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**19K-1043**

**SCD LAB 8**

**Q1**

**Main.java**

**package** application;

**import** javafx.application.Application;

**import** javafx.fxml.FXMLLoader;

**import** javafx.stage.Stage;

**import** javafx.scene.Parent;

**import** javafx.scene.Scene;

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

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

@Override

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

**try** {

//BorderPane root = new BorderPane();

Parent root = FXMLLoader.*load*(getClass().getResource("/SceneOne.fxml"));

Scene scene = **new** Scene(root,400,400);

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

primaryStage.setScene(scene);

primaryStage.show();

} **catch**(Exception e) {

e.printStackTrace();

}

}

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

*launch*(args);

}

}

**Controller.java**

**package** application;

**import** javafx.event.ActionEvent;

**import** javafx.fxml.FXMLLoader;

**import** javafx.scene.Node;

**import** javafx.scene.Parent;

**import** javafx.scene.Scene;

**import** javafx.stage.Modality;

**import** javafx.stage.Stage;

**public** **class** Controller {

**private** Stage stage;

**private** Scene scene;

**private** Parent root;

**public** **void** SceneOne\_Window(ActionEvent e) {

**try** {

root = FXMLLoader.*load*(getClass().getResource("/SceneOne.fxml"));

stage = (Stage) ((Node) e.getSource()).getScene().getWindow();

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

stage.setScene(scene);

stage.show();

} **catch** (Exception ex) {

ex.printStackTrace();

}

}

**public** **void** SceneTwo\_Window(ActionEvent e) {

**try** {

root = FXMLLoader.*load*(getClass().getResource("/SceneTwo.fxml"));

stage = (Stage) ((Node) e.getSource()).getScene().getWindow();

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

stage.setScene(scene);

stage.show();

} **catch** (Exception ex) {

ex.printStackTrace();

}

}

}

SceneOne.FXML

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<?import javafx.scene.control.Button?>

<?import javafx.scene.control.Label?>

<?import javafx.scene.layout.AnchorPane?>

<?import javafx.scene.text.Font?>

<AnchorPane maxHeight=*"-Infinity"* maxWidth=*"-Infinity"* minHeight=*"-Infinity"* minWidth=*"-Infinity"* prefHeight=*"400.0"* prefWidth=*"600.0"* xmlns=*"http://javafx.com/javafx/18"* xmlns:fx=*"http://javafx.com/fxml/1"* fx:controller=*"application.Controller"*>

<children>

<Label layoutX=*"217.0"* layoutY=*"48.0"* text=*"Scene One"*>

<font>

<Font size=*"35.0"* />

</font>

</Label>

<Button layoutX=*"225.0"* layoutY=*"148.0"* mnemonicParsing=*"false"* onAction=*"#SceneTwo\_Window"* prefHeight=*"51.0"* prefWidth=*"150.0"* text=*"Click Scene Two"* />

</children>

</AnchorPane>

**SceneTwo.FXML**

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<?import javafx.scene.control.Button?>

<?import javafx.scene.control.Label?>

<?import javafx.scene.layout.AnchorPane?>

<?import javafx.scene.text.Font?>

<AnchorPane maxHeight=*"-Infinity"* maxWidth=*"-Infinity"* minHeight=*"-Infinity"* minWidth=*"-Infinity"* prefHeight=*"400.0"* prefWidth=*"600.0"* xmlns=*"http://javafx.com/javafx/18"* xmlns:fx=*"http://javafx.com/fxml/1"* fx:controller=*"application.Controller"*>

<children>

<Label layoutX=*"217.0"* layoutY=*"53.0"* text=*"Scene Two"*>

<font>

<Font size=*"35.0"* />

</font>

</Label>

<Button layoutX=*"224.0"* layoutY=*"148.0"* mnemonicParsing=*"false"* onAction=*"#SceneOne\_Window"* prefHeight=*"51.0"* prefWidth=*"150.0"* text=*"Click Scene One"* />

</children>

</AnchorPane>

**Q2**

**Controller.java**

**package** application;

**import** javafx.event.ActionEvent;

**import** javafx.fxml.FXMLLoader;

**import** javafx.scene.Node;

**import** javafx.scene.Parent;

**import** javafx.scene.Scene;

**import** javafx.stage.Modality;

**import** javafx.stage.Stage;

**public** **class** Controller {

**private** Stage stage;

**private** Scene scene;

**private** Parent root;

**public** **void** SceneOne\_Window(ActionEvent e) {

**try** {

root = FXMLLoader.*load*(getClass().getResource("/SceneOne.fxml"));

stage = (Stage) ((Node) e.getSource()).getScene().getWindow();

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

stage.setScene(scene);

stage.initModality(Modality.***APPLICATION\_MODAL***);

stage.initOwner((Stage) ((Node) e.getSource()).getScene().getWindow());

stage.showAndWait();

} **catch** (Exception ex) {

ex.printStackTrace();

}

}

**public** **void** SceneTwo\_Window(ActionEvent e) {

**try** {

root = FXMLLoader.*load*(getClass().getResource("/SceneTwo.fxml"));

stage = (Stage) ((Node) e.getSource()).getScene().getWindow();

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

stage.setScene(scene);

stage.initModality(Modality.***APPLICATION\_MODAL***);

stage.initOwner((Stage) ((Node) e.getSource()).getScene().getWindow());

stage.showAndWait();

} **catch** (Exception ex) {

ex.printStackTrace();

}

}

}