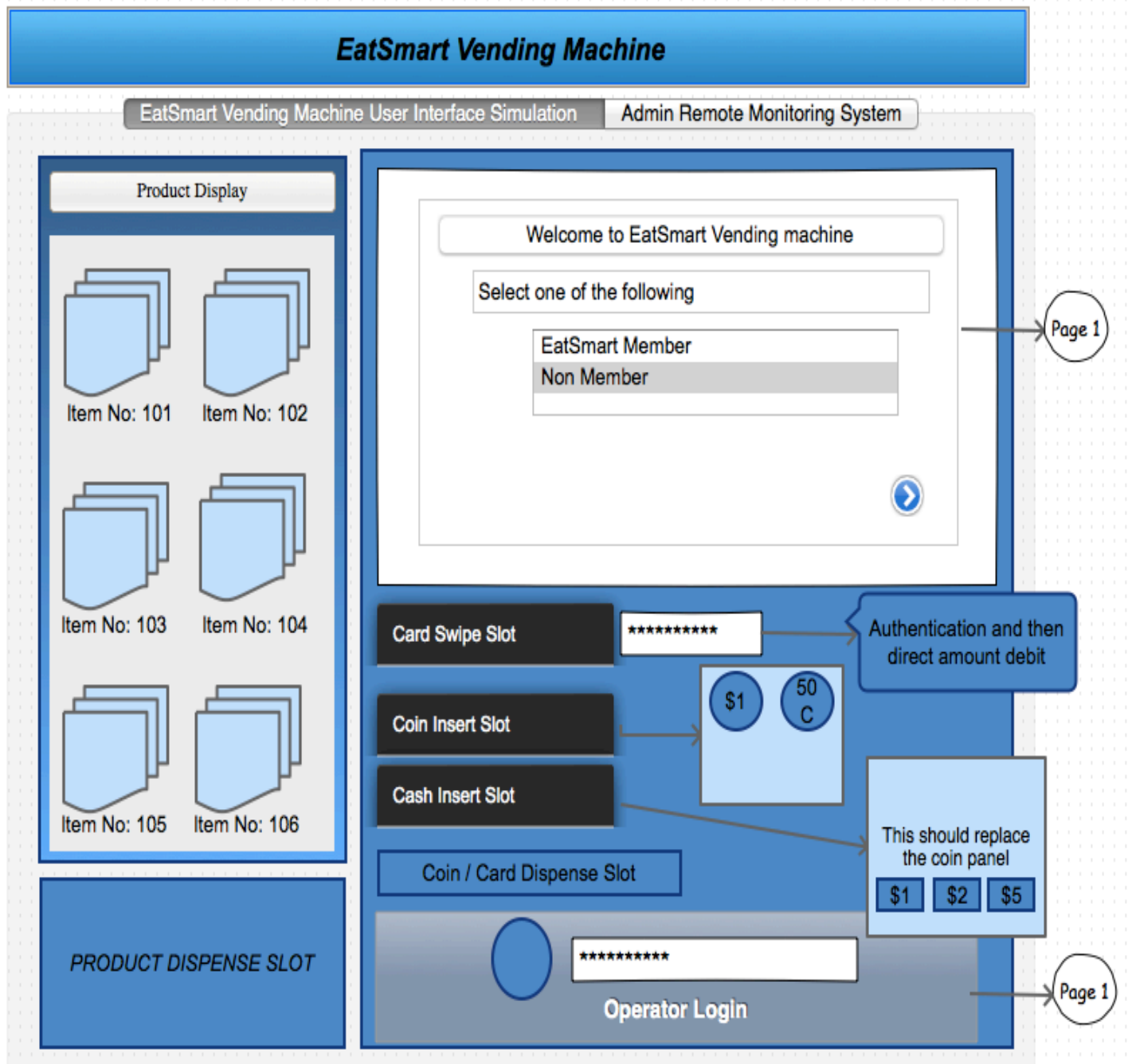


Requirement Analysis document

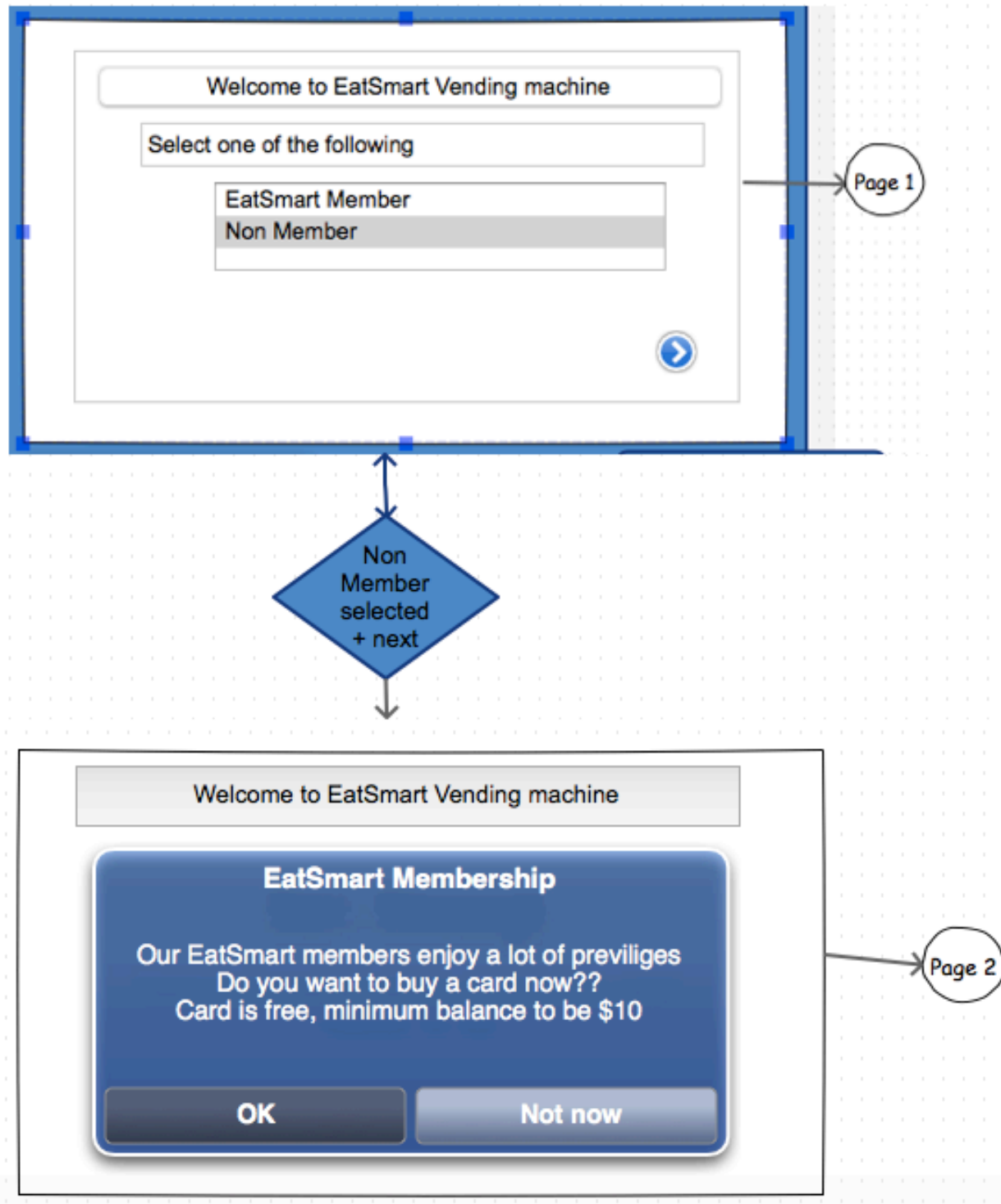
