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(UiTM) KEDAH, KAMPUS SUNGAI PETANI

SCHOOL OF INFORMATION SCIENCE
COLLEGE OF COMPUTING, INFORMATICS AND MATHEMATICS
DIPLOMA IN INFORMATICS LIBRARY

[CDIM144]

IML 208: coding

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SUBMISSION DATE:

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Course Code: CDIM144

Programme Code: IML208

Faculty / Campus: SCHOOL OF INFORMATION SCIENCE COLLEGE OF COMPUTING,
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ACKNOWLEDGEMENT

Assalamualaikum w.b.t

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Project Name: portable toilet rental

File Name: IML208 assignment.py

Prompt Data:

- i) Add toilet
- ii) Add toilet
- iii) Return toilet
- iv) Delete toilet
- v) View inventory

Function:

1.create the data

Portable Toilet Rental System

Toilet ID: 123

Customer Name:

Add Toilet

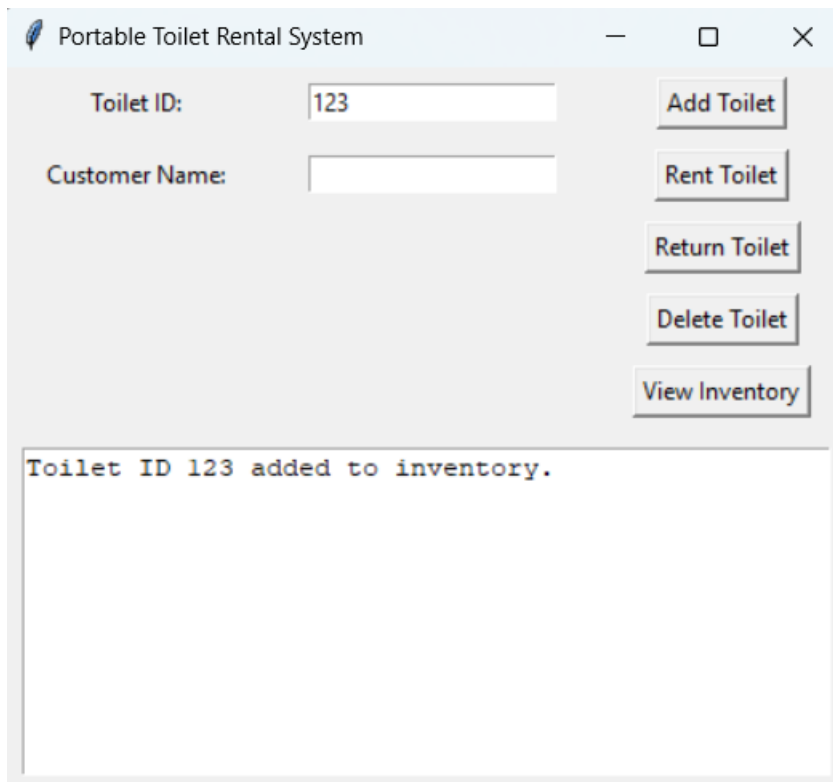
Rent Toilet

Return Toilet

Delete Toilet

View Inventory

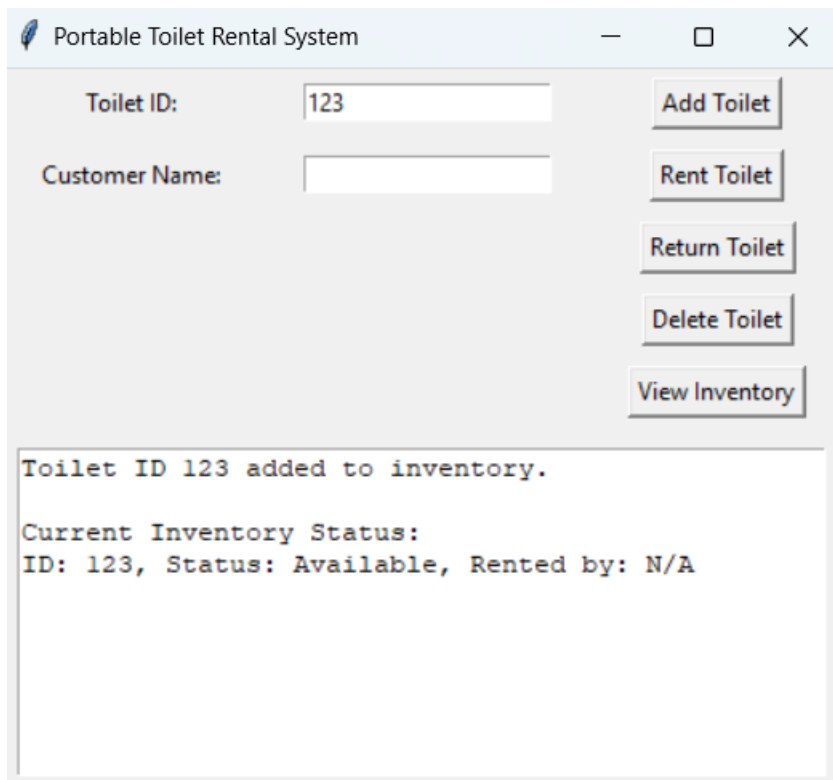
2. Read the data



The screenshot shows a window titled "Portable Toilet Rental System". It has a light blue header bar with a feather icon on the left and standard window controls (minimize, maximize, close) on the right. The main area is light gray. On the left, there are two input fields: "Toilet ID:" with the value "123" and "Customer Name:" which is empty. To the right of these fields are five buttons stacked vertically: "Add Toilet", "Rent Toilet", "Return Toilet", "Delete Toilet", and "View Inventory". The "Add Toilet" button is highlighted with a dark border. Below the buttons is a white text area containing the message "Toilet ID 123 added to inventory." in a monospaced font.

