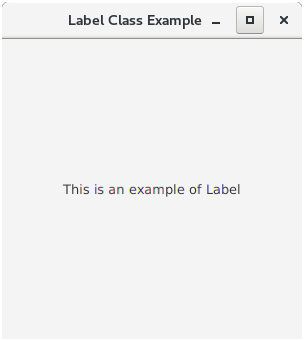
Adding a Node to the scene graph

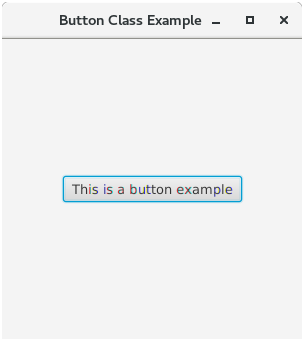
1. **package** application;
2. **import** javafx.application.Application;
3. **import** javafx.scene.Scene;
4. **import** javafx.scene.control.Label;
5. **import** javafx.scene.layout.StackPane;
6. **import** javafx.stage.Stage;
7. **public** **class** LabelTest **extends** Application {
8. **public** **void** start(Stage primaryStage) **throws** Exception {
9. Label my\_label=**new** Label("This is an example of Label");
10. StackPane root = **new** StackPane();
11. Scene scene=**new** Scene(root,300,300);
12. root.getChildren().add(my\_label);
13. primaryStage.setScene(scene);
14. primaryStage.setTitle("Label Class Example");
15. primaryStage.show();
16. }
17. **public** **static** **void** main(String[] args) {
18. launch(args);  }}



Adding a Button to the scene graph

1. **package** application;
2. **import** javafx.application.Application;
3. **import** javafx.scene.Scene;
4. **import** javafx.scene.control.Button;
5. **import** javafx.scene.layout.StackPane;
6. **import** javafx.stage.Stage;
7. **public** **class** ButtonTest **extends** Application {
8. **public** **void** start(Stage primaryStage) **throws** Exception {
9. StackPane root = **new** StackPane();
10. Button btn=**new** Button("This is a button");
11. Scene scene=**new** Scene(root,300,300);
12. root.getChildren().add(btn);
13. primaryStage.setScene(scene);
14. primaryStage.setTitle("Button Class Example");
15. primaryStage.show();
16. }
17. **public** **static** **void** main(String[] args) {
18. launch(args);
19. }
20. }

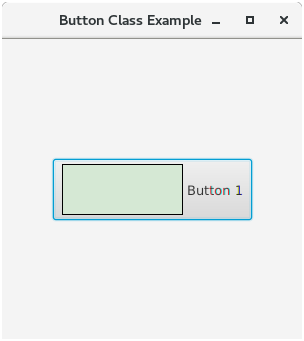
**Output:**



Setting the image on the button

1. **package** application;
2. **import** java.io.FileInputStream;
3. **import** javafx.application.Application;
4. **import** javafx.scene.Scene;
5. **import** javafx.scene.control.Button;
6. **import** javafx.scene.image.Image;
7. **import** javafx.scene.image.ImageView;
8. **import** javafx.scene.layout.StackPane;
9. **import** javafx.stage.Stage;
10. **public** **class** ButtonTest **extends** Application {
11. **public** **void** start(Stage primaryStage) **throws** Exception {
12. FileInputStream input=**new** FileInputStream("/home/javatpoint/Desktop/JavaFX/Images/colored\_label.png");
13. Image image = **new** Image(input);
14. ImageView img=**new** ImageView(image);
15. StackPane root = **new** StackPane();
16. Button btn=**new** Button("Button 1",img);
17. btn.setWrapText(**true**);
18. Scene scene=**new** Scene(root,300,300);
19. root.getChildren().add(btn);
20. primaryStage.setScene(scene);
21. primaryStage.setTitle("Button Class Example");
22. primaryStage.show();
23. }
24. **public** **static** **void** main(String[] args) {
25. launch(args);
26. }
27. }