1. MAIN GUI LOOK – Tab 1



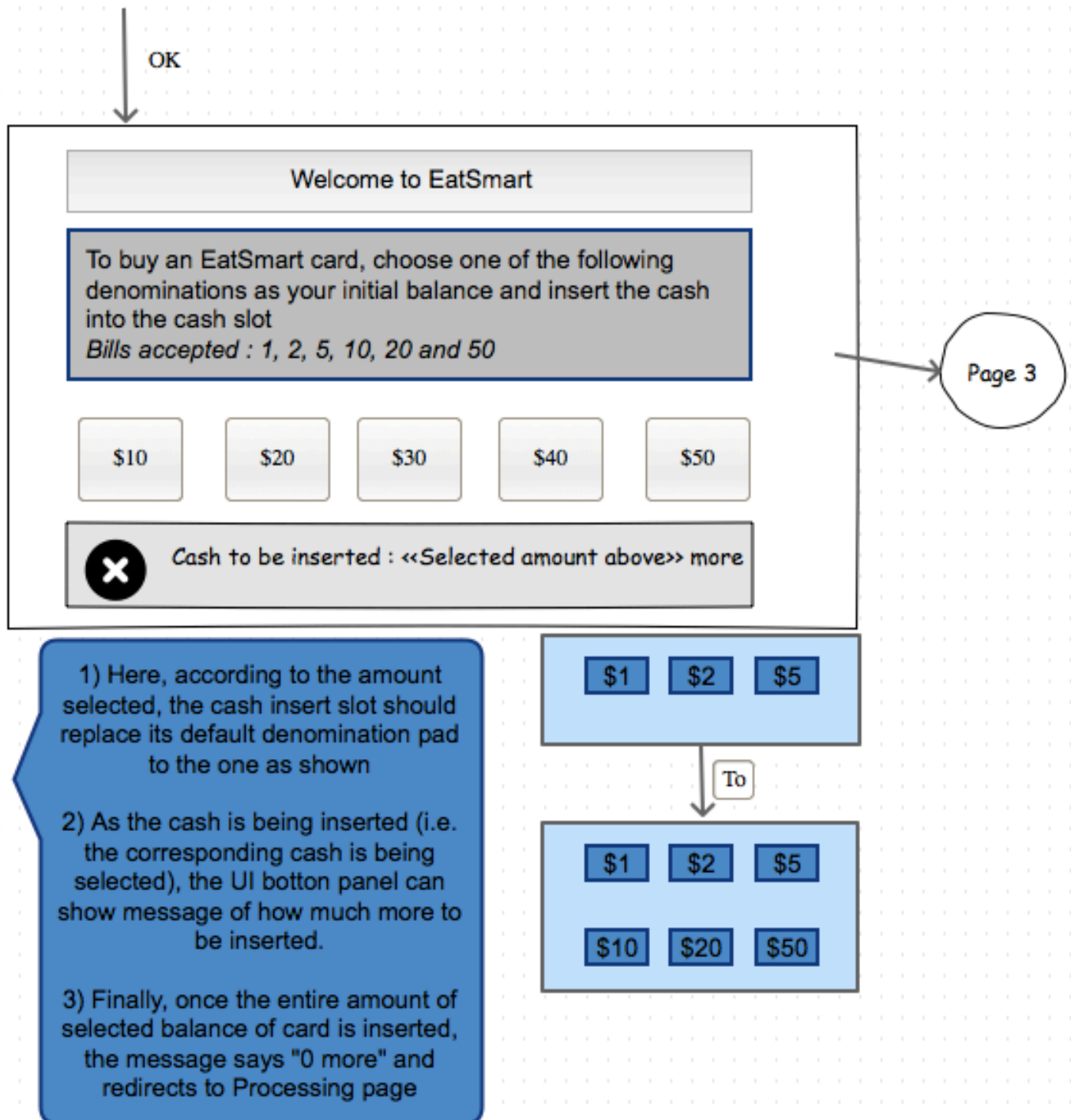
1.1 USER UI PANEL FLOW

SEQUENCE 1:

