Task 6: Build a Basic To-Do List Application

DESCRIPTION:

- This is the description of Task-6 of my python internship at Happieloop.
- Here, the task is to **perform different operations on a List**.
- I have created a file **task6.py** and developed python code according to the requirements to implement the operations.
- The purpose of the program that I have developed is to perform the following operations on a List.
  i)Adding items
  ii)Viewing items
  iii)Removing items
- I have developed 3 functions in my code. They are **display_List, adding_item , removing_item**.
- In the function **display_List**: If there are any items in List then **the items will be displayed** in the console window or else it will display **No items in the list**.
- The **adding_items** function implements the adding of elements to the list.
- The **removing_items** function: If the given index contains an element then the corresponding element will be removed from the List or else if there is no element

present at that index or if the List is empty then it will display **No items to remove.**

- If the given index is not a valid index it will show invalid index.
- The code also handles errors and exceptional cases.
- The **List manipulation functions** that I have used in my code are **append()** and **pop()** functions.
- The **append()** function adds elements into the List.
- The **pop()** function removes the element of a particular index in the given List.
- Below will be the implementation and example inputs to determine the output by performing different operations.

CODE:

```
List = []
def display_list():
    if List:
        print("Items:")
        for index, item in enumerate(List, start=1):
            print(f"{index}. {item}")
    else:
        print("No items yet.")
def add_item():
    item = input("Enter the  item: ")
    List.append(item)
```

```
    print(f"{item} added to the  list.")
def remove_item():
    display_list()
    if List:
        try:
            index = int(input("Enter the index of the item to
remove: "))
            if 0 <= index < len(List):
                removed_item = List.pop(index)
                print(f"Removed: {removed_item}")
            else:
                print("Invalid index.")
        except ValueError:
            print("Invalid input. Please enter a valid integer.")
    else:
        print("No items to remove.")
while True:
    print("\nMenu:")
    print("1. Add an item")
    print("2. View the list")
    print("3. Remove an item")
    print("4. Quit")
```

```
choice = input("Enter your choice: ")

if choice == '1':
    add_item()
elif choice == '2':
    display_list()
elif choice == '3':
    remove_item()
elif choice == '4':
    break
else:
    print("Invalid choice. Please select a valid option.")
```

- Now let me show some of the sample inputs and corresponding outputs for the above code.

OUTPUTS:

Menu:

1. Add an item
2. View the list
3. Remove an item
4. Quit

Enter your choice: 1

Enter the item: 28

28 added to the list.

Menu:

1. Add an item

2. View the list

3. Remove an item

4. Quit

Enter your choice: 1

Enter the item: 45

45 added to the list.

Menu:

1. Add an item

2. View the list

3. Remove an item

4. Quit

Enter your choice: 1

Enter the item: 79

79 added to the list.

Menu:

1. Add an item

2. View the list

3. Remove an item

4. Quit

Enter your choice: 2

Items:

1. 28

2. 45

3. 79

Menu:

1. Add an item

2. View the list

3. Remove an item

4. Quit

Enter your choice: 3

Items:

1. 28

2. 45

3. 79

Enter the index of the item to remove: 1

Removed: 45

Menu:

1. Add an item

2. View the list

3. Remove an item

4. Quit

Enter your choice: 2

Items:

1. 28

2. 79

Menu:

1. Add an item

2. View the list

3. Remove an item

4. Quit

Enter your choice: 4

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