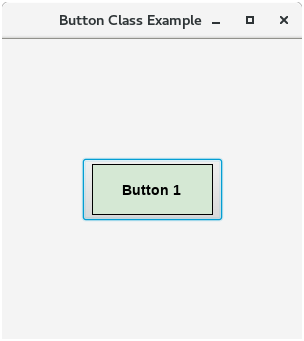
**Output:**



**Using setGraphic() method:**

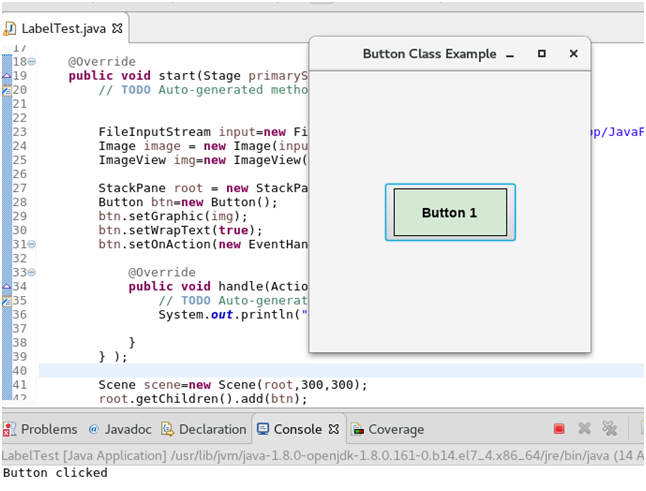
1. **package** application;
2. **import** java.io.FileInputStream;
3. **import** javafx.application.Application;
4. **import** javafx.scene.Scene;
5. **import** javafx.scene.control.Button;
6. **import** javafx.scene.image.Image;
7. **import** javafx.scene.image.ImageView;
8. **import** javafx.scene.layout.StackPane;
9. **import** javafx.stage.Stage;
10. **public** **class** ButtonTest **extends** Application {
11. **public** **void** start(Stage primaryStage) **throws** Exception {
12. FileInputStream input=**new** FileInputStream("/home/javatpoint/Desktop/JavaFX/Images/colored\_label.png");
13. Image image = **new** Image(input);
14. ImageView img=**new** ImageView(image);
15. StackPane root = **new** StackPane();
16. Button btn=**new** Button();
17. btn.setGraphic(img);
18. btn.setWrapText(**true**);
19. Scene scene=**new** Scene(root,300,300);
20. root.getChildren().add(btn);
21. primaryStage.setScene(scene);
22. primaryStage.setTitle("Button Class Example");
23. primaryStage.show();
24. }
25. **public** **static** **void** main(String[] args) {
26. launch(args);
27. }
28. }

**Output:**



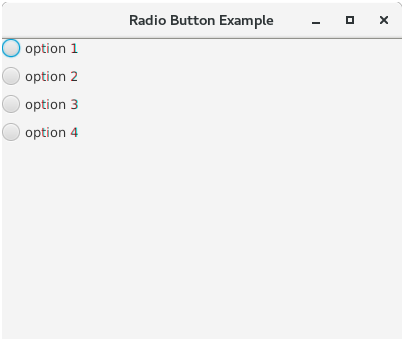
Button Action

1. **package** application;
2. **import** java.io.FileInputStream;
3. **import** javafx.application.Application;
4. **import** javafx.event.ActionEvent;
5. **import** javafx.event.EventHandler;
6. **import** javafx.scene.Scene;
7. **import** javafx.scene.control.Button;
8. **import** javafx.scene.image.Image;
9. **import** javafx.scene.image.ImageView;
10. **import** javafx.scene.layout.StackPane;
11. **import** javafx.stage.Stage;
12. **public** **class** LabelTest **extends** Application {
13. **public** **void** start(Stage primaryStage) **throws** Exception {
14. FileInputStream input=**new** FileInputStream("/home/javatpoint/Desktop/JavaFX/Images/colored\_label.png");
15. Image image = **new** Image(input);
16. ImageView img=**new** ImageView(image);
17. StackPane root = **new** StackPane();
18. Button btn=**new** Button();
19. btn.setGraphic(img);
20. btn.setWrapText(**true**);
21. btn.setOnAction(**new** EventHandler<ActionEvent>() {
22. publicvoid handle(ActionEvent arg0) {
23. System.out.println("Button clicked");
24. }
25. } );
26. Scene scene=**new** Scene(root,300,300);
27. root.getChildren().add(btn);
28. primaryStage.setScene(scene);
29. primaryStage.setTitle("Button Class Example");
30. primaryStage.show();
31. }
32. **public** **static** **void** main(String[] args) {
33. launch(args);
34. }  }