3. Update the data

Before customer rent the toilet



The screenshot shows the same "Portable Toilet Rental System" window. The "Toilet ID:" field still contains "123" and the "Customer Name:" field is empty. The buttons are the same, but now the "View Inventory" button at the bottom is highlighted with a dark border. The text area below the buttons displays two lines of monospaced text: "Toilet ID 123 added to inventory." followed by "Current Inventory Status:" and "ID: 123, Status: Available, Rented by: N/A".

After customer rent

The screenshot shows a window titled "Portable Toilet Rental System" with standard window controls. It contains two input fields: "Toilet ID:" with the value "123" and "Customer Name:" with the value "kama". To the right of these fields are five buttons: "Add Toilet", "Rent Toilet", "Return Toilet", "Delete Toilet", and "View Inventory". Below the input fields is a text area displaying the following text:

```
Current Inventory Status:  
ID: 123, Status: Available, Rented by: N/A  
  
Toilet ID 123 rented to kamal.  
  
Current Inventory Status:  
ID: 123, Status: Rented, Rented by: kamal
```

4. Delete the data

Before delete the data

Portable Toilet Rental System

Toilet ID:

Customer Name:

Current Inventory Status:
ID: 123, Status: Available, Rented by: N/A

Toilet ID 123 rented to kamal.

Current Inventory Status:
ID: 123, Status: Rented, Rented by: kamal

After delete the data

Portable Toilet Rental System

Toilet ID:

Customer Name:

Toilet ID 123 rented to kamal.

Current Inventory Status:
ID: 123, Status: Rented, Rented by: kamal

Toilet ID 123 has been deleted from the system.

