Gerardo Gutierrez CS 4350-01 04/03/2025

Lab 4 Outputs - Pomona Transit System

Will be prompted for postgres username and password upon launching program.

```
Gerardos-Air:pomona-transit gerardogutierrez$ mvn exec:java -Dexec.mainClass="com.pomonatransit.App"
[INFO] Scanning for projects...
[INFO]
[INFO] Building pomona-transit 1.0-SNAPSHOT
[INFO]
          from pom.xml
[INFO]
                                 ----[ jar ]-----
[INFO]
[INFO] --- exec:3.5.0:java (default-cli) @ pomona-transit ---
Enter PostgreSQL username: postgres
Enter PostgreSQL password: 1234
Welcome to Pomona Transit.
Please select an option.
1. Show trip offering schedule for start location and destination. 
 2. Show full trip offering schedule.
3. Delete a trip offering.
4. Add trip offering(s).
5. Change driver assigned to trip offering.6. Change bus assigned to trip offering.
Display the stops for a trip.
8. Display a driver's schedule.
9. Add a new driver to list of drivers.
10. Add a bus to list of buses.
11. Remove bus from bus list.
12. Insert 'Actual Trip Stop Info'.
0. EXIT
```

1. Display trip offering for a given start location and destination and exit program.

```
os-Air:pomona-transit gerardogutierrez$ mvn exec:java -Dexec.mainClass="com.pomonatransit.App'
Scanning for projects...
               Please select an option.
1. Show trip offering schedule for start location and destination.
2. Show full trip offering schedule.
3. Delete a trip offering.
4. Add trip offering(s).
5. Change driver assigned to trip offering.
6. Change bus assigned to trip offering.
7. Display the stops for a trip.
8. Display a driver's schedule.
9. Add a bus to list of drivers.
10. Add a bus to list of buses.
11. Remove bus from bus list.
12. Insert 'Actual Trip Stop Info'.
0. EXIT
 Enter the start location name of your desired trip:
 el super
Enter the destination name of your desired trip:
sprouts farmers market
  Trip # Date Start Location
                                                                                                                                     Destination
                                                                                                                                                                                                                           Start Time
                                                                                                                                                                                                                                                     Arrival Time Driver
                   2025-04-01 el super
2025-04-02 el super
2025-04-03 el super
2025-04-04 el super
2025-04-05 el super
2025-04-06 el super
                                                                                                                                     sprouts farmers market
                                                                                                                                                                                                                          08:00:00
08:00:00
08:00:00
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                                                                                                                                                                                                                                                      08:20:00
08:20:00
08:20:00
08:20:00
08:20:00
08:20:00
                                                                                                                                                                                                                                                                                                        BUS001
BUS001
BUS001
BUS001
                                                                                                                                                                                                                                                                                  ID001
                                                                                                                                                                                                                                                                                 ID001
ID001
ID001
ID001
```

```
Please select an option.

1. Show trip offering schedule for start location and destination.
2. Show full trip offering schedule.
3. Delete a trip offering.
4. Add trip offering(s).
5. Change driver assigned to trip offering.
6. Change bus assigned to trip offering.
7. Display the stops for a trip.
8. Display a driver's schedule.
9. Add a new driver to list of drivers.
10. Add a bus to list of buses.
11. Remove bus from bus list.
12. Insert 'Actual Trip Stop Info'.
9. EXIT

1

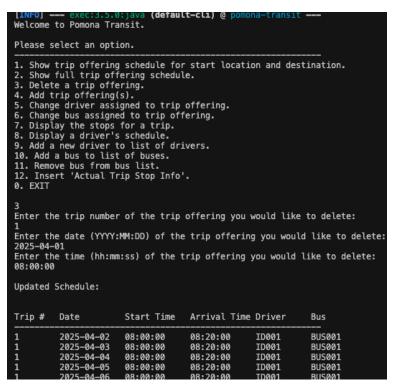
Enter the start location name of your desired trip:
jupiter
Enter the destination name of your desired trip:
mars
No trip offerings found.

Please select an option.

1. Show trip offering schedule for start location and destination.
2. Show full trip offering schedule.
3. Delete a trip offering.
4. Add trip offering(s).
5. Change driver assigned to trip offering.
6. Change bus assigned to trip offering.
7. Display the stops for a trip.
8. Display a driver's schedule.
9. Add a new driver to list of drivers.
10. Add a bus to list of buses.
11. Remove bus from bus list.
12. Insert 'Actual Trip Stop Info'.
9. EXIT
9
Session Ended.
```