# **RadioButton**

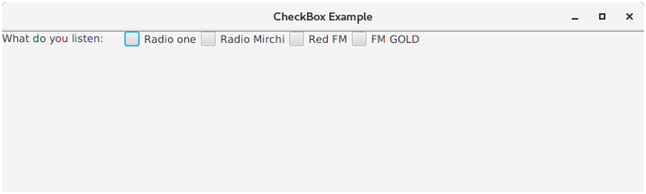
1. **package** application;
2. **import** javafx.application.Application;
3. **import** javafx.scene.Scene;
4. **import** javafx.scene.control.RadioButton;
5. **import** javafx.scene.control.ToggleGroup;
6. **import** javafx.scene.layout.VBox;
7. **import** javafx.stage.Stage;
8. **public** **class** RadioButtonTest **extends** Application {
9. **public** **static** **void** main(String[] args) {
10. launch(args);
11. }
12. **public** **void** start(Stage primaryStage) **throws** Exception {
13. ToggleGroup group = **new** ToggleGroup();
14. RadioButton button1 = **new** RadioButton("option 1");
15. RadioButton button2 = **new** RadioButton("option 2");
16. RadioButton button3 = **new** RadioButton("option 3");
17. RadioButton button4 = **new** RadioButton("option 4");
18. button1.setToggleGroup(group);
19. button2.setToggleGroup(group);
20. button3.setToggleGroup(group);
21. button4.setToggleGroup(group);
22. VBox root=**new** VBox();
23. root.setSpacing(10);
24. root.getChildren().addAll(button1,button2,button3,button4);
25. Scene scene=**new** Scene(root,400,300);
26. primaryStage.setScene(scene);
27. primaryStage.setTitle("Radio Button Example");
28. primaryStage.show();
29. }
30. }



CHECK BOX

1. **package** application;
2. **import** javafx.application.Application;
3. **import** javafx.scene.Scene;
4. **import** javafx.scene.control.CheckBox;
5. **import** javafx.scene.control.Label;
6. **import** javafx.scene.layout.HBox;
7. **import** javafx.stage.Stage;
8. **public** **class** CheckBoxTest **extends** Application {
9. **public** **static** **void** main(String[] args) {
10. launch(args);
11. }
12. **public** **void** start(Stage primaryStage) **throws** Exception {
13. Label l = **new** Label("What do you listen:     ");
14. CheckBox c1 = **new** CheckBox("Radio one");
15. CheckBox c2 = **new** CheckBox("Radio Mirchi");
16. CheckBox c3 = **new** CheckBox("Red FM");
17. CheckBox c4 = **new** CheckBox("FM GOLD");
18. HBox root = **new** HBox();
19. root.getChildren().addAll(l,c1,c2,c3,c4);
20. root.setSpacing(5);
21. Scene scene=**new** Scene(root,800,200);
22. primaryStage.setScene(scene);
23. primaryStage.setTitle("CheckBox Example");
24. primaryStage.show();
25. }
26. }

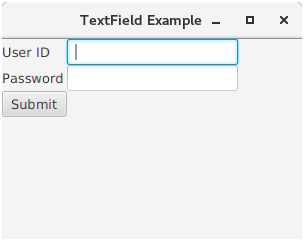
**Output:**



# **JavaFX TextField**

1. **package** application;
2. **import** javafx.application.Application;
3. **import** javafx.scene.Scene;
4. **import** javafx.scene.control.Button;
5. **import** javafx.scene.control.Label;
6. **import** javafx.scene.control.TextField;
7. **import** javafx.scene.layout.GridPane;
8. **import** javafx.stage.Stage;
9. **public** **class** TextFieldTest **extends** Application {
10. **public** **static** **void** main(String[] args) {
11. launch(args);
12. }
13. **public** **void** start(Stage primaryStage) **throws** Exception {
14. Label user\_id=**new** Label("User ID");
15. Label password = **new** Label("Password");
16. TextField tf1=**new** TextField();
17. TextField tf2=**new** TextField();
18. Button b = **new** Button("Submit");
19. GridPane root = **new** GridPane();
20. root.addRow(0, user\_id, tf1);
21. root.addRow(1, password, tf2);
22. root.addRow(2, b);
23. Scene scene=**new** Scene(root,800,200);
24. primaryStage.setScene(scene);
25. primaryStage.setTitle("Text Field Example");
26. primaryStage.show();
27. }
28. }

