

Unit Test Screenshot Results for Some Functionalities

Admin Activity Logs output:

View top 10 current activity logs.

```
1 from Business.business_acc
2 from Data.data_access_layer
3 from Data.Databases.Script
4 from threading import Thre
5 from time import sleep
6
7 bus = BusinessAccessLayer(
8     dal = DataAccessLayer()
9
10
11 def traffic_data():
12     #user must be logged i
13
14     while True:
15         print('\nTraffic C
16         print('1. By Date'
17         print('2. By Colli
18         print('3. By Road
19         print('4. By Traff
20         print('5. Dashboar
21         print('6. Exit')
22
23         choice = input('En
24
25         if choice == '1':
26             input_start_da
27             if input_start
28
29             input_end_date
30             if input_end_d
31
32             bus.plot_accid
33         elif choice=='2':
34             # Define a dic
35             impact_types =
36                 0: "Angle"
37                 1: "Approa
```

Admin Menu:

1. View Activity Logs

Enter your choice: At intersection
Invalid choice, please try again ... or ...feature may not be implemented yet.

Transportation System

1. User Login
2. User Registration
3. Play with some Traffic data
4. Admin
5. User
6. Exit

Enter your choice: 4

Admin Menu:

1. View Activity Logs

Enter your choice: 1

Activity Logs:

Action	Timestamp	Details
16-174077	2016-08-10 08:20:00	Intersection related
16-173815	2016-08-10 07:35:00	At/near private drive
16-173628	2016-08-09 22:22:00	At/near private drive
16-173454	2016-08-09 17:26:00	Intersection related
16-173244	2016-08-09 12:23:00	Non intersection
16-173233	2016-08-09 12:10:00	Non intersection
16-172629	2016-08-08 17:30:00	At intersection
16-172511	2016-08-08 14:57:00	At intersection
16-172491	2016-08-08 14:34:00	At intersection
16-171880	2016-08-07 18:10:00	Non intersection

Transportation System

1. User Login
2. User Registration
3. Play with some Traffic data
4. Admin
5. User
6. Exit

Enter your choice: 1

Feedback Management

Add Feedback

```
1 from Business.business_acc
2 from Data.data_access_layer
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36                 0: "Angle"
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```

Downloads/PROG8421-Prag for Big Data/Big Data Project/Traffic-Insight - Copy/console.py"

Connection successful
Connection successful

Transportation System

1. User Login
2. User Registration
3. Play with some Traffic data
4. Admin
5. User
6. Exit

Enter your choice: 5

Welcome User!

1. Search by Location
2. Offline Search
3. Notifications
4. Feedback Menu
5. Logout

Enter your choice:

4

Feedback Menu:

1. Add Feedback
2. Update Feedback
3. Search Feedback

Enter your choices: 1
Enter your User ID: 008
Enter your feedback: New user collisions
Feedback added successfully.

Welcome User!

1. Search by Location
2. Offline Search
3. Notifications
4. Feedback Menu
5. Logout

Enter your choice:

Update Feedback

```
1 from Business.business_acc
2 from Data.data_access_layer
3 from Data.Databases.Script
4 from threading import Thread
5 from time import sleep
6
7 bus = BusinessAccessLayer(
8     dal = DataAccessLayer()
9
10
11 def traffic_data():
12     #user must be logged in
13     while True:
14         print('\nTraffic C
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18         print('4. By Traff
19         print('5. Dashboar
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28             input_end_date
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35                 0: "Angle"
36                 1: "Appro
```

Download/PROG8421-Prog for Big Data/Big Data Project/Traffic-Insight - Copy/console.py"

connection successful
connection successful

Transportation System

1. User Login
2. User Registration
3. Play with some Traffic data
4. Admin
5. User
6. Exit

Enter your choice: 5

Welcome User!

1. Search by Location
2. Offline Search
3. Notifications
4. Feedback Menu
5. Logout

Enter your choice: 4

Feedback Menu:

1. Add Feedback
2. Update Feedback
3. Search Feedback

Enter your choice: 2

Enter feedback ID to update: 001

Enter the updated feedback: new update on feedback

Feedback updated successfully.

Welcome User!

1. Search by Location
2. Offline Search
3. Notifications
4. Feedback Menu
5. Logout

Enter your choice:

Search Feedback

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33             # Define a dic
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35                 0: "Angle"
36                 1: "Appro
```

5. Logout

Enter your choice:

4

Feedback Menu:

1. Add Feedback
2. Update Feedback
3. Search Feedback

Enter your choice: 1

Enter your User ID: 008

Enter your feedback: New user collisions

Feedback added successfully.

