Marlene Rodriguez

CSD402 Java For Programmers

5/10/2025

JavaFX is a set of graphics and packages that allow the designers to design, test, and put out applications that operate on many different platforms. The two that I will be covering are the JavaFX Scroll Pane, and the JavaFX Titled Pane.

JavaFX Scroll Pane is almost self-explanatory where it is a container that has two different scroll bars. One scroll bar being used for horizontal scrolling and the other scroll bar being used for vertical scrolling. With these two scroll bars the user will be able to view all content within the pane. The scroll panes come into effect if the content does end up being much larger than the pane itself. With the scrolls, the user will not be able to view the full content which is why both horizontal and vertical are added. As mentioned earlier, the advantage of a Scroll Pane is that it allows a user to view all of elements/content within the container.

The ScrollPane() is a default constructor. Methods that are frequently used for this graphic package are setContent(), setPannable(true), setPrefSize(), setVbarPolicy(), and setHbarPolicy(). These methods hold a design method for how a designer would want the scroll pane to appear. To briefly talk about the methods, using the methods are beneficial for a variety of reasons and here is why,

The setContent() method allows a designer to input the content within the scroll pane.

SetPannable(true) is a method for previewing the image by clicking on it.

setPrefSize() allows a designer to set the size of a scroll pane that can make it easier for users to view.

setVbarPolicy() and setHBarPolicy() is self-explanatory and sets a policy for both the horizontal scroll pane and sets a policy for the vertical scroll pane.

The steps to creating a scroll pane can be created in six steps as follows:

1. Creating the Scroll pane

Ex: ScrollPane scrollPane = new ScrollPane();

1. Adding the elements and bar policies into the feature

Ex: scrollPane.setContent();

scrollPane.setVbarPolicy(); //or can use Hbar for horizontal policy

1. Create the pane / display

Ex: tPane = new TilePane ( );

1. Create the screen to display the output

Ex: Scene screen = new Scene(tPane, length, width);

1. Creating a Screen reference to stage the object
2. Display the output

Ex: stage.show();

The examples will be incorporated in another file as a full example. The importance of the scroll pane is to provide a pane that has a scrollable view for all the contents within it.

Like the Scroll Pane, the JavaFX Tile Pane is a feature that contains methods to be customed to what the designer wants. The Tile Pane is a layout component that arranges the nodes in uniformly sized tiles in either vertically method or horizontal arrangement. The methods for a Tile Pane are similar but unique to the Scroll Pane. A few methods are TilePane(double hGap, double vGap, Node childNodes, and TilePane(Orientation orientation). This pane also contains many properties which feature alignment, hgap, vgap, orientation, prefColumns, prefRows, prefTileHeight, prefTileWidth, tileHeight, tileWidth, and tileAlignement.

The steps to creating a TilePane are the following,

1. Added TilePane to the scene
2. Add the number of columns and rows to be added
3. Create the Tile Pane layout
4. Customize the Layout

As mentioned in the properties these features can control the alignments vertical and horizontal orientations, the height and the width of each tile. Setting the parameters can get more technical depending on the layout of the pane and how many elements are in them, but once mastered, it will lead to beneficial content that will have a clean layout and be easy to view.

[Javafx Scrollpane | Learn How to Create ScrollPane in JavaFX?](https://www.educba.com/javafx-scrollpane/)

[JavaFX TilePane Layout](https://www.tutorialspoint.com/javafx/javafx_tilepane_layout.htm)