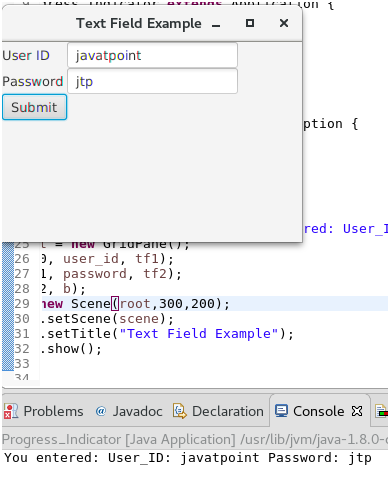
**Output:**



Getting Text field Data

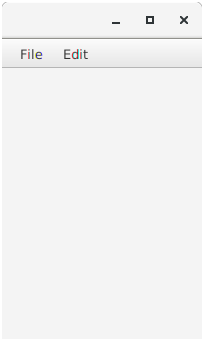
1. **package** application;
2. **import** javafx.application.Application;
3. **import** javafx.scene.Scene;
4. **import** javafx.scene.control.Button;
5. **import** javafx.scene.control.Label;
6. **import** javafx.scene.control.TextField;
7. **import** javafx.scene.layout.GridPane;
8. **import** javafx.stage.Stage;
9. **public** **class** TextFieldExample **extends** Application {
10. **public** **static** **void** main(String[] args) {
11. launch(args);
12. }
13. **public** **void** start(Stage primaryStage) **throws** Exception {
14. Label user\_id=**new** Label("User ID");
15. Label password = **new** Label("Password");
16. TextField tf1=**new** TextField();
17. TextField tf2=**new** TextField();
18. Button b = **new** Button("Submit");
19. b.setOnAction(e->System.out.println("You entered: User\_ID: "+tf1.getText()+""+"Password: "+tf2.getText()));
20. GridPane root = **new** GridPane();
21. root.addRow(0, user\_id, tf1);
22. root.addRow(1, password, tf2);
23. root.addRow(2, b);
24. Scene scene=**new** Scene(root,300,200);
25. primaryStage.setScene(scene);
26. primaryStage.setTitle("Text Field Example");
27. primaryStage.show();
28. }
29. }

**Output:**



1. **package** application;
2. **import** javafx.application.Application;
3. **import** javafx.scene.Scene;
4. **import** javafx.scene.control.\*;
5. **import** javafx.scene.layout.BorderPane;
6. **import** javafx.stage.Stage;
7. **public** **class** MenuExample **extends** Application {
8. **public** **static** **void** main(String[] args) {
9. launch(args);
10. }
12. @Override
13. **public** **void** start(Stage primaryStage) **throws** Exception {
14. // TODO Auto-generated method stub
15. BorderPane root = **new** BorderPane();
16. Scene scene = **new** Scene(root,200,300);
17. MenuBar menubar = **new** MenuBar();
18. Menu FileMenu = **new** Menu("File");
19. MenuItem filemenu1=**new** MenuItem("new");
20. MenuItem filemenu2=**new** MenuItem("Save");
21. MenuItem filemenu3=**new** MenuItem("Exit");
22. Menu EditMenu=**new** Menu("Edit");
23. MenuItem EditMenu1=**new** MenuItem("Cut");
24. MenuItem EditMenu2=**new** MenuItem("Copy");
25. MenuItem EditMenu3=**new** MenuItem("Paste");
26. EditMenu.getItems().addAll(EditMenu1,EditMenu2,EditMenu3);
27. root.setTop(menubar);
28. FileMenu.getItems().addAll(filemenu1,filemenu2,filemenu3);
29. menubar.getMenus().addAll(FileMenu,EditMenu);
30. primaryStage.setScene(scene);
31. primaryStage.show();
33. }
34. }

**Output:**



**Adding a ToggleButton to the Scene Graph**

package com.jenkov.javafx.controls;

import javafx.application.Application;

import javafx.scene.Scene;

import javafx.scene.control.ToggleButton;

import javafx.scene.layout.HBox;

import javafx.stage.Stage;

public class ToggleButtonExperiments extends Application {

@Override

public void start(Stage primaryStage) throws Exception {

primaryStage.setTitle("HBox Experiment 1");

ToggleButton toggleButton1 = new ToggleButton("Left");

HBox hbox = new HBox(toggleButton1);

Scene scene = new Scene(hbox, 200, 100);

primaryStage.setScene(scene);

primaryStage.show();

}

public static void main(String[] args) {

Application.launch(args);

}

}

## Create a ScrollPane

ScrollPane scrollPane = new ScrollPane();

## Set ScrollPane Content

ScrollPane scrollPane = new ScrollPane();

String imagePath = "images/aerial-beverage-caffeine-972533.jpg";

ImageView imageView = new ImageView(new Image(new FileInputStream(imagePath)));

scrollPane.setContent(imageView);

**Adding a ListView to the Scene Graph**

package com.jenkov.javafx.controls;

import javafx.application.Application;

import javafx.scene.Scene;

import javafx.scene.control.ListView;

import javafx.scene.layout.HBox;

import javafx.stage.Stage;

public class ListViewExperiments extends Application {

@Override

public void start(Stage primaryStage) throws Exception {

primaryStage.setTitle("ListView Experiment 1");

ListView listView = new ListView();

listView.getItems().add("Item 1");

listView.getItems().add("Item 2");

listView.getItems().add("Item 3");

HBox hbox = new HBox(listView);

Scene scene = new Scene(hbox, 300, 120);

primaryStage.setScene(scene);

primaryStage.show();

}

public static void main(String[] args) {

Application.launch(args);

}

}