2. Modify trip offering table.

- a. Delete trip_offering screenshot (top left). Notice that the trip offering for trip 1 on 2025-04-01 (from previous screenshot in #1) is no longer on the trip_offering table.
 - Note that this is a partial screenshot of the output.
- b. The second screenshot (top right) is the message after successfully adding the same trip offering we just deleted back to the table.
 - The third screenshot(bottom) is the output after adding the same trip_offering back to the table. (This is a cropped screenshot from the bottom of the table trip_offerings after execution).



```
Please select an option.

1. Show trip offering schedule for start location and destination.
2. Show full trip offering schedule.
3. Delete a trip offering.
4. Add trip offering(s).
5. Change driver assigned to trip offering.
6. Change bus assigned to trip offering.
7. Display the stops for a trip.
8. Display a driver's schedule.
9. Add a new driver to list of drivers.
10. Add a bus to list of buses.
11. Remove bus from bus list.
12. Insert 'Actual Trip Stop Info'.
9. EXIT

4
Enter the following details of the new trip offering.

Trip Number:
1
1
2015 Date (YYYY—MM—DD):
2025—04—01
2025—04—01
2025—04—01
2025—04-01
2025—04-01
2025—04-01
2025—04-01
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12 13 14 15 1	2025-04-13 2025-04-14 2025-04-14 2025-04-14 2025-04-01	11:00:00 08:00:00 09:00:00 10:00:00 08:00:00	11:30:00 08:30:00 09:30:00 10:25:00 08:20:00	ID008 ID009 ID010 ID011 ID001	BUS008 BUS009 BUS010 BUS011 BUS001
1. Sho	select an opti w trip offering w full trip of	g schedule f fering sched		tion and de	stination.
	ete a trip offe trip offering				

c. Change Driver for trip_offering. Updated entry in last row of trip_offering table. (Previous Driver was ID002)

Please select an option.

1. Show trip offering schedule for start location and destination.
2. Show full trip offering schedule.
3. Delete a trip offering.
4. Add trip offering(s).
5. Change driver assigned to trip offering.
6. Change bus assigned to trip offering.
7. Display the stops for a trip.
8. Display a driver's schedule.
9. Add a new driver to list of drivers.
10. Add a bus to list of buses.
11. Remove bus from bus list.
12. Insert 'Actual Trip Stop Info'.
0. EXIT
5
Enter the trip number of the trip offering you would like modify:
2
Enter the date (YYY-MM-DD) of the trip offering you would like modify:
2025-04-02
Enter the scheduled start time (hh:mm:ss) of the trip offering you would like modify:
99:00:00
Enter the Driver ID of the new driver for this trip offering:
ID015
Successfully updated the driver for trip offering!

