Milestone 4 – Part 1: Acceptance Test Procedure – Smart Checkout Nexus

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Acceptance Test Procedure

Test Case ID: ATP_001

Functional Behavior: Customer logs into self-checkout kiosk

Purpose: Verify that the login system accepts valid customer credentials and denies invalid attempts.

Preconditions:

- Kiosk is powered on and displaying the login screen
- Valid customer credentials are available

Test Steps:

1. Launch the self-checkout kiosk.
2. Enter a valid customer ID and PIN.
3. Click the "Login" button.
4. Observe system behavior.
5. Logout and return to the login screen.
6. Enter an invalid customer ID or PIN.
7. Click the "Login" button again.

Expected Result:

- For the valid login, the system should advance to the home screen.
- For the invalid login, the system should display an error message such as "Invalid ID or PIN."

Pass/Fail Criteria:

- Pass if both successful and unsuccessful logins behave as expected.
- Fail if either valid credentials are rejected or invalid credentials are accepted.

Test Case ID: ATP_002

Functional Behavior: Customer adds item using barcode scanner

Purpose: Confirm that the scanner correctly adds an item to the virtual cart.

Preconditions:

- Kiosk is powered on and customer is logged in
- Barcode scanner is connected and functional
- Item with valid barcode is available

Test Steps:

1. Place the item under the scanner.
2. Scan the barcode.
3. Wait for system to beep or confirm scan.
4. Check the item list on the screen.

Expected Result:

- The scanned item appears in the cart with the correct name and price.

Pass/Fail Criteria:

- Pass if item details are displayed immediately and accurately in the cart.
- Fail if the item does not appear or displays incorrect details.

Test Case ID: ATP_003

Functional Behavior: System displays item in the cart

Purpose: Verify that all scanned items are correctly reflected in the cart view.

Preconditions:

- Customer is logged in and multiple items have been scanned

Test Steps:

1. Scan three different items.
2. Click on the "Cart" or "View Items" button.
3. Review the list of items, their prices, and the total.

Expected Result:

- All scanned items are shown in the cart with correct quantities and prices.
- The total reflects the sum of the items.

Pass/Fail Criteria:

- Pass if item names, prices, and total are correct.
- Fail if any item is missing, duplicated, or mispriced.

Test Case ID: ATP_004

Functional Behavior: Customer requests assistance (calls attendant)
Purpose: Ensure that the system notifies an attendant when a customer taps the help button.
Preconditions:

- Kiosk is powered on and customer is mid-transaction
- Attendant device/system is online and receiving alerts

Test Steps:

1. On the kiosk screen, tap the "Need Help" or "Call Attendant" button.
2. Wait for acknowledgment notification.
3. Verify that the alert appears on the attendant's dashboard or screen.

Expected Result:

- The customer sees a "Help is on the way" message.
- The attendant receives a visual/audible alert linked to the kiosk number.

Pass/Fail Criteria:

- Pass if both the customer and attendant interfaces react as expected.
- Fail if no notification is received by the attendant or no confirmation is shown to the customer.

Test Case ID: ATP_005

Functional Behavior: Attendant overrides item or coupon error
Purpose: Verify that the attendant can resolve errors like invalid items or rejected coupons.
Preconditions:

- Kiosk must be in error state (e.g., invalid coupon scanned)
- Attendant must be logged into their dashboard

Test Steps:

1. Attempt to scan an expired or unreadable coupon at the kiosk.
2. Observe the error message on the customer screen.
3. Attendant logs into their system and selects the alert from the kiosk.
4. Attendant overrides or approves the coupon.
5. Customer screen updates with the resolved status.

Expected Result:

- Error is cleared and coupon is applied or properly rejected with reason.
- The customer can proceed with checkout.

Pass/Fail Criteria:

- Pass if the attendant successfully overrides the error and the kiosk returns to a working state.
- Fail if the error cannot be resolved or override is not reflected.

Test Case ID: ATP_006

Functional Behavior: Customer selects receipt option

Purpose: Ensure the customer can choose to print, email, or decline a receipt after completing a transaction.

Preconditions:

- Customer has completed scanning items and submitted payment
- Printer is connected (for physical receipt option)

Test Steps:

1. Complete a purchase and proceed to the receipt options screen.
2. Choose "Print Receipt" and wait for printout.
3. Complete another transaction, then choose "Email Receipt" and enter email address.
4. Complete a third transaction, and choose "No Receipt."

Expected Result:

- Receipt prints correctly for the first test.
- Email is sent and confirmation appears for the second.
- System completes checkout with no receipt for the third.

Pass/Fail Criteria:

- Pass if the correct option is followed through for all three cases.
- Fail if the receipt is not delivered, printed incorrectly, or option doesn't work.

Test Case ID: ATP_007

Functional Behavior: Attendant logs in to dashboard

Purpose: Verify that only authorized personnel can access the attendant dashboard.

Preconditions:

- Attendant account exists
- Attendant terminal is powered on and connected

Test Steps:

1. Open the attendant dashboard login screen.
2. Enter valid credentials and attempt to log in.
3. Log out, then attempt to log in with incorrect credentials.
4. Attempt to access dashboard without logging in.

Expected Result:

- Valid credentials allow access to dashboard.
- Invalid credentials result in an error.
- Dashboard cannot be accessed without login.

Pass/Fail Criteria:

- Pass if login security and access control work correctly.
- Fail if access is granted improperly or denied incorrectly.