Train Travel Black Box Test Plan

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Introduction

The Train Travel program is used for creating reservations for an intercity train. This black box test plan tests the initialization of the program by entering the parameters of the Train (the number of cars) as well as the creation and modification of assigned seating reservations for first class cars.

The program is started by running the TrainUI.java class. The user will be prompted to enter a number of cars for the train they are initializing and then the main GUI will pop up. The left side of the GUI displays seating maps for cars and has input fields for creating and modifying reservations. The right side of the GUI displays all existing reservations in the order of oldest to newest from top to bottom.

Test ID	Description	Expected Results	Actual Results
testValidTrainInitializationMiddleValue (Noah Benveniste)	**Preconditions:** none Run TrainTravelGUI.java Enter **7** into the pop-up dialog box Use the arrow keys to navigate the cars in the Train Reservation System GUI that pops up Check results	A dialog box pops up, prompting the user to enter the number of cars After the user enters a valid number of cars, the Train Reservation System GUI pops up, displaying the seating map for the first car on the left and the reservation list on the right Using the arrow keys to navigate the cars on the left side of the GUI, the first two cars are first class, the next four are second class, and the last car is bicycle class	A dialog box pops up, prompting the user to enter the number of cars After the user enters a valid number of cars, the Train Reservation System GUI pops up, displaying the seating map for the first car on the left and the reservation list on the right Using the arrow keys to navigate the cars on the left side of the GUI, the first two cars are first class, the next four are second class, and the last car is bicycle class
testNewComfortReservation (Noah Benveniste)	**Preconditions:** testValidTrainInitializationMiddleValue has passed Run TrainTravelGUI.java Enter **4** into the pop-up dialog box	The new reservation is created and is displayed in the Reservations section of the GUI with the following information:	The new reservation is created and is displayed in the Reservations section of the GUI with the following information:

	In the Train Reservation System GUI, enter **2** into the box for Number of Passengers Select **Comfort Class** for kind Select **Add New Reservation** Check results	**1000 Comfort Class [1-1B, 1-1C]** The seating map for car #1 displays seats 1B and 1C with an 'x' in their cells indicating they are reserved	**1000 Comfort Class [1-1B, 1-1C]** The seating map for car #1 displays seats 1B and 1C with an 'x' in their cells indicating they are reserved
testModifyComfortReservation (Noah Benveniste)	**Preconditions:** testValidTrainInitializationMiddleValue and testNewComfortReservation have passed Run TrainTravelGUI.java Enter **4** into the pop-up dialog box In the Train Reservation System GUI, enter **2** into the box for Number of Passengers Select **Comfort Class** for kind Select **Add New Reservation** In the Reservation section of the GUI, select the reservation that was just created (ID 1000) Select **Change Seats on Selected Reservation** In the pop-up dialog box, enter **1-2A, 1-3A** and then click **OK** Check results	The reservation is created and shows up in the Reservation section of the GUI. The seating map shows seats 1-1B and 1-1C as being reserved. Seats 1-1B and 1-1C are no longer reserved (i.e. the 'x' is removed in their cells and the seat number is replaced) and now seats 1-2A and 1-3A have 'x' indicating that they are reserved. The reservation in the Reservation section of the GUI has also been updated to display the following: **1000 Comfort Class [1-2A, 1-3A]**	The reservation is created and shows up in the Reservation section of the GUI. The seating map shows seats 1-1B and 1-1C as being reserved. Seats 1-1B and 1-1C are no longer reserved (i.e. the 'x' is removed in their cells and the seat number is replaced) and now seats 1-2A and 1-3A have 'x' indicating that they are reserved. The reservation in the Reservation section of the GUI has also been updated to display the following: **1000 Comfort Class [1-2A, 1-3A]**
testDeleteReservation (Noah Benveniste)	**Preconditions:** TestValidTrainInitializationMiddleValue has passed Run TrainTravelGUI.java Enter **4** into the pop-up dialog box In the Train Reservation System GUI, enter **2** into the box for Number of Passengers	The reservation is created and shows up in the Reservation section of the GUI. **1000 Economy Class [3-19A,3-19B]** The seat map for	The reservation is created and shows up in the Reservation section of the GUI. **1000 Economy Class [3-19A,3-19B]** The seat map for

	Select **Economy Class** for kind Check the box that says **Reserved Seats** Select **Add New Reservation** In the Reservation section of the GUI, select the reservation that was just created (ID 1000) Select **Delete Selected Reservation** Check results	Car #3 shows that seats 19A and 19B are reserved with an "x" in their cells The reservation is removed from the Reservations section of the GUI, the section is now empty The seat map for Car #3 shows all seats being free to reserve again	Car #3 shows that seats 19A and 19B are reserved with an "x" in their cells The reservation is removed from the Reservations section of the GUI, the section is now empty The seat map for Car #3 shows all seats being free to reserve again
testNoReservedBicycleSeats (Noah Benveniste)	**Preconditions:** TestValidTrainInitializationMiddleValue has passed Run TrainTravelGUI.java Enter **4** into the pop-up dialog box In the Train Reservation System GUI, enter **2** into the box for Number of Passengers Select **Bicycle Class** for kind Check the box that says **Reserved Seats** Check results	A pop-up dialog appears saying "Cannot reserve seats in a Bicycle Car" The reservation is created as a non-reserved reservation: **1000 Bicycle Class (2)**	A pop-up dialog appears saying "Cannot reserve seats in a Bicycle Car" The reservation is created as a non-reserved reservation: **1000 Bicycle Class (2)**

Document Revision History

Date	Author	Change Description
9/21/17	Noah Benveniste	• Added three test cases
9/22/17	Noah Benveniste	• Proofread for grammar and spelling, made sure tests were answering relevant questions about use cases
10/13/17	Noah Benveniste	• Added additional tests for final black box testing