JAVAFX TOOL DISCUSSION

Tyler O’Riley

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The two topics I will be reviewing today include the JavaFX GridPane tool and JavaFX BorderPane tool. JavaFX is one of many modern GUI’s that can be utilized using Java code to produce graphical outputs. As we review each topic, I will provide screen images of programs I created based on the architecture of code provided by JavaPoint website. The intent of this is to show my guided notes with syntax I chose to use for variable names. This way it can be easy to follow along with what each bit of code accomplishes.

Our first topic is about the GridPane tool. Grids are a universal topic across most graphical interface programs whether it is a language like Java or HTML or everyday use in a PowerPoint presentation or Excel Sheet layout. JavaFX sets out to accomplish grid layouts to allow the users a way to organize items in a certain order and even allow labels to be attached as well. The syntax to use this method is not as complicated as you may think either. Just like a language such as HTML, you build the grid utilizing row and column methods. In JavaFX these methods are defined as addRow and addColumn. To show where this code fits, refer to the image below for our first program that shows how to create a basic grid.

A screen shot of a computer program

Description automatically generated with low confidence

In this program, I used code architecture provided by [JavaPoint](https://www.javatpoint.com/javafx-gridpane) to create a basic grid that display two different items using two rows with a third row that displays a submit button. For clarity, I did not use any column syntax to keep the program easy to read and understand. A key detail to note is the usage of objects to store the methods to create returned values. This is done so that when we go to stage and view our results, they can be pulled as parameters to be viewed. Overall, creating a grid is not a complicated process but can require a fair amount of code depending on the size and diversity of the grid you are looking to create.

For our next topic we will be reviewing the JavaFX tool BorderPane. Not as indepth as grids, the BorderPane tool in FX is primarily used for border creation along set parameters along your stage view. This is an important tool to use as it can help with clarity on what a user is looking at. For context, using the Windows OS, something many folks do not think about is how the display windows look when they use various features. If you look closely, you will notice there are two distinct border features happening with these displays. One can be noted as a thin black border to give a sharp contrast against other displays it may be overlapping. The other is the faint shadow effect created off the thin line to create a broader area of distinction as to where the edges of the display are. It’s a feature we take for granted but comes in handy when you have a lot of windows open at the same time.

Our example for this program will follow suit with our previous one with the aim to be simple and easy to read. Our syntax is again utilized from [JavaPoint](https://www.javatpoint.com/javafx-borderpane) but written out in my format to provide notes on what each part of the program does.

A screen shot of a computer program

Description automatically generated with low confidence

In this program, we are simply aiming to identify where are borders are to show what each bit of syntax looks like for each piece of a border display. Unlike programs like Microsoft Office, we don’t just focus on the border as a single whole object, rather we focus on each side of the border to better define each side depending on the contents being stored within. Just as with the GridPane tool, we will use an object to store the data gathered by the attached methods. In this case our method is the BorderPane() tool that works alongside the setTop, setLeft, etc. to use variables for each side of the border that they are designated for. Our program is simple as it just displays text at the site of each border side to simply identify where they are on our stage view. This syntax can grow as you use graphical attributes to display your physical border.

JavaFX is a program that has many, many tools that could take hours to discuss. For today I chose mainly to focus on some simple but important topics that help with the overall layout of your FX output. There is still an abundance to discuss about these topics and how we can better use them for graphical display but for today I wanted to provide their core purpose for use in JavaFX.

SOURCES

“JavaFX Borderpane - Javatpoint.” *Www.Javatpoint.Com*, www.javatpoint.com/javafx-borderpane. Accessed 27 June 2023.

“JavaFX GridPane - Javatpoint.” *Www.Javatpoint.Com*, www.javatpoint.com/javafx-gridpane. Accessed 27 June 2023.