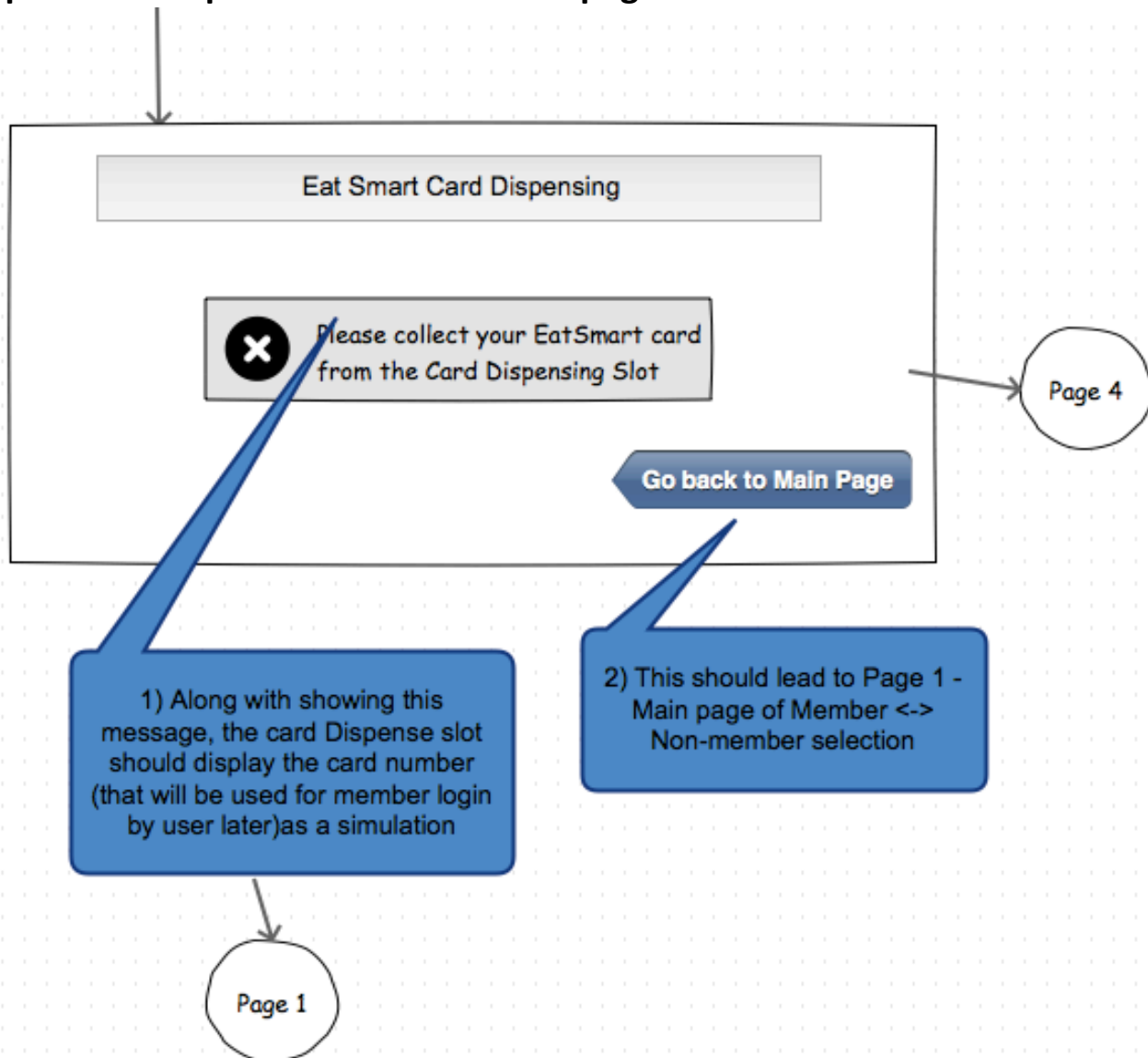
Step 1: Non member



Step 2: Non-member wants to buy a new card



Step 3: Card dispensed – back to main page

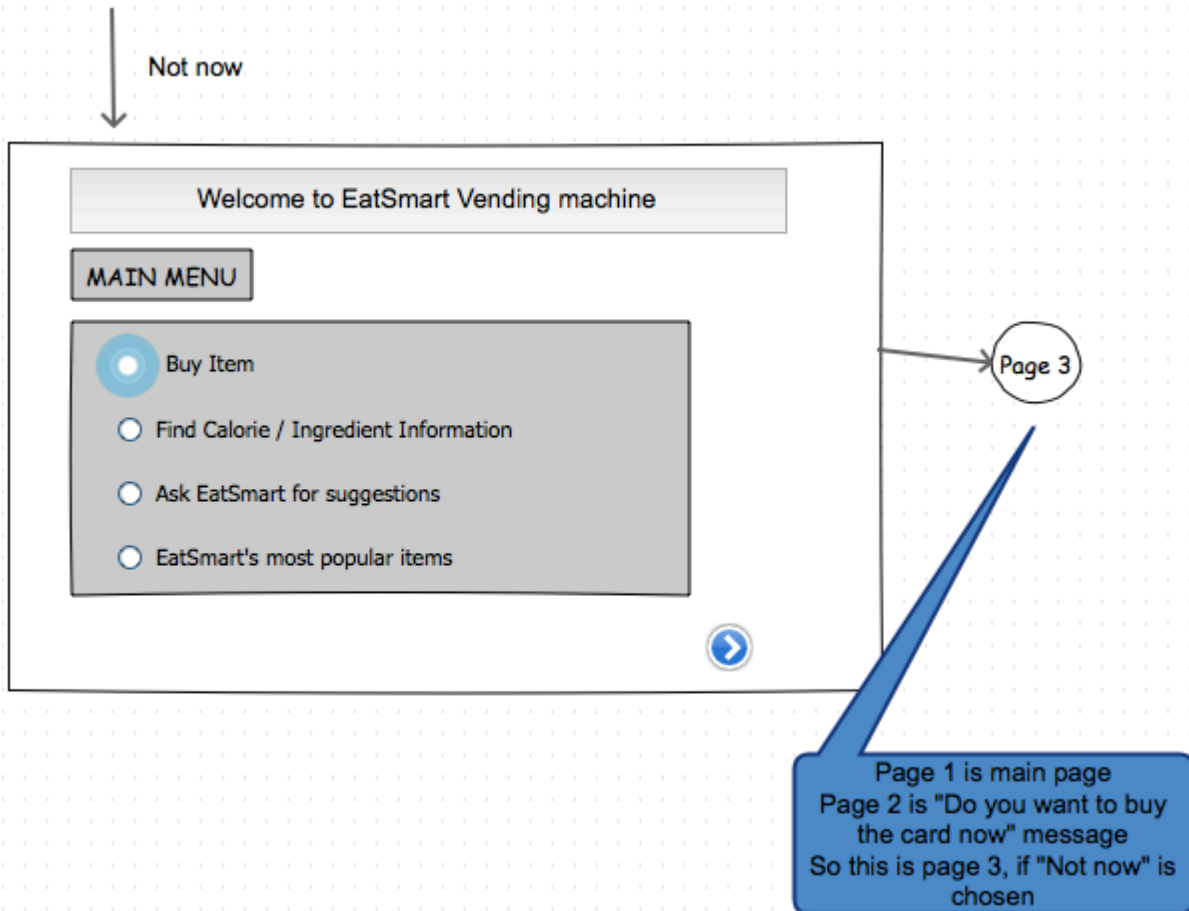


On Page 1, if earlier selection was or the subsequent selection (after buying new card) is EatSmart Member, then go to sequence 3.

SEQUENCE 2:

A deviation after step 1 of sequence 1– non-member proceeding as non-member

If @ Step 1 of Sequence 1, the selection was “Not now” instead of “Ok”, then:



Explaining each of the options in the above page 3 when selected and clicked on next

1) Buy item

- Page 4** - Leads to **Number pad** for item code entry
- Page 5** – options – continue shopping and checkout with the total billing cost shown and the cancel button

Continue shopping vs Checkout vs cancel

- If continue shopping, back to **page 4** and the subsequently to page 5
- Page 6** - If Checkout is selected, go to a new page showing total amount and saying “Please enter the required amount using cash or coin slot”

- iii. As the coin/ cash slots' denominations pad is clicked, the amount due in this page will reduce accordingly
- iv. **Page 7** - Once the required cash/coins are inserted, display amount entered, amount required as 0 and due amount to be dispensed as change and display “ **Please collect your product**” and “**Please collect your change due**”. Also, the respective slots will display an image/message to highlight that the product/change has been dispensed.
