

第09讲 JavaFX--音乐播放器（界面切换）

主要内容

- ☐ Main入口
- ☐ Stage切换
- ☐ 用户登录验证

重点内容

- 通过static进行界面切换
-

难点分析

- Static界面切换
-

1 JavaFX

1.1 Main入口类

- ☒ JavaFX的入口函数Main函数

```
package application;
import GUI.LoginPane;
import Util.StageFactory;
import javafx.application.Application;
import javafx.stage.Stage;
import javafx.scene.Scene;
import javafx.scene.layout.GridPane;
import javafx.scene.layout.Pane;
public class Main extends Application {
    @Override
    public void start(Stage primaryStage) {
        try {
            //      BorderPane root = new BorderPane();
            //      Scene scene = new Scene(root,400,400);
            GridPane pane1 = (GridPane) LoginPane.getPane();
            Scene scene = login(pane1);

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

            primaryStage.setScene(scene);
            StageFactory.create(primaryStage);
            primaryStage.show();
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
    public Scene login(Pane p)
    {
```

```

        return new Scene(p, 300, 200);
    }
    public static void main(String[] args) {
        launch(args);
    }
}

```

1.2 LoginPane登录界面

☑ 登录界面，点击用户名和密码验证，验证通过，切换用户界面。

```

package GUI;
import Util.StageFactory;
import javafx.event.ActionEvent;
import javafx.event.EventHandler;
import javafx.geometry.Insets;
import javafx.scene.Scene;
import javafx.scene.control.Button;
import javafx.scene.control.Label;
import javafx.scene.control.PasswordField;
import javafx.scene.control.TextField;
import javafx.scene.layout.GridPane;
import javafx.scene.layout.HBox;
import javafx.scene.layout.Pane;
import javafx.stage.Stage;
public class LoginPane{
    public static Pane getPane()
    {
        GridPane root;
        Label label1 = new Label("用户名");
        Label label2 = new Label("密码");
        Label label3 = new Label(" ");
        TextField field1 = new TextField();
        PasswordField field2 = new PasswordField();
        Button ok = new Button("登录");
        Button cancel = new Button("重置");
        ok.setOnAction(new EventHandler<ActionEvent>()
        {
            public void handle(ActionEvent e)
            {
                if(field1.getText().equals("zhang") &&
field2.getText().equals("password"))
                {
                    label3.setText("Login Sucess");
                    Stage s = StageFactory.getInstance();
                    Scene scene = new Scene(AudioPlayer.getPane(), 250, 50);
                    s.setScene(scene);
                    s.setTitle("用户登录");
                    s.show();
                }
                else{
                    label3.setText("Login Failed");
                    field1.setText("");
                    field2.setText("");
                }
            }
        });
    }
}

```

```

        cancel.setOnAction(e -> {field2.setText("");field1.setText("");});
        HBox hb = new HBox();
        hb.setPadding(new Insets(10,20,10,20));
        hb.getChildren().addAll(ok, cancel);
        root = new GridPane();
        root.setHgap(10);
        root.setVgap(10);
        root.setPadding(new Insets(10,10,10,10));
        root.add(label1, 0, 0);
        root.add(label2, 0, 1);
        root.add(field1,1,0);
        root.add(field2, 1, 1);
        root.add(hb, 0, 2,2,1);
        root.add(label3, 2, 0);
        return root;
    }

    // TODO Auto-generated constructor stub
}

```

1.3 音乐播放器

☐ 创建音乐播放器界面

```

package GUI;
import java.io.File;
import javafx.geometry.Insets;
import javafx.geometry.Pos;
import javafx.scene.control.Button;
import javafx.scene.layout.BorderPane;
import javafx.scene.layout.HBox;
import javafx.scene.media.Media;
import javafx.scene.media.MediaPlayer;
import javafx.scene.media.MediaView;
public class AudioPlayer {
    public static BorderPane getPane()
    {
        File path = new File("src/media/skycity.mp3");
        String source = path.toURI().toString();
        Media media = new Media(source);
        MediaPlayer player1 = new MediaPlayer(media);
        player1.setAutoPlay(false);
        MediaView mediaview = new MediaView(player1);
        mediaview.setOnError(e->System.out.println(e));
        HBox hbox = new HBox(10);
        hbox.setPadding(new Insets(10,10,20,10));
        hbox.setAlignment(Pos.CENTER);
        Button play = new Button("播放");
        Button pause = new Button("暂停");
        Button loop = new Button("循环");
        Button stop = new Button("停止");
        hbox.getChildren().addAll(play,pause,loop,stop);
        play.setOnAction(e->player1.play());
        pause.setOnAction(e->player1.pause());
        loop.setOnAction(e->{player1.setCycleCount(MediaPlayer.INDEFINITE);
        player1.play();});
        stop.setOnAction(e->player1.stop());
        BorderPane root = new BorderPane();
    }
}

```

```
        root.setCenter(mediaview);
        root.setBottom(hbox);
        return root;
    }
}
```

1.4 Stage控制器

```
package Util;
import javafx.stage.Stage;
public class StageFactory {
    public static Stage stage = null;
    public static void create(Stage s)
    {
        stage = s;
    }
    public static Stage getInstance()
    {
        return stage;
    }
}
```