```
import java.util.Optional;
import javafx.application.Application;
import javafx.scene.Group;
import javafx.scene.Scene;
import javafx.scene.control.Alert;
import javafx.scene.control.Alert.AlertType;
import javafx.scene.control.TextInputDialog;
import javafx.scene.shape.Circle;
import javafx.stage.Stage;
/*
 * File: Circles.java
 * Author: KARIN HERNANDEZ
 * Concentration: Software Development
 * Date: 11/08/2020
 * Class description: Circles
 */
public class Circles extends Application{
    public void start(Stage myStage)
    {
        TextInputDialog oneX = new TextInputDialog();
        oneX.setContentText("Enter the location x for circle one: ");
        oneX.setHeaderText(null);
        oneX.setTitle(null);
        Optional<String> oneXString = oneX.showAndWait();

        TextInputDialog oneY = new TextInputDialog();
        oneY.setContentText("Enter the location y for circle one: ");
        oneY.setHeaderText(null);
        oneY.setTitle(null);
        Optional<String> oneYString = oneY.showAndWait();

        TextInputDialog radiusOne = new TextInputDialog();
```

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radiusOne.setContentText("Enter the radius for circle one: ");
radiusOne.setHeaderText(null);
radiusOne.setTitle(null);
Optional<String> radiusString = radiusOne.showAndWait();

int x1 = Integer.parseInt(oneXString.get());
int y1 = Integer.parseInt(oneYString.get());
int radius1 = Integer.parseInt(radiusString.get());
Circle one = new Circle(x1, y1, radius1);



TextInputDialog twoX = new TextInputDialog();
twoX.setContentText("Enter the location x for cirlce two: ");
twoX.setHeaderText(null);
twoX.setTitle(null);
Optional<String> twoXString = twoX.showAndWait();

TextInputDialog twoY = new TextInputDialog();
twoY.setContentText("Enter the location y for circle two: ");
twoY.setHeaderText(null);
twoY.setTitle(null);
Optional<String> twoYString = twoY.showAndWait();

TextInputDialog radiusTwo = new TextInputDialog();
radiusTwo.setContentText("Enter the radius for circle two: ");
radiusTwo.setHeaderText(null);
radiusTwo.setTitle(null);
Optional<String> numStringTwo = radiusTwo.showAndWait();

