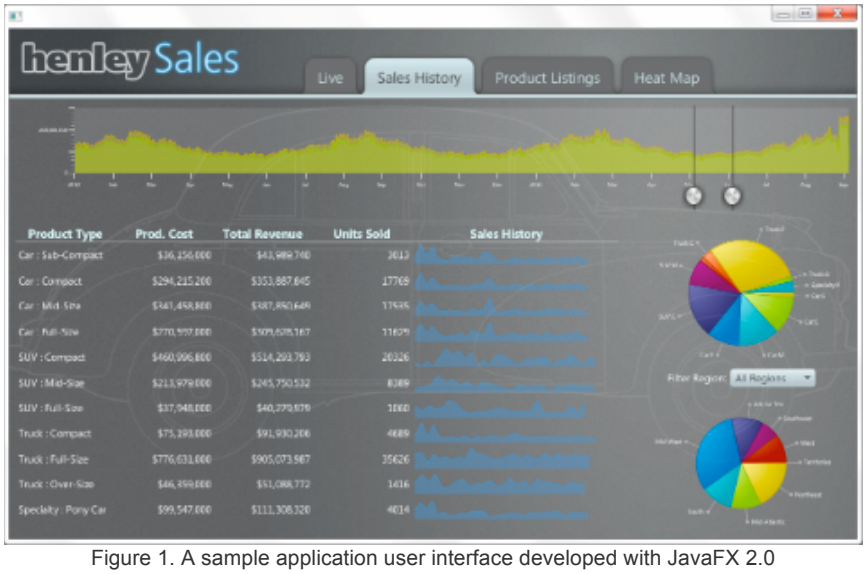

Figure 1. A sample application user interface developed with JavaFX 2.0

The Next Step in the Evolution of Java as a Rich Client Platform

The JavaFX platform enables application developers to easily create and deploy Rich Internet Applications (RIA) that behave consistently across multiple platforms. Built on Java technology, the JavaFX platform provides a rich set of graphics and media API with high-performance hardware-accelerated graphics and media engines that simplify the development of data-driven enterprise client applications. Investing in the JavaFX platform provides multiple advantages to Java developers and companies that are part of the Java ecosystem, including the ability to leverage existing Java skills and development tools, as well as extending Swing applications, thus providing a migration path towards more modern and flexible UI technologies.

SYSTEM REQUIREMENTS

The JavaFX 2.0 Runtime and the JavaFX 2.0 Software Development Kit (SDK) are available for the following environments:

- Windows XP 32-bit
- Windows Vista 32-bit and 64-bit
- Windows 7 32-bit and 64-bit
- Java SE 6 or Java SE 7

RELATED PRODUCTS

- JavaFX 2.0 Beta for Mac OS
- NetBeans IDE
  - JavaFX project integration
  - Visual debugging
- JavaFX Scene Builder
  - Visual design tool for JavaFX
  - Supports FXML code generation
- JavaFX UI Controls OpenJDK Project
  - Open Source project
  - Based on JavaFX 2.0 UI controls

Features Overview

Java APIs for JavaFX

- End-to-end Java development
- Java language features—generics, annotations, multi-threading
- Reduced static footprint of runtime and applications
- Fluent API design for UI construction
- Development in alternative languages (e.g. JRuby, Groovy) with JavaFX
- Leverage sophisticated Java IDEs, debuggers and profilers
- Java APIs preserve convenient JavaFX Script features (e.g., bind)

FXML

- Scriptable, XML-based markup language for defining user interfaces
- Convenient alternative to developing UI programmatically in Java
- Easy to learn and intuitive for developers familiar with web technologies or other markup based UI technologies
- Powerful scripting feature allows embedding scripts within a FXML file. Any JVM scripting language can be used, including JavaScript, Groovy, and Clojure, among others

New Graphics Pipeline for Modern GPUs

- New hardware accelerated graphics pipeline (Prism)
- New windowing toolkit (Glass) for Prism
- Java2D software pipeline for unsupported graphics hardware
- High-level support for making rich graphics simple: Shadows, Blurs, Reflections, Effects, 2D and 3D transforms

Rich Set of UI Controls

- Over 50 components for form-based UI, including charts, layout and form controls
- CSS3+ skinning and layout of UI controls
- Advanced UI controls, including table, tree view, rich text editor

