

```
1 import uuid
2
3 # Global list to store the wishlist items.
4 # Each item is a dictionary: {'id': UUID, 'name': str, 'price': float, 'priority': str}
5 # We use a list to simulate a simple in-memory database.
6 wishlist = []
7
8 def generate_id():
9     """Generates a unique, short UUID for the item ID."""
10    # Using a shorter version of UUID for easier user input in the CLI
11    return str(uuid.uuid4()).split('-')[0]
12
13 def add_item():
14     """Prompts the user for item details and adds a new item to the wishlist."""
15     print("\n--- Add New Item ---")
16     name = input("Enter item name: ").strip()
17
18     while True:
19         try:
20             price_input = input("Enter estimated price (e.g., 49.99): ").strip()
21             # Convert to float, handling empty input as 0.0
22             price = float(price_input) if price_input else 0.0
23             if price < 0:
24                 print("Price cannot be negative. Please try again.")
25                 continue
26             break
27         except ValueError:
28             print("Invalid price format. Please enter a number.")
29
30     while True:
31         priority = input("Enter priority (High, Medium, Low): ").strip().capitalize()
32         if priority in ['High', 'Medium', 'Low']:
33             break
34         print("Invalid priority. Must be 'High', 'Medium', or 'Low'.")
35
36     new_item = {
```

```
37     'id': generate_id(),
38     'name': name,
39     'price': price,
40     'priority': priority
41 }
42 wishlist.append(new_item)
43 print(f"\n✓ Item '{name}' added successfully with ID: {new_item['id']}\\n")
44
45 def view_items():
46     """Displays all items in the wishlist with formatting."""
47     print("\n--- Your Shopping Wishlist ---")
48     if not wishlist:
49         print("Your wishlist is currently empty. Start adding some items!")
50         return
51
52 # Sort items by priority (High > Medium > Low) for better readability
53 priority_order = {'High': 3, 'Medium': 2, 'Low': 1}
54 sorted_wishlist = sorted(wishlist, key=lambda item: priority_order.get(item['priority'], 0), reverse=True)
55
56 total_cost = sum(item['price'] for item in sorted_wishlist)
57
58 print(f"{'ID':<8} {'Name':<35} {'Price':>10} {'Priority':<8}")
59 print("-" * 62)
60
61 for item in sorted_wishlist:
62     price_str = f"${item['price']:.2f}"
63     print(f"{item['id']:<8} {item['name'][:35]:<35} {price_str:>10} {item['priority']:<8}")
64
65 print("-" * 62)
66 print(f"Total Estimated Cost for {len(wishlist)} items: ${total_cost:.2f}\\n")
67
68
69 def find_item_by_id(item_id):
70     """Utility function to find an item dictionary by its unique ID."""
71     for item in wishlist:
```

```
72     |     if item['id'] == item_id:
73     |         return item
74     | return None
75
76 def update_item():
77     """Allows the user to modify an existing item's name, price, or priority."""
78     print("\n--- Update Item ---")
79     if not wishlist:
80         print("Wishlist is empty. Nothing to update.\n")
81         return
82
83     view_items()
84     item_id = input("Enter the ID of the item you want to update: ").strip()
85     item = find_item_by_id(item_id)
86
87     if not item:
88         print(f"X Error: Item with ID '{item_id}' not found.\n")
89         return
90
91     print(f"Updating item: {item['name']} (Current Price: ${item['price']:.2f}, Priority: {item['priority']})")
92
93     # Update Name
94     new_name = input(f"Enter new name (or press Enter to keep '{item['name']}'): ").strip()
95     if new_name:
96         item['name'] = new_name
97
98     # Update Price
99     while True:
100         new_price_input = input(f"Enter new price (or press Enter to keep ${item['price']:.2f}): ").strip()
101         if not new_price_input:
102             break
103         try:
104             new_price = float(new_price_input)
105             if new_price < 0:
106                 print("Price cannot be negative. Please try again.")
```

```
107     |         continue
108     |     item['price'] = new_price
109     |     break
110 except ValueError:
111     |     print("Invalid price format. Please enter a number.")
112
113 # Update Priority
114 while True:
115     new_priority = input(f"Enter new priority (High, Medium, Low, or Enter to keep '{item['priority']}'): ").strip().capitalize()
116     if not new_priority:
117         break
118     if new_priority in ['High', 'Medium', 'Low']:
119         item['priority'] = new_priority
120         break
121     print("Invalid priority. Must be 'High', 'Medium', or 'Low'.")
122
123 print(f"\n✓ Item '{item['name']}' (ID: {item_id}) updated successfully.\n")
124
125
126 def delete_item():
127     """Allows the user to remove an item from the wishlist."""
128     print("\n--- Delete Item ---")
129     if not wishlist:
130         print("Wishlist is empty. Nothing to delete.\n")
131         return
132
133     view_items()
134     item_id = input("Enter the ID of the item you want to delete: ").strip()
135     item_to_delete = find_item_by_id(item_id)
136
137     if not item_to_delete:
138         print(f"✗ Error: Item with ID '{item_id}' not found.\n")
139         return
140
141     # Remove the item from the list
```

```
142     wishlist.remove(item_to_delete)
143     print(f"\n[ ] Item '{item_to_delete['name']}' (ID: {item_id}) deleted successfully.\n")
144
145
146 def main():
147     """Main function to run the CLI application loop."""
148     print("Welcome to the Python Shopping Wishlist CLI App!")
149
150     while True:
151         print("\n--- Menu ---")
152         print("1. Add Item (Create)")
153         print("2. View Wishlist (Read)")
154         print("3. Update Item (Update)")
155         print("4. Delete Item (Delete)")
156         print("5. Exit")
157         choice = input("Enter your choice (1-5): ").strip()
158
159         if choice == '1':
160             add_item()
161         elif choice == '2':
162             view_items()
163         elif choice == '3':
164             update_item()
165         elif choice == '4':
166             delete_item()
167         elif choice == '5':
168             print("\nThank you for using the Wishlist App. Goodbye!")
169             break
170         else:
171             print("\n ! Invalid choice. Please enter a number between 1 and 5.")
172
173 if __name__ == "__main__":
174     main()
```

```
--- Menu ---
1. Add Item (Create)
2. View Wishlist (Read)
3. Update Item (Update)
4. Delete Item (Delete)
5. Exit
Enter your choice (1-5): 1

--- Add New Item ---
Enter item name: sabil
Enter estimated price (e.g., 49.99): 49.99
Enter priority (High, Medium, Low): medium
PS C:\Users\Mr Sabeel\Downloads> & "C:/Users/Mr Sabeel/AppData/Local/Programs/Python/Python313/python.exe" "c:/Users/Mr Sabeel/Downloads/CRUD app.py"
Welcome to the Python Shopping Wishlist CLI App!

--- Menu ---
1. Add Item (Create)
2. View Wishlist (Read)
3. Update Item (Update)
4. Delete Item (Delete)
5. Exit
Enter your choice (1-5): 1

--- Add New Item ---
Enter item name: sabil
Enter estimated price (e.g., 49.99): 49.99
Enter priority (High, Medium, Low): medium

✓ Item 'sabil' added successfully with ID: 9cc31e24
```