 Show trip offering schedule for start location and destination. Show full trip offering schedule. Delete a trip offering. Add trip offering(s). Change driver assigned to trip offering. Change bus assigned to trip offering. Display the stops for a trip. Display a driver's schedule. Add a new driver to list of drivers. Add a bus to list of buses. Remove bus from bus list. Insert 'Actual Trip Stop Info'. EXIT 						
Σ Γrip #	Date	Start Time	Arrival Time	Driver	Bus	
 L	 2025-04-02	08:00:00	08:20:00	ID001	BUS001	
	2025-04-03	08:00:00	08:20:00	ID001	BUS001	
	2025-04-04	08:00:00	08:20:00	ID001	BUS001	
	2025-04-05	08:00:00	08:20:00	ID001	BUS001	
L L L L 2 2 3 3 3 3 3 4 4 4 4 4 5 5 5	2025-04-06	08:00:00	08:20:00	ID001	BUS001	
2	2025-04-01	09:00:00	09:20:00	ID002	BUS002	
3	2025-04-01	10:00:00	10:25:00	ID003	BUS003	
3	2025-04-02	10:00:00	10:25:00	ID003	BUS003	
3	2025-04-03	10:00:00	10:25:00	ID003	BUS003	
3	2025-04-04	10:00:00	10:25:00	ID003	BUS003	
3	2025-04-05	10:00:00	10:25:00	ID003	BUS003	
1	2025-04-01	11:00:00	11:25:00	ID004	BUS004	
1	2025-04-02	11:00:00	11:25:00	ID004	BUS004	
1	2025-04-03	11:00:00	11:25:00	ID004	BUS004	
!	2025-04-04	11:00:00	11:25:00	ID004	BUS004	
!	2025-04-05	11:00:00	11:25:00	ID004	BUS004	
	2025-04-06	12:00:00	12:25:00	ID005	BUS005	
2	2025-04-06	13:00:00	13:30:00	ID006	BUS006	
7 3	2025-04-06	14:00:00	14:25:00	ID007	BUS007	
5	2025-04-07	08:00:00	08:20:00	ID008	BUS008	
)	2025-04-07	09:00:00	09:30:00	ID009	BUS009	
10	2025-04-07	10:00:00	10:30:00	ID010	BUS010	
11	2025-04-08	08:30:00	08:50:00	ID011	BUS011	
12 13	2025-04-08	09:30:00	09:55:00	ID012	BUS012	
L3 L4	2025-04-08	10:30:00	11:00:00	ID013	BUS013	
14 15	2025-04-08	11:30:00	12:00:00	ID014	BUS014	
15 16	2025-04-08 2025-04-09	12:30:00 08:00:00	13:00:00 08:30:00	ID015 ID016	BUS015 BUS016	
L6 L7	2025-04-09	09:00:00	09:25:00	ID016 ID017	BUS017	
L7 L8	2025-04-09	10:00:00	10:30:00	ID017	BUS018	
19	2025-04-09	11:00:00	11:20:00	ID010 ID019	BUS019	
20	2025-04-10	08:00:00	08:25:00	ID019 ID020	BUS020	
	2025-04-10	09:00:00	09:20:00	ID020	BUS001	
5 7 3	2025-04-10	10:00:00	10:30:00	ID001	BUS002	
7	2025-04-10	08:00:00	08:25:00	ID003	BUS003	
3	2025-04-11	09:00:00	09:30:00	ID003	BUS004	
á	2025-04-11	08:30:00	09:00:00	ID005	BUS005	
ĹØ	2025-04-12	09:30:00	10:00:00	ID006	BUS006	
11	2025-04-13	10:00:00	10:30:00	ID007	BUS007	
12	2025-04-13	11:00:00	11:30:00	ID007	BUS008	
13	2025-04-14	08:00:00	08:30:00	ID009	BUS009	
14	2025-04-14	09:00:00	09:30:00	ID010	BUS010	
15	2025-04-14	10:00:00	10:25:00	ID011	BUS011	
	2025-04-01	08:00:00	08:20:00	ID001	BUS001	
L 2	2025-04-02	09:00:00	09:20:00	ID015	BUS002	

d. Change Bus for trip_offering.

Output:

