Sources:

CISC190 Java Programming

GitHub Copilot

A close-up of a text

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A black text on a white background

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if (nodeName.getStyleClass().contains("className")) {

// The node contains the class name

System.out.println("The node contains the class name.");

} else {

// The node does not contain the class name

System.out.println("The node does not contain the class name.");

}

In this code, replace nodeName with your node's variable name and className with the class name you want to check.

**Big program Example:**

**package** application;

**import** javafx.application.Application;

**import** javafx.stage.Stage;

**import** javafx.scene.Scene;

**import** javafx.scene.control.Label;

**import** javafx.scene.control.Button;

**import** javafx.scene.control.TextField;

**import** javafx.scene.image.Image;

**import** javafx.scene.image.ImageView;

**import** javafx.scene.layout.HBox;

**import** javafx.scene.layout.VBox;

**import** javafx.scene.layout.GridPane;

**import** javafx.scene.layout.BorderPane;

**import** javafx.geometry.Insets;

**import** javafx.event.ActionEvent;

**import** javafx.event.EventHandler;

**public** **class** **Main** **extends** Application {

**public** **Label** label1;

**public** **Button** button1;

**public** **Button** button2;

**public** **Button** button3;

**public** **Button** button4;

**public** **Button** searchButton;

**public** **Button** button5;

**public** **Button** button6;

**public** **Button** button7;

**public** **Button** bottomButt1;

**public** **Button** bottomButt2;

**public** **Button** bottomButt3;

**public** **Label** aboutLabel;

**public** **TextField** textField1;

**public** **Label** searchLabel;

**public** **Image** image1;

**public** **ImageView** imageView1;

**public** **Image** image2;

**public** **ImageView** imageView2;

**public** **Image** image3;

**public** **ImageView** imageView3;

**public** **HBox** hbox;

**public** **HBox** hbox2;

**public** **HBox** bottomHbox;

**public** **VBox** LeftVBox;

**public** **BorderPane** borderPane;

**public** **Scene** scene;

**public** **static** **void** **main**(**String**[] args) {

***launch***(args);

}

**@Override**

**public** **void** **start**(**Stage** primaryStage) {

primaryStage.**setTitle**(**"GUI Applicaiton"**);

label1 = **new** **Label**(**"Welcome"**);

button1 = **new** **Button**(**"🏠 HOME"**);

button1.**getStyleClass**().**add**(**"home\_button"**);

button2 = **new** **Button**(**"⏬ MENU"**);

button2.**getStyleClass**().**add**(**"menu\_button"**);

button3 = **new** **Button**(**"! ABOUT"**);

button3.**getStyleClass**().**add**(**"about\_button"**);

button4 = **new** **Button**(**"? HELP"**);

button4.**getStyleClass**().**add**(**"help\_button"**);

aboutLabel = **new** **Label**(**"ABOUT: This is a Testing App"**);

aboutLabel.**getStyleClass**().**add**(**"about\_label"**);

aboutLabel.**setPadding**(**new** **Insets**(**10**));

textField1 = **new** **TextField**();

textField1.**getStyleClass**().**add**(**"textField\_search"**);

searchButton = **new** **Button**(**"🔎 SEARCH"**);

searchButton.**getStyleClass**().**add**(**"search\_button"**);

searchLabel = **new** **Label**(**""**);

searchLabel.**getStyleClass**().**add**(**"search\_label"**);

searchLabel.**setPadding**(**new** **Insets**(**10**));

button3.**setOnAction**(**new** **ButtonClickHandler**());

searchButton.**setOnAction**(**new** **ButtonClickHandler2**());

button5 = **new** **Button**(**"IMAGE"**);

button5.**getStyleClass**().**add**(**"image\_button"**);

button6 = **new** **Button**(**"STORAGE"**);

button6.**getStyleClass**().**add**(**"storage\_button"**);

button7 = **new** **Button**(**"DESIGN"**);

button7.**getStyleClass**().**add**(**"design\_button"**);

image1 = **new** **Image**(**"file:wallpaper1.jpg"**);

imageView1 = **new** **ImageView**(image1);

imageView1.**setPreserveRatio**(**true**);

imageView1.**setFitWidth**(**300**);

imageView1.**setFitHeight**(**300**);

image2 = **new** **Image**(**"file:wallpaper2.jpg"**);

imageView2 = **new** **ImageView**(image2);