- v. If no change to be dispensed, show only “ Please collect your product”
- vi. This page also has “**Go back to main menu**” button, which will ~~lead to Page 3 of sequence 2~~ **lead to the member-nonmember page**
- vii. In the stage of continue shopping (before clicking on checkout) there must be a cancel button that takes user back to main menu (**Page 3 of sequence 2 or page 1 depending on if we can implement timer thread**). There must be a cancel button even after clicking checkout - @point (ii) that does the same as above

2) Find calorie/ingredient information

- a) **Page 4** - Leads to **Number pad** for item code entry
- b) **Page 5** – displays the entire calorie, ingredient and nutrition information related to the item. This page also has “**Go back to main menu**” button, which will **lead to Page 3 of sequence 2**

3) Ask EatSmart for suggestions

- a. **Page 4** – Leads to the following page

Ask EatSmart for Healthy Suggestions

Item List

Item code 103
Item code 201
Item code 106

Select a Keyword

☐ Low Sugar
☐ Low Fat
☐ No GMO
☐ Gluten free
☐ Natural and Organic
☐ High Fibre

Select a calorie range

Low
High

SEARCH

Main Menu

Main menu will lead to the page 3 of sequence 2

Page 4

As per the options selected, the user can search and modify the search again and again and the list to the left will be refreshed.

