
TEAM H

**Lenovo Online Store
Software Requirements Specification
For Online Computer Store Application**

Version 2.0

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Revision History

Date	Version	Description	Author
03/20/2021	1.0	Create a login screen for all system users	Ziyi Huang
03/21/2021	1.0	Improve the design and create a first version of the home page	Billy Davila Ai Hua Li
03/30/2021	1.0	Work on the Specification report for phase I.	Ziyi Huang Ai Hua Li Billy Davila Toma Suciu
04/17/2021	2.0	Work on the administrator/manager features such as remove users from system, maintain the taboo list, the creation and modification of the avoid list and the power to choose which 3 systems can be on the main page.	Ziyi Huang
04/18/2021	2.0	Create pages for all systems including laptops, desktops, mainframes, servers, workstations along with their respective computers.	Billy Davila Ai Hua Li
04/19/2021	2.0	Create pages for specific purposes (gaming, scientific, business), OS (Windows, MacOS, Linux), architecture (AMD Ryzen, Intel).	Billy Davila Ai Hua Li
04/20/2021	2.0	Feature top 3 best-selling computer added to the home page. Added several items(computers) in the excel files along with their respective technical specifications. Add the star rating customer review to the computer pages.	Ai Hua Li
04/21/2021	2.0	Create add credit card feature to the respective customer account. Add the feature of checking the validity of the credit card number by implementing Luhn's algorithm. Create the page for customer to add their virtual funds to their credit card.	Billy Davila
04/22/2021	2.0	Add the feature of adding item to shopping cart. Generate random tracking order numbers for each order.	Billy Davila
04/23/2021	2.0	Create review pages where customer can comment, give their ratings on the item purchased. Add the feature where customer can complain about purchased items, clerks, delivery companies, and other customers they interact with. Add the feature where the administrator/manager can decide a complain to reverse or stay.	Ziyi Huang

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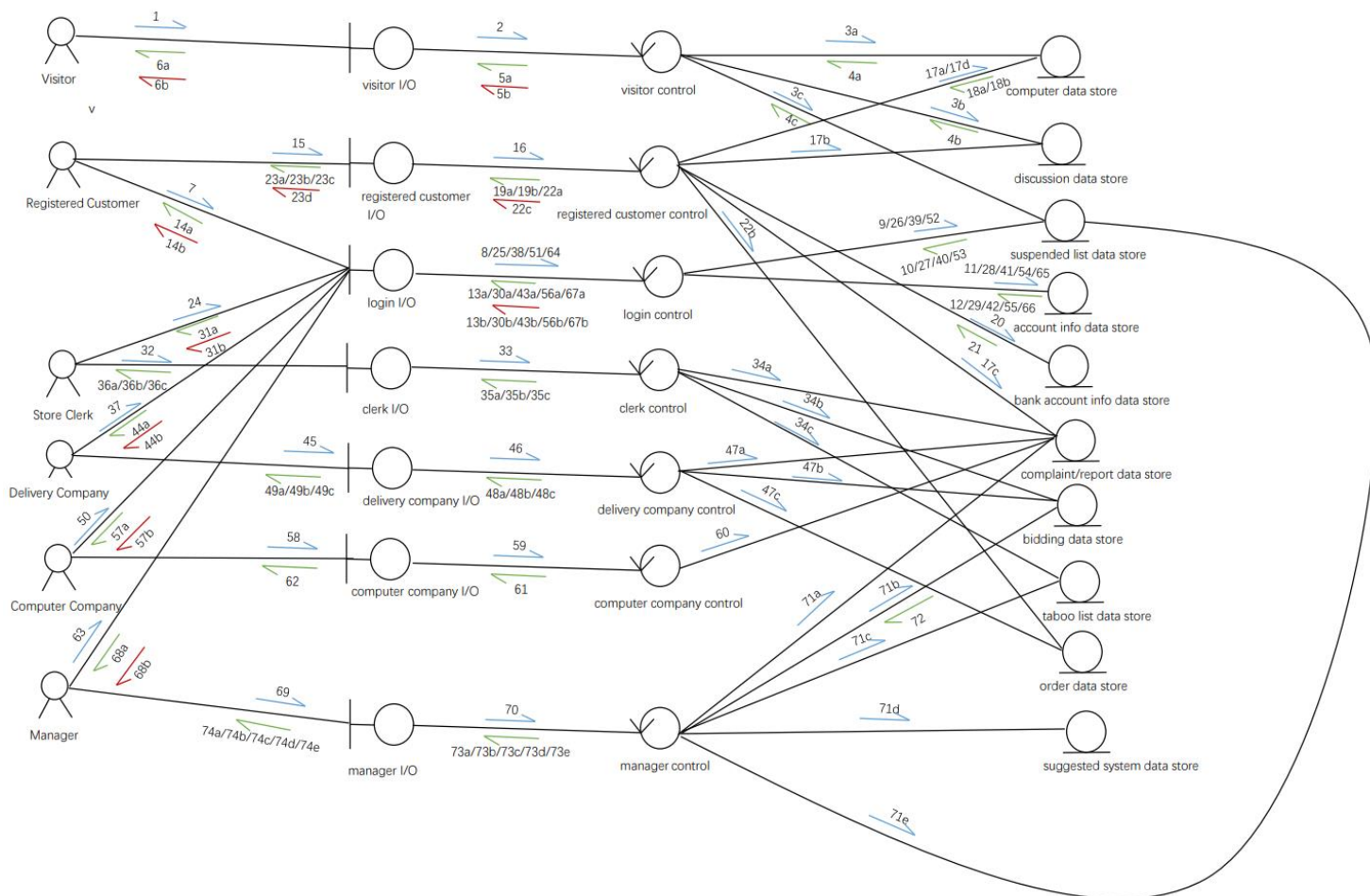
Software Requirements Specification