Current Inventory Status:

Conditional Statement: Yes

```
Welcome | toilet rental.py | IML208 assignmet.py |
C: > Users > fathi > OneDrive > Documents > sem3 > toilet rental.py > ...
47 def main():
60     if choice == "1":
61         toilet_id = input("Enter Toilet ID to add: ").strip()
62         if toilet_id:
63             print(rental_system.add_toilet(toilet_id))
64         else:
65             print("Invalid input. Please provide a valid Toilet ID.")
66
67     elif choice == "2":
68         toilet_id = input("Enter Toilet ID to rent: ").strip()
69         customer_name = input("Enter Customer Name: ").strip()
70         if toilet_id and customer_name:
71             print(rental_system.rent_toilet(toilet_id, customer_name))
72         else:
73             print("Invalid input. Please provide both Toilet ID and Customer Name.")
74
75     elif choice == "3":
76         toilet_id = input("Enter Toilet ID to return: ").strip()
77         if toilet_id:
78             print(rental_system.return_toilet(toilet_id))
79         else:
80             print("Invalid input. Please provide a valid Toilet ID.")
81
82     elif choice == "4":
83         toilet_id = input("Enter Toilet ID to delete: ").strip()
84         if toilet_id:
85             print(rental_system.delete_toilet(toilet_id))
86         else:
87             print("Invalid input. Please provide a valid Toilet ID.")
88
89     elif choice == "5":
90         print(rental_system.view_inventory())
91
92     elif choice == "6":
93         print("Exiting the system. Goodbye!")
94         break
95
96     else:
97         print("Invalid choice. Please enter a number between 1 and 6.")
```

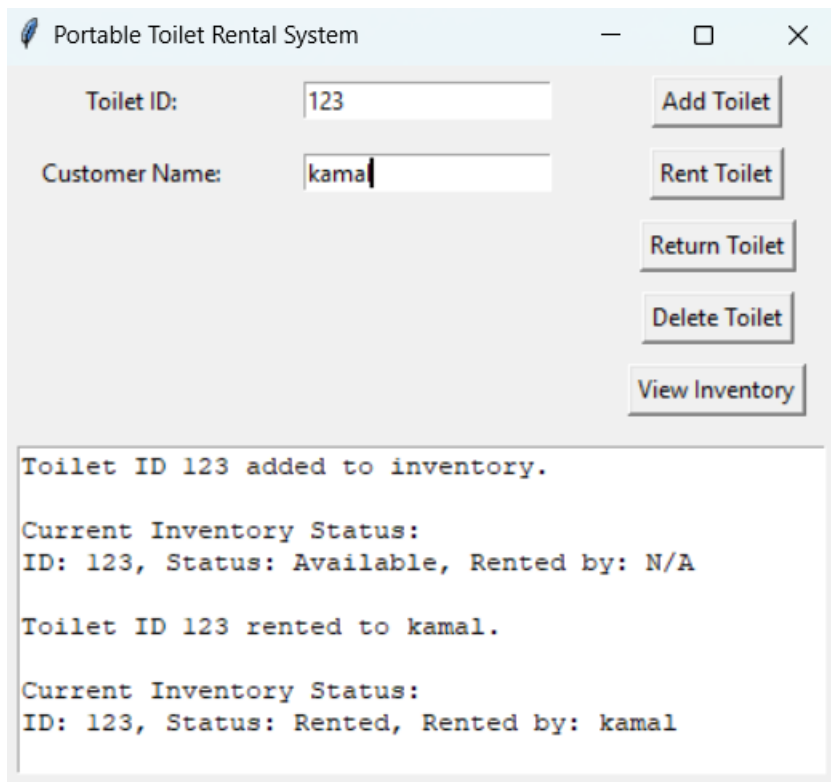
GUI: Yes

Portable Toilet Rental System

Toilet ID:

Customer Name:

Result: Screenshot



Strengths:

Comprehensive functionality:

1. Clear Separation of Concerns

- The program is well-structured, with the logic and the user interface separated:
 - **PortableToiletRental class:** Manages the core business logic (inventory and rental operations).
 - **PortableToiletRentalApp class:** Handles the GUI and connects the user interface to the backend logic.
- This modularity improves code readability, maintainability, and scalability.

2. User-Friendly GUI

- The tkinter-based interface is simple and easy to use:
 - Text fields for input make interactions straightforward.
 - Buttons for specific actions ensure clarity of purpose.
 - Output messages in the text area provide immediate feedback to the user.