Main Menu button will lead to **Page 3 of sequence 2**

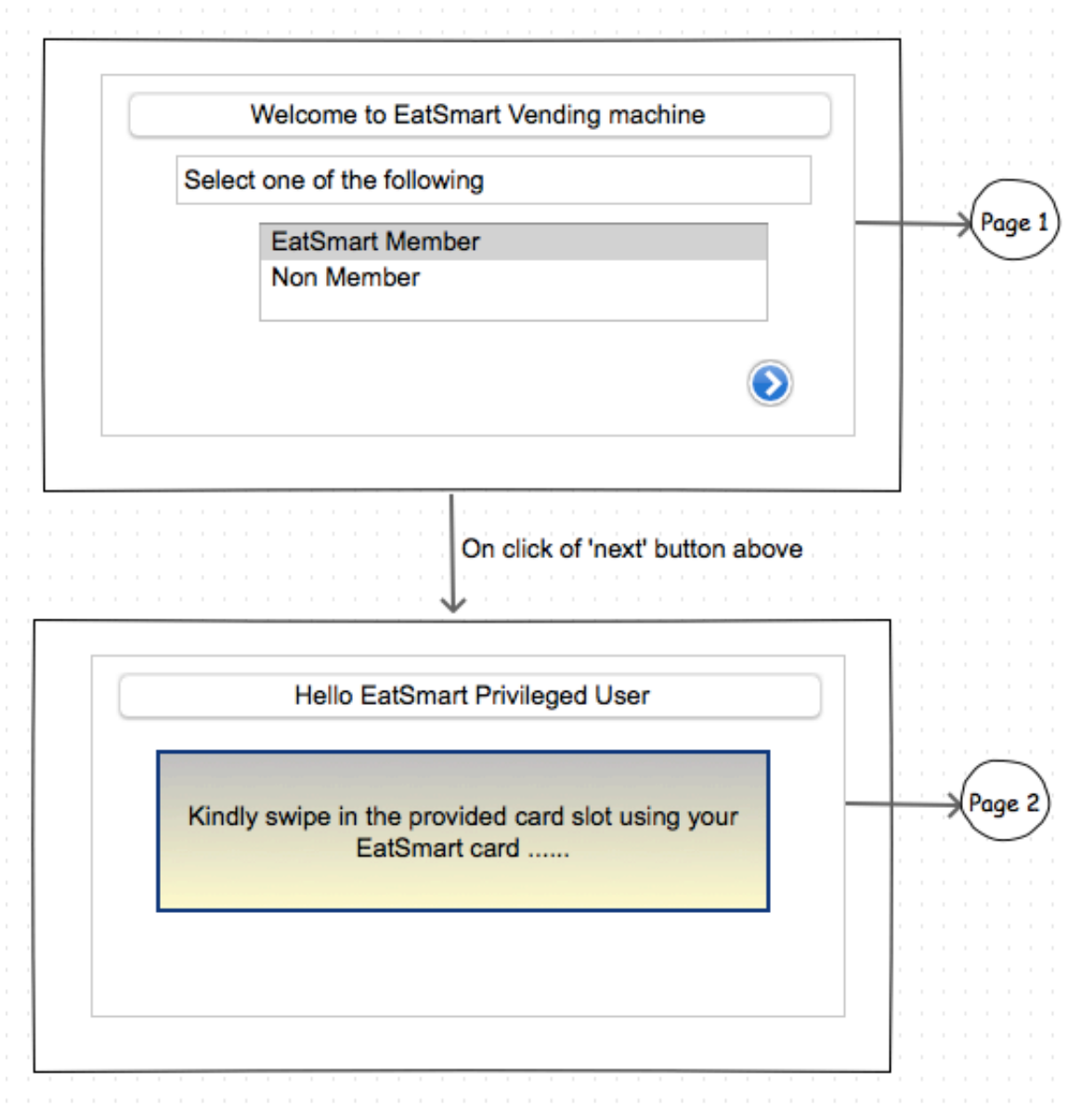
4) EatSmart's most popular items

- a. **Page 4** – Leads to a page that displays the list of most popular items as a table of columns – 'item code', 'item name'. This list is populated in the descending order of total quantity sold. This list **need not** take care of the fact that the displayed item is available in the specific machine or not. This also has the **"Go back to main menu"** button.

SEQUENCE 3:

On Page 1 (member-non-member page), if the first selection was or the subsequent selection (after buying new card) is EatSmart Member, then the following pages/steps will follow.