int x2 = Integer.parseInt(twoXString.get());
int y2 = Integer.parseInt(twoYString.get());
int radius2 = Integer.parseInt(numStringTwo.get());
Circle two = new Circle(x2, y2, radius2);
```

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        double numDistance = Math.sqrt((x1-x2)*(x1-x2) + (y1-y2)*(y1-y2));
        int radiusLength = radius1 + radius2;
        boolean overlap;
        if(radiusLength > numDistance)
        {
            overlap = true;
        }
        else
        {
            overlap = false;
        }

        Alert distance = new Alert(AlertType.CONFIRMATION);
        distance.setContentText("The distance between the two circles is: " +
                (int)numDistance + "\nDo circles overlap: " + overlap);
        distance.setHeaderText(null);
        distance.setTitle(null);
        distance.show();

        Group root = new Group(one, two);

        Scene myScene = new Scene(root, 600, 600);

        myStage.setScene(myScene);
        myStage.show();
    }

    public static void main(String[] args)
    {
        launch(args);
    }
}
```
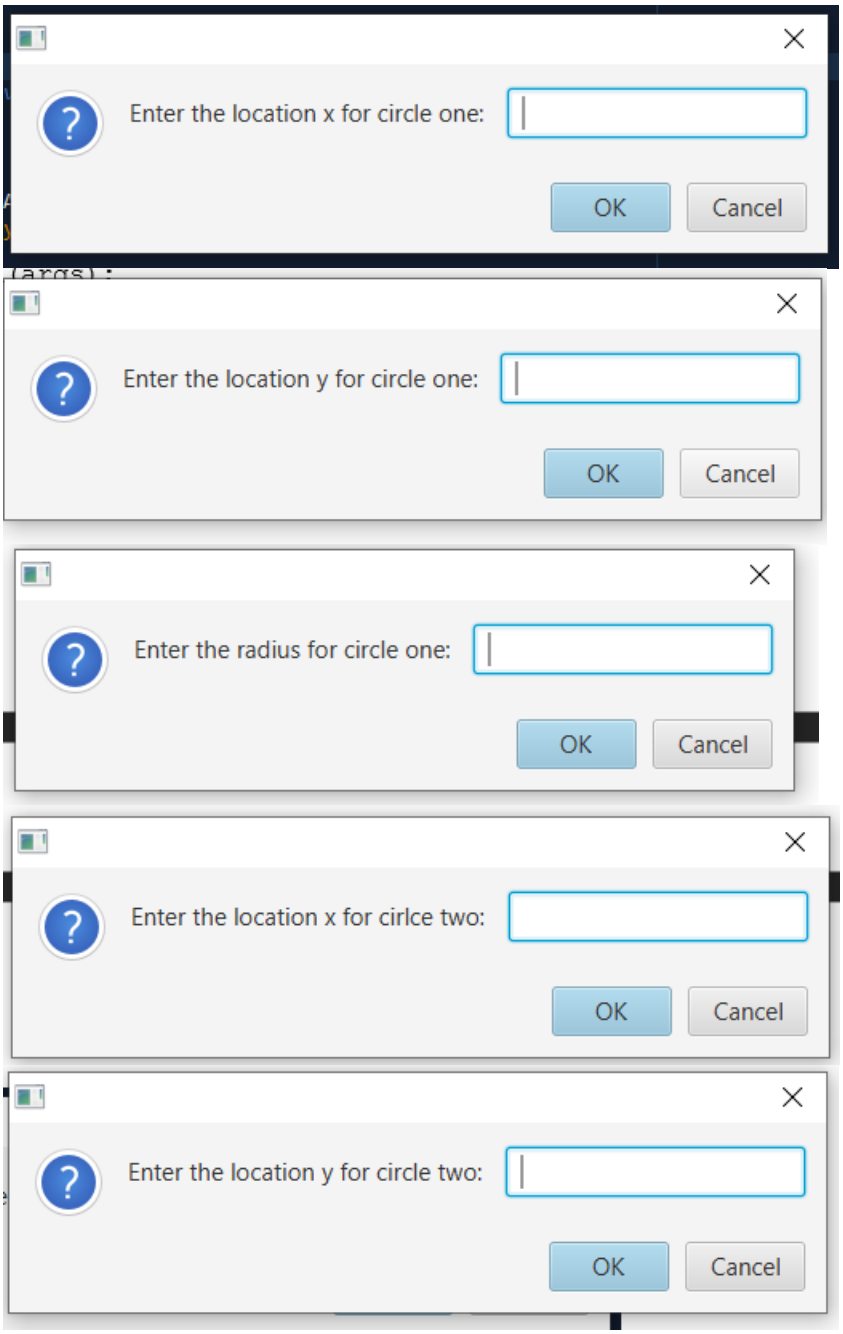
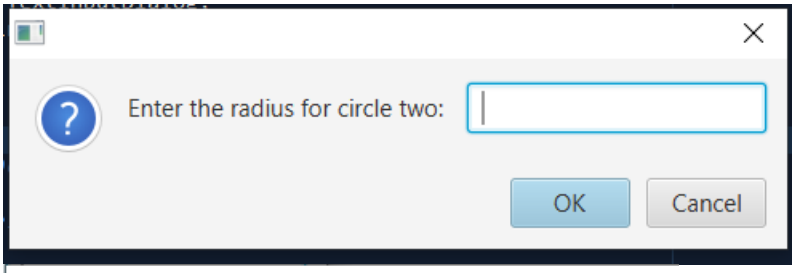
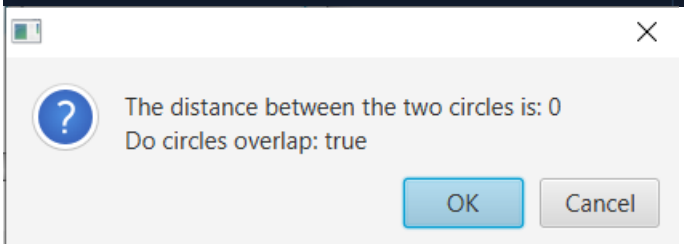


Enter the location x for circle one:
OK
Cancel
Enter the location y for circle one:
OK
Cancel
Enter the radius for circle one:
OK
Cancel
Enter the location x for cirlce two:
OK
Cancel
Enter the location y for circle two:
OK
Cancel


Enter the radius for circle two:
OK
Cancel


The distance between the two circles is: 0
Do circles overlap: true
OK
Cancel