

The following code demonstrates the sequential and parallel path transition.

```
import javafx.application.*;
import javafx.event.ActionEvent;

import javafx.animation.*;

import javafx.util.Duration;
import javafx.geometry.Insets;

import javafx.scene.*;
import javafx.scene.control.*;
import javafx.scene.layout.*;
import javafx.scene.shape.*;
import javafx.scene.paint.*;

import javafx.stage.*;

public class Main extends Application
{
    public static void main(String[] args)
    {
        launch(args);
    }

    public void start(Stage stage)
    {
        /*******
        // Create the animation objects
        /*******
        Circle sun = new Circle(400, 240, 30);
        sun.setStroke(Color.rgb(190,190,190));
        sun.setFill(Color.YELLOW);

        Circle earth = new Circle(500, 260, 18);
        earth.setStroke(Color.rgb(190,190,190));
        earth.setFill(Color.LIGHTBLUE);

        Circle saturn = new Circle(130, 150, 20);
        saturn.setStroke(Color.rgb(190,190,190));
        saturn.setFill(Color.ORANGERED );

        Circle venus = new Circle(470, 110, 15);
        venus.setStroke(Color.rgb(190,190,190));
        venus.setFill(Color.BISQUE);

        /*******
        // Create the path for the objects
        /*******
```

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Arc arcEarth = new Arc(300, 260, 200, 100, 0, 360);
arcEarth.setStroke(Color.rgb(210,210,210));
arcEarth.setFill(null);

Arc arcSaturn = new Arc(320, 220, 200, 120, 180, 360);
arcSaturn.setStroke(Color.rgb(210,210,210));
arcSaturn.setFill(null);
arcSaturn.setRotate(20.0);

Arc arcVenus = new Arc(340, 210, 170, 115, 0, 360);
arcVenus.setStroke(Color.rgb(210,210,210));
arcVenus.setFill(null);
arcVenus.setRotate(-35.0);

PathTransition pt1 = new PathTransition();
pt1.setInterpolator(Interpolator.LINEAR);
pt1.setDuration(Duration.millis(5000));
pt1.setPath(arcEarth);
pt1.setNode(earth);

PathTransition pt2 = new PathTransition();
pt2.setInterpolator(Interpolator.LINEAR);
pt2.setDuration(Duration.millis(5000));
pt2.setPath(arcSaturn);
pt2.setNode(saturn);

PathTransition pt3 = new PathTransition();
pt3.setInterpolator(Interpolator.LINEAR);
pt3.setDuration(Duration.millis(5000));
pt3.setPath(arcVenus);
pt3.setNode(venus);

//*****
// Create the Transitions
//*****
SequentialTransition seqTransition = new SequentialTransition();
seqTransition.getChildren().addAll(pt1, pt2, pt3);
seqTransition.setCycleCount(Timeline.INDEFINITE);
seqTransition.setAutoReverse(false);

ParallelTransition pTransition = new ParallelTransition();
pTransition.getChildren().addAll(pt1, pt2, pt3);
pTransition.setCycleCount(Timeline.INDEFINITE);
pTransition.setAutoReverse(false);

//*****
// Add the animation component to the animation pane
//*****
Pane paneAnimate = new Pane();
paneAnimate.setMinSize(600, 400);

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paneAnimate.getChildren().addAll(sun,
                                arcEarth, arcSaturn, arcVenus,
                                earth, saturn, venus);

//*****
// Start Sequential Animation
//*****
Button startSeqBtn = new Button("Start Sequential Animation");
startSeqBtn.setOnAction((ActionEvent e) -> {
    seqTransition.play();
});

//*****
// Pause Sequential Animation
//*****
Button pauseSeqBtn = new Button("Pause Sequential Animation");
pauseSeqBtn.setOnAction((ActionEvent e) -> {
    seqTransition.pause();
});

//*****
// Stop Sequential Animation
//*****
Button stopSeqBtn = new Button("Stop Sequential Animation");
stopSeqBtn.setOnAction((ActionEvent e) -> {
    seqTransition.stop();
});

//*****
// Start Parallel Animation
//*****
Button startPBtn = new Button("Start Parallel Animation");
startPBtn.setOnAction((ActionEvent e) -> {
    pTransition.play();
});

//*****
// Pause Parallel Animation
//*****
Button pausePBtn = new Button("Pause Parallel Animation");
pausePBtn.setOnAction((ActionEvent e) -> {
    pTransition.pause();
});

//*****
// Stop Parallel Animation
//*****
Button stopPBtn = new Button("Stop Parallel Animation");
stopPBtn.setOnAction((ActionEvent e) -> {
    pTransition.stop();
});

```

```

//*****
// Add the Sequential buttons to the hbS pane
//*****
HBox hbS = new HBox();
hbS.setSpacing(10);
hbS.setPadding(new Insets(10, 0, 0, 10));
hbS.getChildren().addAll(startSeqBtn,pauseSeqBtn, stopSeqBtn);

//*****
// Add the Parallel buttons to the hbP pane
//*****
HBox hbP = new HBox();
hbP.setSpacing(10);
hbP.setPadding(new Insets(10, 0, 0, 10));
hbP.getChildren().addAll(startPBtn,pausePBtn, stopPBtn);

//*****
// Add components to VBox
//*****
VBox vb = new VBox();
vb.setSpacing(7);
vb.setPadding(new Insets(10, 0, 0, 10));
vb.getChildren().addAll(paneAnimate, hbS, hbP);

//*****
// Prepare the stage
//*****
Scene scene = new Scene (vb, 200, 200);
stage.setScene(scene);
stage.setTitle("Animation");
stage.setWidth(800);
stage.setHeight(550);
stage.show();

}
}

```