imageView2.**setPreserveRatio**(**true**);

imageView2.**setFitWidth**(**300**);

imageView2.**setFitHeight**(**300**);

image3 = **new** **Image**(**"file:wallpaper3.jpg"**);

imageView3 = **new** **ImageView**(image3);

imageView3.**setPreserveRatio**(**true**);

imageView3.**setFitWidth**(**300**);

imageView3.**setFitHeight**(**300**);

bottomButt1 = **new** **Button**(**"Privacy Policy"**);

bottomButt1.**getStyleClass**().**add**(**"privary\_policy\_button"**);

bottomButt2 = **new** **Button**(**"Copyright"**);

bottomButt2.**getStyleClass**().**add**(**"copyright\_button"**);

bottomButt3 = **new** **Button**(**"Terms of Use"**);

bottomButt3.**getStyleClass**().**add**(**"terms\_of\_use\_button"**);

hbox = **new** **HBox**(**10**, button1, button2, button3, button4, textField1, searchButton);

hbox.**getStyleClass**().**add**(**"top\_nav\_bar"**);

hbox.**setPadding**(**new** **Insets**(**10**));

hbox2= **new** **HBox**(**10**,imageView1, imageView2, imageView3);

hbox2.**setPadding**(**new** **Insets**(**20**));

LeftVBox = **new** **VBox**(**10**, button5, button6, button7);

LeftVBox.**getStyleClass**().**add**(**"left\_nav\_bar"**);

LeftVBox.**setPadding**(**new** **Insets**(**10**));

bottomHbox = **new** **HBox**(**10**, bottomButt1, bottomButt2, bottomButt3);

bottomHbox.**getStyleClass**().**add**(**"bottom\_nav\_bar"**);

bottomHbox.**setPadding**(**new** **Insets**(**10**));

borderPane = **new** **BorderPane**();

borderPane.**setTop**(hbox);

borderPane.**setLeft**(LeftVBox);

borderPane.**setCenter**(hbox2);

borderPane.**setBottom**(bottomHbox);

scene = **new** **Scene**(borderPane);

scene.**getStylesheets**().**add**(**"file:style1.css"**);

primaryStage.**setScene**(scene);

primaryStage.**show**();

}

**class** **ButtonClickHandler** **implements** EventHandler<ActionEvent>{

**@Override**

**public** **void** **handle**(**ActionEvent** event) {

hbox.**getChildren**().**add**(aboutLabel);

}

}

**class** **ButtonClickHandler2** **implements** EventHandler<ActionEvent>{

**@Override**

**public** **void** **handle**(**ActionEvent** event) {

**String** **userInput** = textField1.**getText**();

searchLabel.**setText**(**"Search Result: "**+userInput);

hbox.**getChildren**().**add**(searchLabel);

}

}

}

**Syntax in style1.css**

.top\_nav\_bar {

-fx-background-color:black;

-fx-border-style: solid;

-fx-border-width: 2px;

-fx-border-color: aqua;

}

.label {

-fx-background-color: black;

-fx-text-fill: white;

-fx-font-size: 20px;

-fx-border-style: solid;

-fx-border-width: 2px;

-fx-border-color: yellowgreen;

}

.home\_button, .menu\_button, .about\_button, .help\_button, .search\_button{

-fx-background-color: black;

-fx-text-fill: aqua;

-fx-font-size: 20px;

-fx-border-style: solid;

-fx-border-width: 2px;

-fx-border-color: yellowgreen;

}

.home\_button:hover, .menu\_button:hover,

.about\_button:hover, .help\_button:hover, .search\_button:hover{

-fx-background-color: aqua;

-fx-text-fill: white;

}

.textField\_search{

-fx-font-size: 20px;

-fx-border-style: solid;

-fx-border-width: 2px;

-fx-border-color: yellowgreen;

}

.about\_label, .search\_label {

-fx-background-color: black;

-fx-text-fill: white;

-fx-font-size: 20px;

-fx-border-style: solid;

-fx-border-width: 2px;

-fx-border-color: yellowgreen;

}

.left\_nav\_bar {

-fx-background-color:black;

-fx-border-style: solid;

-fx-border-width: 2px;

-fx-border-color: yellowgreen;

}

.image\_button, .storage\_button, .design\_button{

-fx-background-color: black;

-fx-text-fill: yellowgreen;

-fx-font-size: 20px;

-fx-border-style: solid;