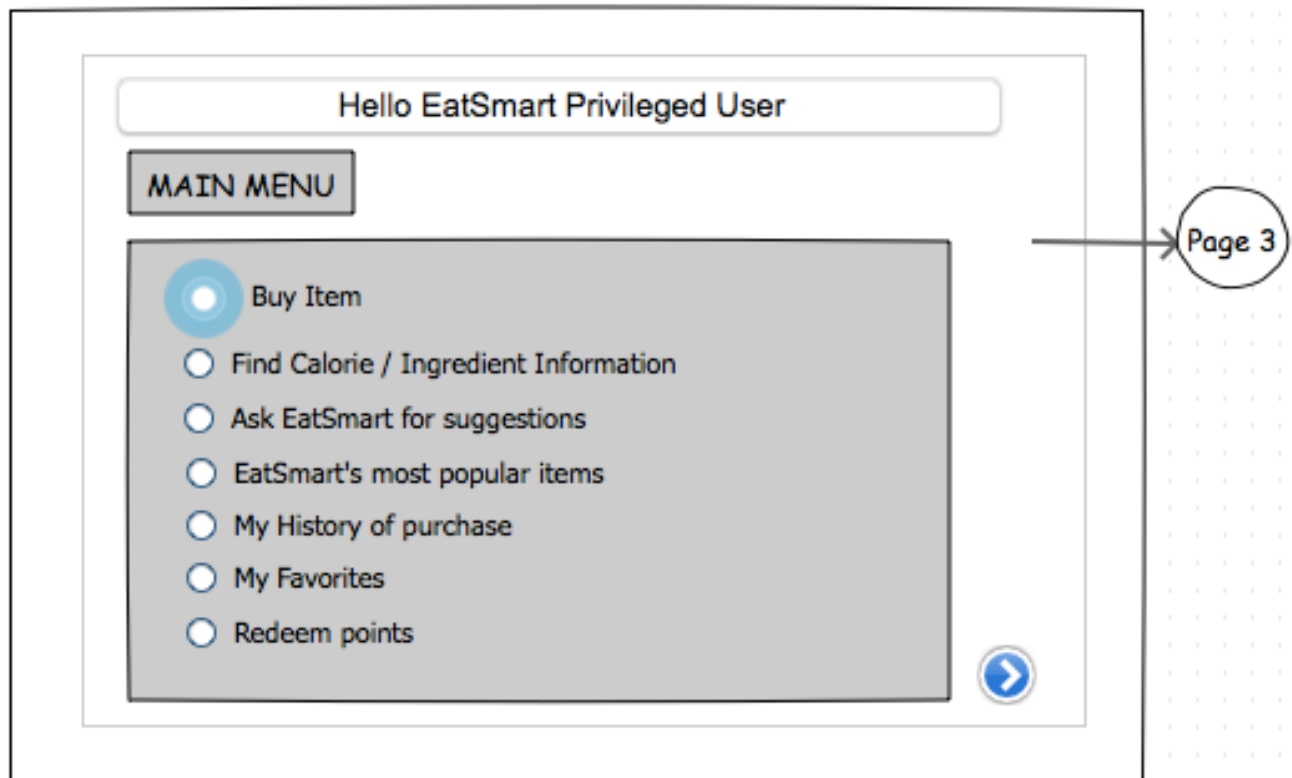
Step 1: EatSmart member



Step 2: During Page 2..... and transition to page 3 (EatSmart member's Main menu)

- 1) At this stage, while the above page 2 is being shown, the user clicks on card slot (simulating a card swipe) and so will be shown a textbox where he enters the card number. Hopefully with the hit of 'enter' on keyboard, the authentication is processed
- 2) If the authentication fails, Next Page i.e. the **message in Page 2 will be replaced** by an error message **"Incorrect swipe, please swipe again"**, and the user will repeat the point 1
- 3) If the authentication is successful, Leads to **Page 3** which is main menu as follows:

PAGE 3



Once it comes to this Main menu, let's look at the next step (Step 3) separately as a new sequence

SEQUENCE 4:

Explaining each of the options in the above page 3 when selected and clicked on next

1) Buy item (All steps are same as in sequence 2 except the payment process)

- a) **Page 4** - Leads to **Number pad** for item code entry
- b) **Page 5** – options – continue shopping and checkout with the total billing cost shown and the cancel button + an “Add to my favorites” button

Continue shopping Vs Checkout Vs Cancel

- (1) If continue shopping, back to **page 4** and the subsequently to page 5
- (2) **Page 6** - *If Checkout is selected, ask for another confirmation (if needed) and then directly debit the amount from the users pre-entered card information.*
- (3) **Page 7** - *display the amount debited, the new balance of the card and also display “**Please collect your product**”. Also, the product dispense slot will display an image/message to highlight that the product has been dispensed.*
- (4) This page also has “**Go back to main menu**” button, which will ~~lead to Page 3 of sequence 3~~ **lead to the member-nonmember page(page 1)**
- (5) In the stage of continue shopping (before clicking on checkout) there must be a *cancel button that takes user back to main menu (No, page 1 – member, non-member page)* There must be a cancel button even after clicking checkout - @point (2) that does the same as above

The underlined ones above are the only changes when compared to Non-member's “buy item” feature

2) Find calorie/ingredient information (same as in sequence2)

3) Ask EatSmart for suggestions (same as in sequence2)

4) EatSmart's most popular items (same as in sequence2)