Welcome User!

1. Search by Location
2. Offline Search
3. Notifications
4. Feedback Menu
5. Logout

Enter your choice: 4

Feedback Menu:

1. Add Feedback
2. Update Feedback
3. Search Feedback

Enter your choice: 3

Enter User ID to search feedback for: 008

Feedback ID: 3, Content: New user collisions

Welcome User!

1. Search by Location
2. Offline Search
3. Notifications
4. Feedback Menu
5. Logout

Enter your choice:

User Offline Search; Traffic Insights

```
File Edit Selection View Go ... Traffic-Insight - Copy
EXPLORER
TRAFFIC-INSIGHT - COPY
Data
Databases
user.py
TrafficData
__pycache__
Data
files
TrafficInsight_E...
TrafficInsightAP...
TrafficInsightDa...
TwitterAPI
cached_accidents...
data_access_laye...
SupportingDocum...
Traffic-Insight
Visualization
_prototype1.py
config.py
console.py
README.md
Requirements.txt
traffic_system.db
OUTLINE
TIMELINE
DEBUG CONSOLE
Filter (e.g. text, l...)
console.py
1 from Business.business_acc
2 from Data.data_access_laye
3 from Data.Databases.Script
4 from threading import Thre
5 from time import sleep
6
7 bus = BusinessAccessLayer(
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9
10 Codeium: Refactor | Explain | Generate
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37                 1: "Approa
38
39 PROBLEMS TERMINAL PORTS GITLENS SEARCH ERROR SPELL CHECKER 3 COMMENTS
Feedback ID: 3, Content: New user collisions
Welcome User!
1. Search by Location
2. Offline Search
3. Notifications
4. Feedback Menu
5. Logout
Enter your choice:
2
Offline Search Menu:
1. Sync Accident Data and Search
2. Back to Main Menu
Enter your choice:
1
Accident data cached successfully at c:\Users\Owner\Downloads\PROG8421-Prog for Big Data\Big Data Project\Traffic-Insigh
t - Copy\Data\cached_accidents.json.
Enter the location to search for accidents offline:At intersection
--- Accident Details ---
Accident Number: 15-001276
Date: 2015-01-02 22:07:00
Location: At intersection
Notes: BLOCK LINE RD; LAURENTIAN DR; 2 M
--- Accident Details ---
Accident Number: 15-002809
Date: 2015-01-05 08:05:00
Location: At intersection
Notes: LORRAINE AVE ; CARSON DR
Offline Search Menu:
1. Sync Accident Data and Search
2. Back to Main Menu
Enter your choice:
1
```

Search by Location

```
File Edit Selection View Go ... Traffic-Insight - Copy
EXPLORER
TRAFFIC-INSIGHT - COPY
Data
Databases
user.py
TrafficData
__pycache__
Data
files
TrafficInsight_E...
TrafficInsightAP...
TrafficInsightDa...
TwitterAPI
cached_accidents...
data_access_laye...
SupportingDocum...
Traffic-Insight
Visualization
_prototype1.py
config.py
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OUTLINE
TIMELINE
DEBUG CONSOLE
Filter (e.g. text, l...)
console.py
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36                 0: "Angle"
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38
39 PROBLEMS TERMINAL PORTS GITLENS SEARCH ERROR SPELL CHECKER 3 COMMENTS
ata Project\Traffic-Insight - Copy> & c:\Users\Owner\AppData\Local\Programs\Python\Python312\python.exe "c:\Users\Owner\
Downloads\PROG8421-Prog for Big Data\Big Data Project\Traffic-Insight - Copy/console.py"
Connection successful
Connection successful
Transportation System
1. User Login
2. User Registration
3. Play with some Traffic data
4. Admin
5. User
6. Exit
Enter your choice: 5
Welcome User!
1. Search by Location
2. Offline Search
3. Notifications
4. Feedback Menu
5. Logout
Enter your choice:
1
Enter the location to search for accidents: At intersection
Accident Number: 16-172629, Date: 2016-08-08 17:30:00, Location: At intersection, Notes: HURON RD; STRASBURG RD
Accident Number: 16-172511, Date: 2016-08-08 14:57:00, Location: At intersection, Notes: FAIRFIELD AVE; ST LEGER ST
Accident Number: 16-172491, Date: 2016-08-08 14:34:00, Location: At intersection, Notes: WESTHEIGHTS DR; BROKEN OAK CRES
Welcome User!
1. Search by Location
2. Offline Search
3. Notifications
4. Feedback Menu
5. Logout
Enter your choice:
1
```


Real-Time Notifications

The screenshot shows a VS Code editor with a Python script named `console.py` in the `TRAFFIC-INSIGHT - COPY` project. The script is a menu-driven application for a traffic system. The terminal output shows the program's execution, including a menu of options (1. By Date, 2. By Collision, 3. By Road, 4. By Traffic, 5. Dashboard, 6. Exit) and a list of accident data. The data is presented in a table with columns for Location, Description, and Date.