```
Welcome to Pomona Transit.
Please select an option.

    Show trip offering schedule for start location and destination.
    Show full trip offering schedule.

3. Delete a trip offering.
4. Add trip offering(s).
5. Change driver assigned to trip offering.
Change bus assigned to trip offering.

c. Change bus assigned to trip offering
7. Display the stops for a trip.
8. Display a driver's schedule.
9. Add a new driver to list of drivers.
10. Add a bus to list of buses.
11. Remove bus from bus list.
12. Insert 'Actual Trip Stop Info'.

0. EXIT
Enter the trip number of the trip offering you would like modify:
Enter the date (YYYY-MM-DD) of the trip offering you would like modify:
2025-04-02
Enter the scheduled start time (hh:mm:ss) of the trip offering you would like modify:
08:00:00
Enter the Bus ID of the new bus for this trip offering:
BUS011
Successfully updated the bus for trip offfering!
```

Updated entry in last row of trip_offering table (previous BusID was BUS001:

3. Display the stops of a given trip.

109

```
Welcome to Pomona Transit.
Please select an option.
1. Show trip offering schedule for start location and destination.
2. Show full trip offering schedule.
3. Delete a trip offering.
Add trip offering(s).
5. Change driver assigned to trip offering.
Change bus assigned to trip offering.
Display the stops for a trip.
8. Display a driver's schedule.
9. Add a new driver to list of drivers.
10. Add a bus to list of buses.
Remove bus from bus list.
12. Insert 'Actual Trip Stop Info'.
0. EXIT
Enter a trip number for the trip stop details:
Trip #
         Stop #
                      Stop Address
                                           Sequence #
                                                        Driving Time
                      1234 1st Street
1
         101
                                           1
                                                        00:05:00
                      5678 5th Street
                                           2
1
                                                        00:10:00
         105
                                           3
```

9012 9th Street

00:15:00

4. Display the weekly schedule of a given driver and date.

Please select an option. 1. Show trip offering schedule for start location and destination. Show full trip offering schedule. Delete a trip offering. 4. Add trip offering(s). 5. Change driver assigned to trip offering. 6. Change bus assigned to trip offering. 7. Display the stops for a trip. 8. Display a driver's schedule. 9. Add a new driver to list of drivers. 10. Add a bus to list of buses. 11. Remove bus from bus list. 12. Insert 'Actual Trip Stop Info'. 0. EXIT Enter the driver ID for the driver's schedule you would like to view: Enter the start date (YYYY-MM-DD) for the schedule you would like to view: 2025-04-01 Enter the end date (YYYY-MM-DD) for the schedule you would like to view: 2025-04-30 Trip # Date Start Time Arrival Time Driver Bus 2025-04-03 ID001 BUS001 08:00:00 08:20:00 2025-04-04 08:20:00 ID001 BUS001 08:00:00 2025-04-05 08:00:00 08:20:00 ID001 BUS001 1 5 1 2025-04-06 08:00:00 ID001 08:20:00 BUS001 2025-04-10 ID001 BUS001 09:00:00 09:20:00 2025-04-01 08:20:00 ID001 BUS001 08:00:00 2025-04-02 08:00:00 08:20:00 ID001 BUS011

5. Add a driver to list of drivers.

Updated Table

	sit=# select * from driv driver_name	
TIVET_ID ID001 ID002 ID003 ID004 ID005 ID006 ID007 ID008 ID009 ID010 ID011 ID012 ID013 ID014 ID015 ID016 ID017 ID018 ID019 ID019 ID019 ID019 ID019	driver_name	(909)111-2345 (909)222-3456 (909)333-4567 (909)444-5678 (909)555-6789 (909)666-7890 (909)777-8901 (909)888-9012 (909)999-0123 (909)000-1234 (909)123-4567 (909)234-5678 (909)345-6789 (909)345-6789 (909)456-7890 (909)678-9012 (909)789-0123 (909)789-0123 (909)890-1234 (909)901-2345 (909)012-3456
ID999 (21 rows)	John Cena	(619)808-9090

6. Remove a bus from the bus list.

Output:

```
Please select an option.
1. Show trip offering schedule for start location and destination.
2. Show full trip offering schedule.
3. Delete a trip offering.
4. Add trip offering(s).
5. Change driver assigned to trip offering.
6. Change bus assigned to trip offering.
7. Display the stops for a trip.
8. Display a driver's schedule.
9. Add a new driver to list of drivers.
10. Add a bus to list of buses.
11. Remove bus from bus list.
12. Insert 'Actual Trip Stop Info'.
EXIT
10
Enter the bus ID of the bus you would like to add:
Enter the model of the bus you would like to add:
SuperBus
Enter the year(YYYY) of the bus you would like to add:
2025
Bus successfully added!
```

Before After

pomona_tr bus id	ransit=# select * from bus; model	year
		+
BUS001	New Flyer XN40	2018
BUS002	Gillig Low Floor	2019
BUS003	Nova Bus LFS	2020
BUS004	Proterra Catalyst	2021
BUS005	BYD K9S	2022
BUS006	Blue Bird All American	2017
BUS007	Thomas Saf-T-Liner	2018
BUS008 j	IC Bus CE Series	2020
BUS009 j	Van Hool A330	2021
BUS010	Alexander Dennis Enviro500	2023
BUS011	New Flyer XDE60	2017
BUS012	Gillig BRT Plus	2018
BUS013	Proterra ZX5	2021
BUS014	BYD C10MS	2022
BUS015	Nova Bus Hybrid	2019
BUS016	IC Bus RE Series	2016
BUS017	Blue Bird Vision	2020
BUS018	Thomas C2	2019
BUS019	Ford E-Transit	2023
BUS020	ElDorado Axess	2021
(20 rows)		

pomona_tr bus_id	ransit=# select * from bus; model	year
BUS001 BUS002 BUS003 BUS004 BUS005 BUS006 BUS007	New Flyer XN40 Gillig Low Floor Nova Bus LFS Proterra Catalyst BYD K9S Blue Bird All American Thomas Saf-T-Liner	+ 2018 2019 2020 2021 2022 2017 2018
BUS008 BUS009 BUS010 BUS011 BUS012 BUS013 BUS014	IC Bus CE Series Van Hool A330 Alexander Dennis Enviro500 New Flyer XDE60 Gillig BRT Plus Proterra ZX5 BYD C10MS	2010 2020 2021 2023 2017 2018 2021
BUS015 BUS016 BUS017 BUS018 BUS019 BUS020 BUS999 (21 rows)	Nova Bus Hybrid IC Bus RE Series Blue Bird Vision Thomas C2 Ford E-Transit ElDorado Axess SuperBus	2019 2016 2020 2019 2023 2021 2025

7. Delete bus from list of buses.

Output:

Before After

pomona_tr bus_id	ransit=# select * from bus; model	year
BUS001 BUS002 BUS003 BUS004 BUS005 BUS006 BUS007	New Flyer XN40 Gillig Low Floor Nova Bus LFS Proterra Catalyst BYD K9S Blue Bird All American Thomas Saf-T-Liner	2018 2019 2020 2021 2022 2017 2018
BUS008 BUS009 BUS010 BUS011 BUS012 BUS013 BUS014 BUS015	IC Bus CE Series Van Hool A330 Alexander Dennis Enviro500 New Flyer XDE60 Gillig BRT Plus Proterra ZX5 BYD C10MS Nova Bus Hybrid	2020 2021 2023 2017 2018 2021 2022 2019
BUS016 BUS017 BUS018 BUS019 BUS020 BUS999 (21 rows)	IC Bus RE Series Blue Bird Vision Thomas C2 Ford E-Transit ElDorado Axess SuperBus	2016 2020 2019 2023 2021 2025

pomona tr	ransit=# select * from bus;	
bus_id		year
BUS001	New Flyer XN40	2018
BUS002	Gillig Low Floor	2019
BUS003	Nova Bus LFS	2020
BUS004	Proterra Catalyst	2021
BUS005	BYD K9S	2022
BUS006	Blue Bird All American	2017
BUS007	Thomas Saf-T-Liner	2018
BUS008	IC Bus CE Series	2020
BUS009	Van Hool A330	2021
BUS010	Alexander Dennis Enviro500	2023
BUS011	New Flyer XDE60	2017
BUS012	Gillig BRT Plus	2018
BUS013	Proterra ZX5	2021
BUS014	BYD C10MS	2022
BUS015	Nova Bus Hybrid	2019
BUS016	IC Bus RE Series	2016
BUS017	Blue Bird Vision	2020
BUS019	Ford E-Transit	2023
BUS020	ElDorado Axess	2021
BUS999	SuperBus	2025
(20 rows)		

8. Insert actual trip stop info.

Output

```
Please select an option.

1. Show trip offering schedule for start location and destination.
2. Show full trip offering schedule.
3. Delete a trip offering.
4. Add trip offering(s).
5. Change driver assigned to trip offering.
6. Change bus assigned to trip offering.
7. Display the stops for a trip.
8. Display a driver's schedule.
9. Add a new driver to list of drivers.
10. Add a bus to list of buses.
11. Remove bus from bus list.
12. Insert 'Actual Trip Stop Info'.
0. EXIT

12
Enter the following details of the actual trip stop info you would like to insert.

Trip Number:
1
Date (YYYY-MM-DD):
2025-04-02
Scheduled Start Time (hh:mm:ss):
08:00:00
Stop Number:
105
Scheduled Arrival Time (hh:mm:ss):
08:10:00
Actual Start Time (hh:mm:ss):
08:02:34
Number of Passengers In:
22
Number of Passengers Out:
4
Actual trip info successfully inserted!
```

Before and after execution.

pomona_transit=# select * trip_number date sche			ed_arrival_time act	tual_start_time nu	umber_of_passengers_in	number_of_passengers_out
(0 rows)					·	
trip_number date	scheduled_start_time	stop_number s	cheduled_arrival_time	e actual_start_tim	ne number_of_passenger	s_in number_of_passengers_out
1 2025-04-02 (1 row)	08:00:00	105 0	8:10:00	08:02:34	i	22 4