

## User Purchases a Product

1. The machine displays a list of products.
2. The user selects a product from the list.
3. The machine displays price.
4. The user adds coins.
5. The machine dispenses purchased product.

### Variation #1

- 1.1 In Step 2, the user selects an invalid product.
- 1.2 Continue with Step 1.

### Variation #2

- 2.1 In Step 4, the user adds an insufficient amount of coins within the required time interval.
- 2.2 The machine returns coins to the user.
- 2.3 Continue with Step 1.

### Variation #3

- 3.1 After Step 4, the machine cannot dispense the product because it is sold out.
- 3.2 The machine displays an error message: *Sold Out*.
- 3.3 The machine returns coins to the user.
- 3.4 Continue with Step 1.

### Variation #4

- 4.1 At any time, the user cancels the request.
- 4.2 The machine returns any added coins.
- 4.3 Continue with Step 1.

## Operator Logs In

1. The machine displays a list of products.
2. The operator enters authorized passcode.

### Variation #1

- 1.1 During Step 2, the operator enters invalid passcode.
- 1.2 The machine displays an error message: *Invalid passcode*
- 1.3 Continue with Step 1.

## Operator Restocks Product

1. The operator carries out **Operator Logs In**.
2. The machine displays two options to the operator:
  - a. *Restock*
  - b. *Remove Money*
3. The operator chooses the *Restock* option.
4. The machine displays a list of items that can be restocked.
5. The operator selects an item z to restock.
6. The machine displays: *How many would you like to add?*
7. The operator indicates how many to add by typing in a number n.
8. The machine adds n to the total z in stock.

### Variation #1

- 1.1 During Step 3, the operator chooses an invalid option.
- 1.2 The machine displays an error message: Invalid option.
- 1.3 Continue with Step 2.

### Variation #2

- 2.1 During Step 5, the operator chooses an invalid product.
- 2.2 The machine displays an error message: Invalid product.
- 2.3 Continue with Step 4.

### **Variation #3**

- 3.1 During Step 7, the operator indicates an invalid number.
- 3.2 The machine displays an error message: Invalid number of items to add.
- 3.3 Continue with Step 6.

### **Variation #4**

- 4.1 At any time, the operator cancels the request.
- 4.2 Continue with Step 1.

## **Operator Removes Money**

- 1. The operator carries out **Operator Logs In**.
- 2. The machine displays two options to the operator:
  - a. *Restock*
  - b. *Remove Money*
- 3. The operator selects *Remove Money*.
- 4. The machine dispenses the money to the operator.

### **Variation #1**

- 1.1 During Step 3, the operator chooses an invalid option.
- 1.2 The machine displays an error message: Invalid option.
- 1.3 Continue with Step 2.

### **Variation #2**

- 2.1 At any time, the operator cancels the request.
- 2.2 Continue with Step 1.