5) My history of purchase

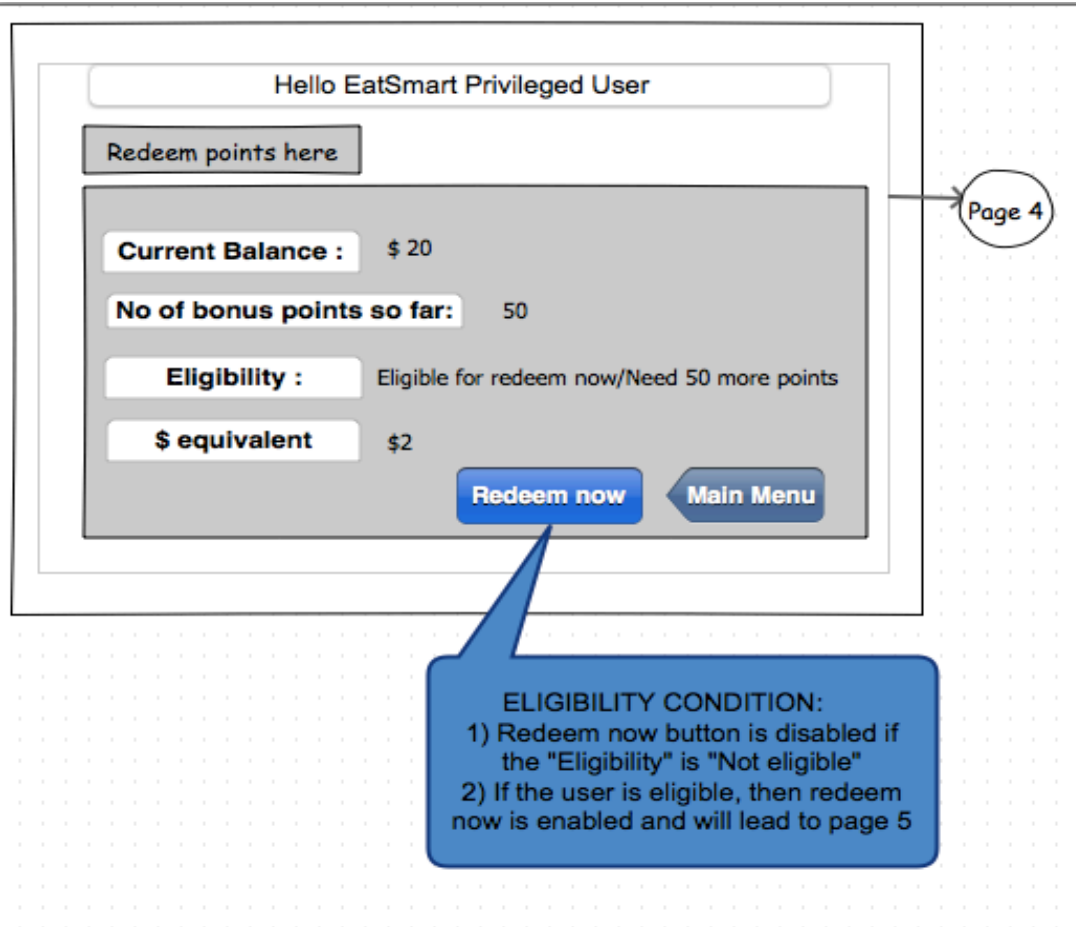
a) **Page 4** – This page can show a table of item codes, item names, and no of times it was purchased ever in his life.

6) My Favorites

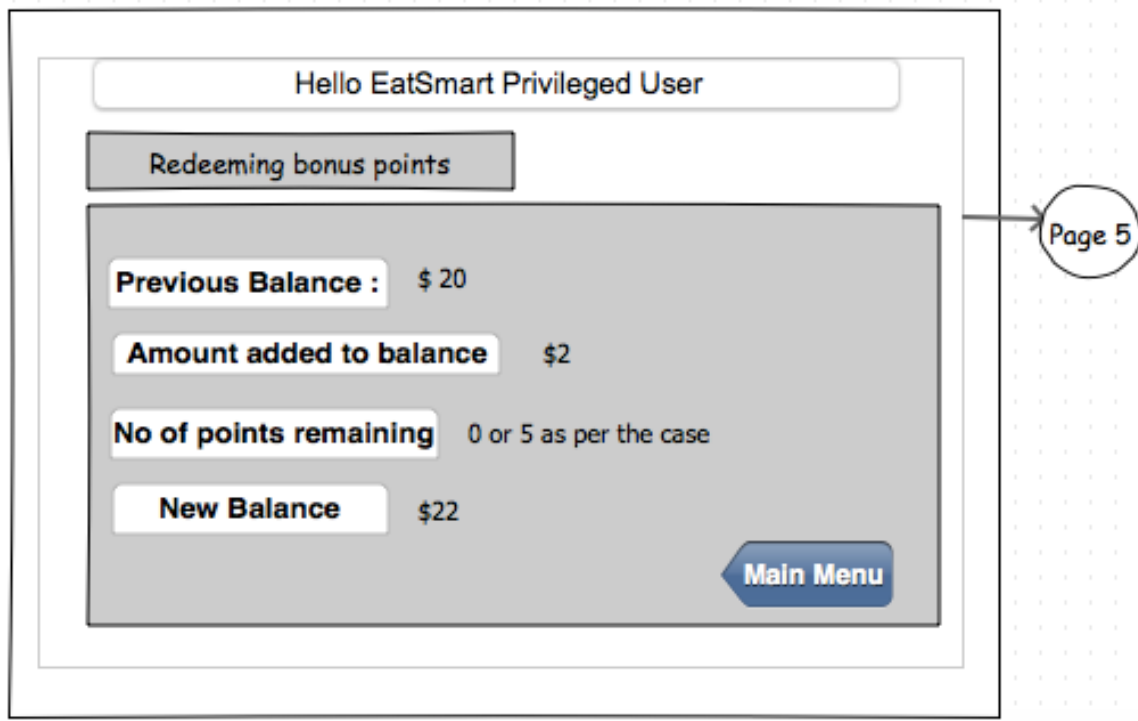
a) **Page 4** – This page again will list the top 5 most frequently bought items by this specific card user in his entire lifetime of purchase (in order from highest no of times to lowest)

7) Redeem Points

a) **Page 4** – This will lead to the page showing card balance, No. of points accumulated so far, eligible for redeem now or not and the redeem now button etc as follows:

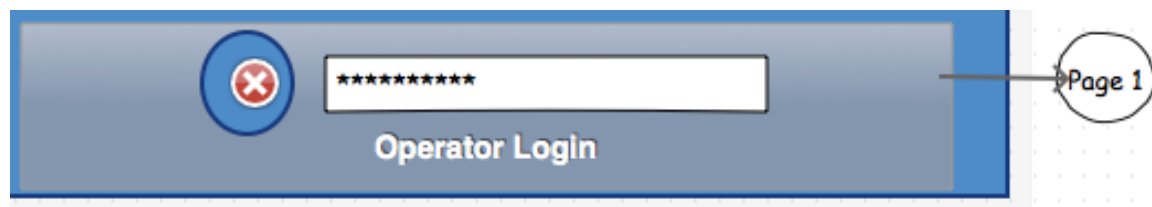


b) Page 5 – This will be the page that shows new balance after redeeming the points (if eligible)



Main menu will of course take back to page 3

1. 2 OPERATOR LOGIN FLOW



When the operator enters his "operator id" into the field above, it goes through validation and if not valid, throws a pop up dialogue saying "Incorrect Operator authentication, try again".

