# COMP2511 JavaFX

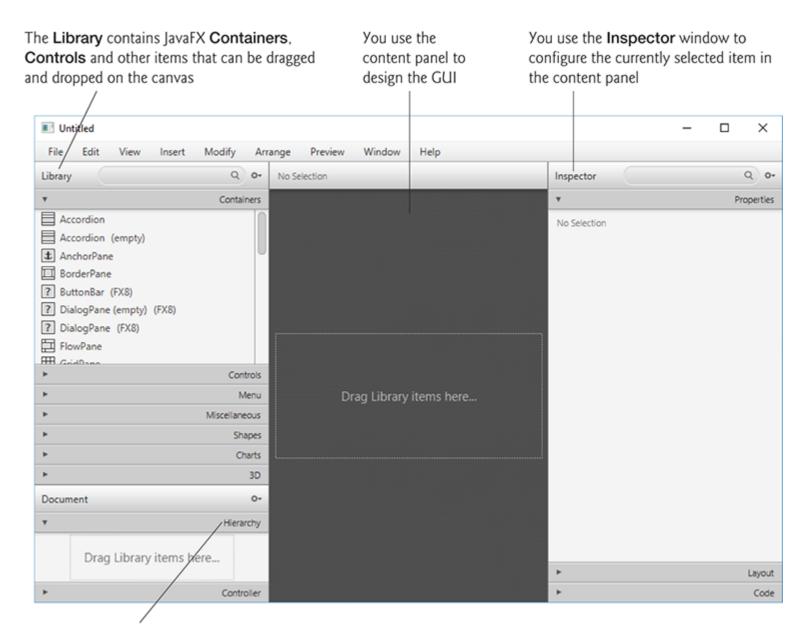
Prepared by

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# JavaFX

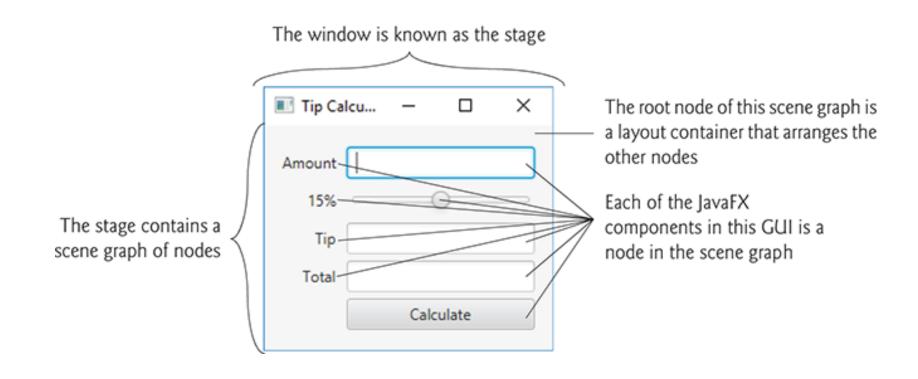
#### **JavaFX**

- Java's original GUI library was the Abstract Window Toolkit (AWT).
- Swing was added to the platform in Java SE 1.2.
- JavaFX is Java's GUI, graphics and multimedia API.
- JavaFX has better threading support, uses the GPU (graphics processing unit).
- JavaFX supports transformations for repositioning and reorienting JavaFX components, and animations for changing the properties of JavaFX c
- The Scene Builder tool is a standalone JavaFX GUI visual layout tool.
- JavaFX Scene Builder enables you to create GUIs by dragging and dropping GUI components.
- JavaFX Scene Builder generates **FXML (FX Markup Language)**—an XML vocabulary for defining and arranging JavaFX GUI controls without writing any Java code.
- The FXML code is separate from the program logic that's defined in Java source code—this
  separation of the interface (the GUI) from the implementation (the Java code) makes it easier to
  debug, modify and maintain JavaFX GUI apps.



The **Document** window's **Hierarchy** section shows the structure of the GUI and allows you to select and reorganize controls

## JavaFX App Window Structure



## Getting Started with JavaFX Scene Builder

• <a href="https://docs.oracle.com/javase/8/scene-builder-2/get-started-tutorial/overview.htm#BABJCAGB">https://docs.oracle.com/javase/8/scene-builder-2/get-started-tutorial/overview.htm#BABJCAGB</a>

# Layouts

• <a href="https://www.tutorialspoint.com/javafx/javafx\_layout\_panes">https://www.tutorialspoint.com/javafx/javafx\_layout\_panes</a>

#### **UI Controls**

• <a href="https://www.tutorialspoint.com/javafx/javafx\_ui\_controls.htm">https://www.tutorialspoint.com/javafx/javafx\_ui\_controls.htm</a>

#### JavaFX Exercise Demo

• Demo of the JavaFX exercise, please watch the video.

#### **JavaFX Animation Demo**

• Demo of the JavaFX Animation, please watch the video.

https://docs.oracle.com/javase/8/javafx/visual-effects-tutorial/basics.htm

# Week-07 Tut/Lab on JavaFx

- Hands-on self study exercises and lab exercises on JavaFx during week-07.
- Application of Observer Pattern.

#### End