

In this assignment, you will re-implement the Mile Redeemer App from Assignment 4 but using JavaFX to create a graphical user interface, or GUI, with which the travel agent can enter and receive data.

The Destination class should remain the same as that developed in Assignment 4. This reusability is one of the advantages of encapsulation, i.e., using object-oriented methodology.

In addition, the MileRedeemer class from Assignment 4 can be reused as well. Many methods of MileRedeemer can be invoked directly by your application, such as `readDestinations()` and `redeemMiles()`. But, there should be no part of your application that displays console-type output as you did in Assignment 4, not even the request for the name of the file!

Other Hints

- You may design a better looking GUI but it should have the same basic functionality and the same general look as that provided in the .jpg file included with the assignment on Blackboard.
- Any error messages or messages printed as a result of caught exceptions should be printed on the Java console.
- Do not hard-code the name of the input file but rather use something similar to this example that uses `FileChooser` to allow the user to choose the location of their input text file of destinations:

```
import javafx.application.Application;
import javafx.fxml.FXMLLoader;
import javafx.scene.control.Button;
import javafx.scene.control.Label;
import javafx.scene.control.TextField;
import javafx.scene.layout.HBox;
import javafx.stage.FileChooser;
import javafx.scene.Parent;
import javafx.scene.Scene;
import javafx.stage.Stage;

public class MileRedemptionApp extends Application
{
    @Override
    public void start(Stage stage) throws Exception
    {
        //create a file chooser
        FileChooser f = new FileChooser();
        //set the title
        f.setTitle("Opening the location..");
        //open the dialog box
        f.showOpenDialog(stage);
        HBox r = new HBox();
        r.setSpacing(20);
        //create scene
        Scene sc = new Scene(r,350,100);
```

```
//set the scene
stage.setScene(sc);
//set title
stage.setTitle("Sample file chooser");
//display the result
stage.show();
```

Immediately following this will be the Parent root = statement getting ready to show your main GUI.

How to Submit the Assignment

Zip your entire project folder and submit the zipped file on Blackboard as before.