On enter key, if validation is success, then **page 2** will show three options:

- 1) **Updates from Admin** (if admin had hit notify button on a specific machine ID, the label here will be set to the updates, else will be set to "No updates")

When clicked on, leads to **Page 3**, which shows the following:

- a. New items to be loaded (Item code: xxxx, item name: xxxx)
- b. Items to be replaced by the new items (Item code: xxxx, item name: xxxx)
- c. An “Update” button (symbolic to opening the machine and replacing), when clicked will update the database and refresh the left hand product display view

2) Re-stock items

When clicked on, leads to **Page 3**, which shows the following:

- a. The list of items running low on stock as of that moment (Item code: xxx, quantity: x)
- b. A “Re-stock” button (symbolic to opening the machine and re-socking), when clicked will update the database and refresh the product display view with new item codes

3) Manage cash

When clicked on, leads to **Page 3**, which shows the following:

- a. A message showing the cash and coins collected by that VM for that day or from last operator login (if feasible).
- b. A button saying “Manage now” that will in-turn pop up a message showing the cash has been managed (loaded/unloaded) for the day <<Thankyou, the end>>

2. ADMIN REMOTE MONITORING SYSTEM – Tab 2

Important points:

- Admin ID (AID) – has many OIDs and MSIDs tagged under him (if we are having multiple admins – one each for a group of MSIDs)
- Operator ID (OID) (Each OID is tagged only to one VMID)
- Machine ID (VMID)
- Monitoring station ID (MSID) - has many VMIDs tagged to it

Admin Main roles:

1) Monitor Vending machines -----?????

- For now just a table listing all machines, their OpID, MSID, description of where exactly this machine is installed like the building, floor and other details and the status of that machine in one word like, "Good", "Needs re-stocking", "Bad sales" etc
- Think about where to incorporate the "Notify" button

EatSmart Vending Machine User Interface Simulation Admin Remote Monitoring System

Welcome to EatSmart Remote Administration System

Monitoring EatSmart Vending Machines across Monitoring stations

Machine ID	Operator ID	Monitoring Station ID	Descripti...	Status
Content 1	Content 2	content 3	location	in 1word
Content 3	Content 4			

Monitor VMs

- Change Item Price
- Introduce new Item
- Add/Change Nutritional Info
- Check performance/sales
- Manage Vending Machine

2) Change Price of an item (existing items)

- A form with item code drop down and its price appearing as per selection as editable text box
- A submit change button that changes the price in item table

3) Introduce new items

- A form to fill all new info for a new item (whose item code is auto generated)
 - All info including nutritional info is filled while creation itself
 - Do not tag the machine id to the item at this stage

- b. A submit button that updates the item table
- 4) Make Nutritional info available (for existing items)**
 - a. A form with item code drop down and its nutritional, calorie, ingredient info appearing as we select in an editable text pane
 - b. A submit button to update the database with new info
- 5) Check Statistics (performance and sales)** – in the form of (1) Revenue for each machine and (2) Most popular items – both side by side in the same frame.

EatSmart Vending Machine User Interface Simulation
Admin Remote Monitoring System

Welcome to EatSmart Remote Administration System

Performance and Sales Statistics

Revenue details

OverAll Revenue: \$----

MSID 111▼

Station revenue: \$----

VMID 101▼

VM revenue: \$----

Most popular items

ItemCo...	ItemNa...	Qty
Content 1	Content 2	90
Content 3	Content 4	50

Monitor VMs

Change Item Price

Introduce new Item

Add/Change Nutritional Info

Check performance/sales

Manage Vending Machine

- 6) Manage Machine** - machine specific tagging and item replacement – (“Notify” will probably come here – so think about how to float the changes until the operator clicks “Update” button from the vending machine)

- a. A separate page with Machine ID dropdown
- b. Item to be replaced dropdown- List of items (as a dropdown) currently tagged to the machine as per the machine selected
- c. Item to be introduced in place of the one being replaced (from a new dropdown of all items, even the ones not tagged to this machine)
- d. A Notify button that sends the last two fields to the machine in the first field (but not yet update the database – Also the final update will only un-tag the item from the machine table and not delete from item table)

ADDITIONS:

GENERIC – applicable to all

- 1) **Main menu page** of either member or non-member will have radio button options, so no need for the next button. Click of radio option will directly lead to next page

EATSMART MEMBERS

- 1) In “Buy Item” after selecting the item, in the continue-checkout page, we have a “Add to my favorites” button, clicking this will directly update the my favorites list in the database. Rest of the functions of the page remain unchanged
- 2) “My favorites”- this will list the items that the user has added as his favorites and none if he hasn’t added any
 - a. Each favorite has a “buy” option next to it, click of buy beside a favorite item will lead to “Continue-Checkout page” showing item code, total amount, cancel etc

- 3) “My History” – Instead of item code and qty, we will sort the items in order of purchase date

NON-MEMBER, who buys a card

1) SEQUENCE 1 - Step 3: Card dispensed – back to main page

- a. There is no “Go back to main menu page” button in the page where this message is displayed – “Please collect your card from the card slot”
- b. Instead, the user has to click on the card slot indicating that he has picked up the card
- c. At this point the card slot will refresh and the main user UI will also redirect to the main page 1 (member-nonmember page)