Location	Description	Date
At railway crossing	Accident: At railway crossing	2015-07-07 07:24:00
Overpass or bridge	Accident: Overpass or bridge	2016-07-04 00:15:00
Overpass or bridge	Accident: Overpass or bridge	2016-04-17 19:55:00
Overpass or bridge	Accident: Overpass or bridge	2016-02-12 19:46:00
Other	Accident: Other	2016-08-02 07:00:00
Other	Accident: Other	2016-07-31 19:22:00
Other	Accident: Other	2016-07-09 09:00:00
Underpass or tunnel	Accident: Underpass or tunnel	2015-11-30 07:15:00
Underpass or tunnel	Accident: Underpass or tunnel	2015-11-23 16:20:00
At intersection	Accident: At intersection	2016-08-08 17:30:00
At intersection	Accident: At intersection	2016-08-08 14:57:00
At intersection	Accident: At intersection	2016-08-08 14:34:00
At/near private drive	Accident: At/near private drive	2016-08-10 07:35:00
At/near private drive	Accident: At/near private drive	2016-08-09 22:22:00
At/near private drive	Accident: At/near private drive	2016-08-06 11:11:00

Error at wrong location search offline

The screenshot shows the same VS Code editor with the `console.py` script. The terminal output shows the program's execution, including a menu of options (1. Search by Location, 2. Offline Search, 3. Notifications, 4. Feedback Menu, 5. Logout, 6. Exit) and a list of accident data. The data is presented in a table with columns for Location, Description, and Date.

Location	Description	Date
At railway crossing	Accident: At railway crossing	2015-07-07 07:24:00
Overpass or bridge	Accident: Overpass or bridge	2016-07-04 00:15:00
Overpass or bridge	Accident: Overpass or bridge	2016-04-17 19:55:00
Overpass or bridge	Accident: Overpass or bridge	2016-02-12 19:46:00
Other	Accident: Other	2016-08-02 07:00:00
Other	Accident: Other	2016-07-31 19:22:00
Other	Accident: Other	2016-07-09 09:00:00
Underpass or tunnel	Accident: Underpass or tunnel	2015-11-30 07:15:00
Underpass or tunnel	Accident: Underpass or tunnel	2015-11-23 16:20:00
At intersection	Accident: At intersection	2016-08-08 17:30:00
At intersection	Accident: At intersection	2016-08-08 14:57:00
At intersection	Accident: At intersection	2016-08-08 14:34:00
At/near private drive	Accident: At/near private drive	2016-08-10 07:35:00
At/near private drive	Accident: At/near private drive	2016-08-09 22:22:00
At/near private drive	Accident: At/near private drive	2016-08-06 11:11:00

Error at wrong Location Search

The screenshot shows a VS Code editor with a Python script named `console.py` open. The script is a menu-driven application for a traffic system. It includes modules for business logic, data access, and user interface. The script is running in a terminal window, and the output shows the user selecting option 1 (Search by Location) and entering a location. The script then prints the location and the number of accidents found. The output shows that no accidents were found at the specified location.

```
1 from Business.business_acc
2 from Data.data_access_layer
3 from Data.Databases.Script
4 from threading import Thre
5 from time import sleep
6
7 bus = BusinessAccessLayer(
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10
11 def traffic_data():
12     #user must be logged i
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29             input_end_date
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31
32             bus.plot_accid
33         elif choice=="2":
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35             impact_types =
36                 0: "Angle"
37                 1: "Approa
```

Terminal Output:

```
Welcome User!
1. Search by Location
2. Offline Search
3. Notifications
4. Feedback Menu
5. Logout
Enter your choice:
4

Feedback Menu:
1. Add Feedback
2. Update Feedback
3. Search Feedback
Enter your choice: 2
Enter Feedback ID to update: 001
Enter the updated feedback: new update on feedback
Feedback updated successfully.

Welcome User!
1. Search by Location
2. Offline Search
3. Notifications
4. Feedback Menu
5. Logout
Enter your choice:
1
Enter the location to search for accidents: got
No accidents found at this location.

Welcome User!
1. Search by Location
2. Offline Search
3. Notifications
4. Feedback Menu
5. Logout
Enter your choice:
```