Web Component

- Embed Web content in JavaFX applications
- HTML and JavaScript rendering based on Webkit
- DOM access and manipulation from Java

Browser Plug-in Refreshed for JavaFX 2.0

- Loading of JavaFX applets based on Prism
- Preloader for JavaFX applets for improved user experience

Powerful Properties Model

- New collections ObservableList, Sequence and ObservableMap
- New design and implementation of bean properties
- Low level binding API for high performance, low footprint bindings
- High level binding API for simple usage

Improved Animation Engine

- Optimized implementation of transitions
- Complete overhaul of API to simplify usage and in preparation of optimized and more stable implementation

Sample Applications

JavaFX lends itself to the development of rich client applications featuring data visualization, media streaming, seamless integration of Web content, hardware accelerated graphics, animations, effects, a rich set of UI controls, and more. JavaFX applications can be deployed within a browser page, or as desktop applications, and leverage the strengths of the underlying Java platform, including a robust security model, thousands of APIs, high performance Virtual Machine, and years of optimization.

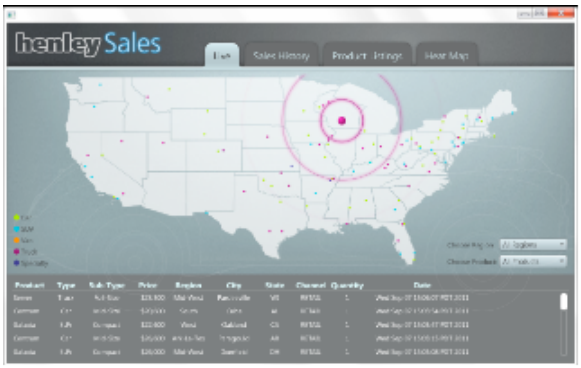

Figure 2. Data visualization using a mix of FXML and JavaFX

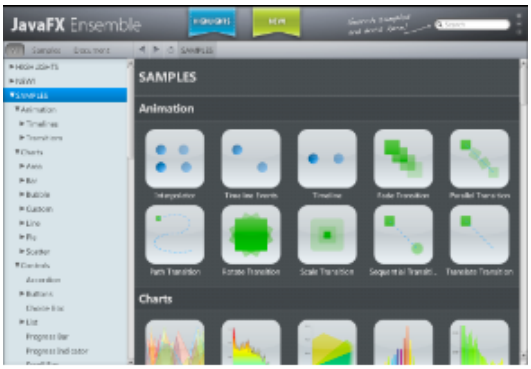

Figure 3. A gallery of over 100 JavaFX features

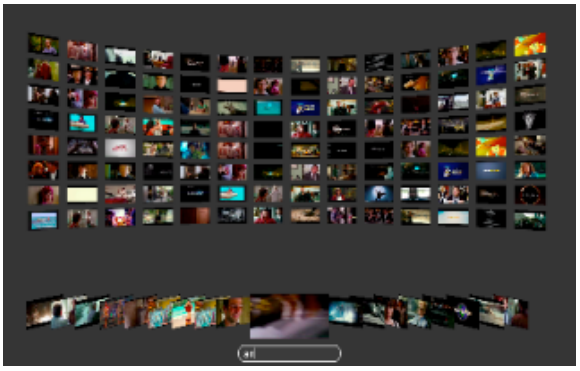

Figure 4. A video wall displayed using perspective 3D

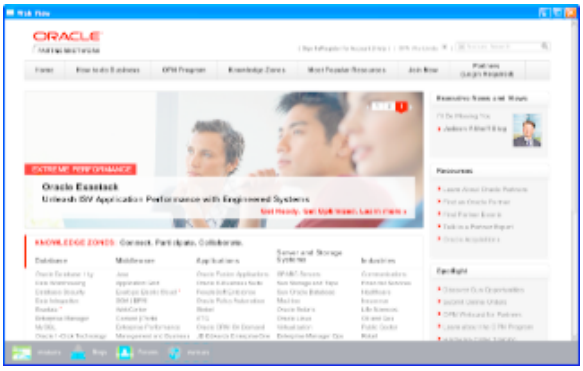

Figure 5. Web component with navigation toolbar

Contact Us

For more information about JavaFX, visit oracle.com/javafx or call +1.800.ORACLE1 to speak to an Oracle representative.

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Hardware and Software, Engineered to Work Together