-fx-border-width: 2px;

-fx-border-color: aqua;

}

.image\_button:hover, .storage\_button:hover, .design\_button:hover{

-fx-background-color: aqua;

-fx-text-fill: white;

}

.bottom\_nav\_bar {

-fx-background-color:black;

-fx-border-style: solid;

-fx-border-width: 2px;

-fx-border-color: aqua;

}

.privary\_policy\_button, .copyright\_button, .terms\_of\_use\_button{

-fx-background-color: black;

-fx-text-fill: white;

-fx-font-size: 20px;

-fx-border-style: solid;

-fx-border-width: 2px;

-fx-border-color: yellowgreen;

}

.privary\_policy\_button:hover, .copyright\_button:hover, .terms\_of\_use\_button:hover{

-fx-background-color: aqua;

-fx-text-fill: white;

}

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In some cases, you may want to add specific styles to any node around your program or remove specific styles from any node around your program, here are some scenarios to consider:

+You have many css files that are imported into your program:

1. In case each css file just contains a small amount of styles, you may want to remove or add the entire file into a specific node in your JavaFX program.

+ You can write: nodeName.getStylesheets().add(getClass().getResource("cssFileName.css").toExternalForm());

Or

nodeName.getStylesheets().remove(getClass().getResource("cssFileName.css").toExternalForm());

1. In case each css file contains a large amount of styles, you may want to remove or add the entire file into a specific node in your JavaFX program, then add or remove specific styles related to specific className of any node around your program.

b.1) To remove or add the entire file into a specific node in your JavaFX program:

+ You can write: nodeName.getStylesheets().add(getClass().getResource("cssFileName.css").toExternalForm());

Or

nodeName.getStylesheets().remove(getClass().getResource("cssFileName.css").toExternalForm());

b.2) To add or remove specific styles related to specific className of any node around your program:

+ You can write:

nodeName.getStyleClass().add(“className”);

Or

nodeName.getStyleClass().remove(“className”);

I’m only provide a program example for The b.2 section because I can find the examples for other sections in other documents

**b.2 Program Example:**

Syntax in **application.css**

/\* JavaFX CSS - Leave this comment until you have at least create one rule which uses -fx-Property \*/

#butt1 {

-fx-font-size:20px;

-fx-text-fill:blue;

-fx-padding:10px;

}

#butt2 {

-fx-font-size:20px;

-fx-text-fill:green;

-fx-padding:10px;

}

.rectangle1{

-fx-fill:blue;

}

.rectangle2{

-fx-fill:green;

}

Syntax in **Main.java**

package application;

import javafx.application.Application;

import javafx.scene.Scene;

import javafx.stage.Stage;

import javafx.scene.control.Button;

import javafx.scene.layout.VBox;

import javafx.scene.shape.Rectangle;

public class Main extends Application {

@Override

public void start(Stage primaryStage) {

Button butt1 = new Button("Blue Rectangle!!!");

butt1.setId("butt1");

Button butt2 = new Button("Green Rectangle!!!");

butt2.setId("butt2");

Rectangle rect1 = new Rectangle(50, 50);

HBox hbox1 = new HBox(butt1,butt2, rect1);

butt1.setOnAction(even->{

if(rect1.getStyleClass().contains("rectangle1")==false &&

rect1.getStyleClass().contains("rectangle2")==true) {

rect1.getStyleClass().add("rectangle1");

rect1.getStyleClass().remove("rectangle2");

}

if(rect1.getStyleClass().contains("rectangle1")==false &&

rect1.getStyleClass().contains("rectangle2")==false) {

rect1.getStyleClass().add("rectangle1");

}

});

butt2.setOnAction(even->{

if(rect1.getStyleClass().contains("rectangle2")==false &&

rect1.getStyleClass().contains("rectangle1")==true) {

rect1.getStyleClass().add("rectangle2");

rect1.getStyleClass().remove("rectangle1");

}

if(rect1.getStyleClass().contains("rectangle2")==false &&

rect1.getStyleClass().contains("rectangle1")==false) {

rect1.getStyleClass().add("rectangle2");

}

});

Scene scene = new Scene(hbox1,400,400);

scene.getStylesheets().add(getClass().getResource("application.css").toExternalForm());

primaryStage.setTitle("Program 1");

primaryStage.setScene(scene);

primaryStage.show();

}

public static void main(String[] args) {

launch(args);

}

}

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