Black Box Test Plan (Project 3: Vehicle Rental Manager)

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In this section, you must provide your black-box test plan with at least 5 black-box test cases.

Make sure:

- ü You describe how to setup the system to begin black-box testing
- ü Test IDs are uniquely identified and descriptive
- ü Test descriptions are fully specified with complete inputs, specific values, and preconditions
    - o Be sure to provide SPECIFIC INPUTs and VALUEs so that your test cases are repeatable
- ü Expected results are fully specified with specific output values
- ü The test process is fully provided and clear. No modifications are needed.
- ü All tests cover scenarios based on the problem statement
- ü All tests cover unique scenarios for the system
- ü All strategies for black-box testing are demonstrated in the tests (ECP, BVA, DT)

The contents of the file used in this BBTP, sample_input.txt, can be found on the last page of this document.

To set up the system:

Note: Invalid file does not exist in the correct repository and will not be discovered by the UI

Sample_input.txt:

```
START_DAY,END_DAY,COST,MAKE,MODEL
1,2,85,Chevrolet,Tahoe
1,4,255,Toyota,Prius
2,5,220,Ford,Explorer
4,5,50,Honda,Accord
2,3,65,Jeep,Compass
3,5,90,Ford,Explorer
3,4,55,Kia,Soul
1,5,500,Honda,CRV
1,3,180,Chevrolet,Silverado
2,4,90,Jeep,Cherokee
```

1. In the package explorer, right click on the VehicleRentalManagerUI file
2. choose Run As >> Java Application

Test ID	Description	Expected Results	Actual Results
Test1: Load UI invalid file (DT - invalid file)	Preconditions: none 1. Follow the instructions above to load the UI program 2. When prompted for a file path of the file. Check Results	Program loads properly, but when given an incorrect file should display a message and prompt for a new filename. This message continues to re-prompt until correct file is inputted: “Please enter the file path:” “Filepath:”	Program loads properly, but when given an incorrect file should display a message and prompt for a new filename. This message continues to re-prompt until correct file is inputted: “Please enter the file path:” “Filepath:”
Test2: Display Rental Queue (ECT - meets UC3)	Preconditions: none 1. Load the program with the file path of ”sample_input.txt” 2. When prompted for a command, type in 1 to generate query profile 3. When prompted for a day, type in the number “2” Check Results The program is restarted	The program should display the following output, giving the cars available for rent on the given day [$65 Jeep Compass for day 2 to day 3 $90 Jeep Cherokee for day 2 to day 4 $220 Ford Explorer for day 2 to day 5]	The program should display the following output, giving the cars available for rent on the given day [$65 Jeep Compass for day 2 to day 3 $90 Jeep Cherokee for day 2 to day 4 $220 Ford Explorer for day 2 to day 5]

Test3: Rental Queue- Invalid Day (BVT - input outside range)	Preconditions: Test 2 passes 1. Load the program with the file path of ”sample_input.txt” 2. When prompted for a command, type in 1 to generate query profile 3. When prompted for a day, type in the number “2” Check Results The program is restarted	Since no rentals are available for that day, the program will just display the message Available Rentals for Day 2 “No rentals available”]	Since no rentals are available for that day, the program will just display the message Available Rentals for Day 2 “No rentals available”]
Test4: Generate Optimal Rental Sequence (ECT - meets UC2)	Preconditions: Test 2 passes 1. When prompted for a command, type in 2 to generate graph profile 2. When prompted for a starting day, type in the number “1” 3. When prompted for a end day, type in the number “4” Check Results The program is restarted	The program should give the following output, representing the cheapest way to rent cars from the given start day to the end day Rental total is $175.00 [From day 1 to day 2: $85.00, Chevrolet Tahoe From day 2 to day 4: $90.00, Jeep Cherokee]	The program should give the following output, representing the cheapest way to rent cars from the given start day to the end day Rental total is $175.00 [From day 1 to day 2: $85.00, Chevrolet Tahoe From day 2 to day 4: $90.00, Jeep Cherokee]

Test5: Optimal Rental Sequence - missing day (BVT - input outside range)	Preconditions: Test 2 passes 1. When prompted for a command, type in 2 to generate graph profile 2. When prompted for a starting day, type in the number “3” 3. When prompted for a end day, type in the number “6” Check Results The program is restarted	Since the given end day is out of the range of the given cars in the input file, the program will end up returning an output that gives the most possible rentals Rental total is $175.00 [From day 3 to day 4: $55.00, Mazda Mazda3 From day 4 to day 5: $50.00, Honda Accord No rentals available for day 5]	Since the given end day is out of the range of the given cars in the input file, the program will end up returning an output that gives the most possible rentals Rental total is $175.00 [From day 3 to day 4: $55.00, Mazda Mazda3 From day 4 to day 5: $50.00, Honda Accord No rentals available for day 5]