1. Introduction

a) Purpose

The main purpose of this document is to provide a high-level overall picture of the system with the help of diagrams, screenshots, and code. The details of the computer system are shown in depth by the collaboration diagrams, Petri-net and E/R diagram. The logic followed by these diagrams are represented by the code/pseudo code. Finally, the screenshots of the computer store system will show the results from the code and the diagrams.

b) Collaboration Class Diagram of System



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Numbered Action:

Visitor:

- (1) Visitor chooses between browsing the computer page/discussion forum or apply to be a registered customer
- (2) Visitor's choice is passed to the visitor's control
- (3) (a) Visitor control sends a request to retrieve computer items on the computer page from the computer data store
 - (b) Visitor control sends a request to retrieve the discussions from the discussion data store
 - (c) If a visitor wants to apply to be a registered customer, visitor control sends a request to the suspended list data store to check whether or not the user is suspended
- (4) (a) Computer data store returns computer items
 - (b) Discussion data store returns discussions/reviews
 - (c) Suspended list data store returns suspended list information regarding the application
- (5) (a) Visitor control sends a success sign up message to visitor I/O if the user is not suspended
 - (b) Visitor control sends an error sign up message to visitor I/O if the user is suspended
- (6) (a) Visitor sign up succeeds
 - (b) Visitor sign up denied

Registered Customer:

- (7) Registered customer is prompt to enter his/her login credentials
- (8) Registered customer's login credentials are passed to login control
- (9) Login control sends a request to the suspended list data store to check whether or not the user is suspended
- (10) Suspended list data store returns suspended list information regarding the login credentials
- (11) If the user is not suspended, the login control sends a request to the account info data store to check if the login credentials are correct
- (12) Account info data store returns account information regarding the login credentials
- (13) (a) login control sends a success message to login I/O
 - (b) login control sends an error message to login I/O
- (14) (a) Registered customer login succeeds
 - (b) Registered customer login failed
- (15) Registered customer chooses among placing an order, posting a review, posting a complaint, searching computer items
- (16) Registered customer's choice is passed to the registered customer control
- (17) (a) Registered customer control sends order details to the computer data store
 - (b) Registered customer control sends review details to the discussion data store
 - (c) Registered customer control sends complaint details to the complaint/report data store
 - (d) Registered customer control sends searched computer details to the computer data store
- (18) (a) Computer data store returns the computer items information regarding the order details
 - (b) Computer data store returns the computer items information regarding the searched computer details
- (19) (a) Registered customer control sends a success message to registered customer I/O regarding the posted discussion
 - (b) Registered customer control sends a success message to registered customer I/O regarding the posted complaint
- (20) Registered customer control sends credit card credentials to the bank account info data store
- (21) Bank account data store returns the credit card information
- (22) (a) Registered customer control sends a success message to registered customer I/O regarding

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the placed order

(b) Registered customer control sends the order information to the order data store

(c) Registered customer control sends an error message to registered customer I/O regarding the placed order

(23) (a) Registered customer post discussion succeeds

(b) Registered customer post complaint succeeds

(c) Registered customer place order succeeds

(d) Registered customer place order failed

Store Clerk:

(24) Store clerk is prompt to enter his/her login credentials

(25) Clerk's login credentials are passed to login control

(26) Login control sends a request to the suspended list data store to check whether or not the user is suspended

(27) Suspended list data store returns suspended list information regarding the login credentials

(28) If the user is not suspended, the login control sends a request to the account info data store to check if the login credentials are correct

(29) Account info data store returns account information regarding the login credentials

(30) (a) login control sends a success message to login I/O

(b) login control sends an error message to login I/O

(31) (a) Store clerk login succeeds

(b) Store clerk login failed

(32) Store clerk chooses among selecting winning delivery company, editing the taboo list, dealing with the complaint

(33) Clerk's choice is passed to the clerk control

(34) (a) Clerk control sends the clerk's response to the complaint/report data store regarding his/her complaint received

(b) Clerk control sends the clerk's selection of the winning delivery company to the bidding data store

(c) Clerk control sends the clerk's modification of taboo list to the taboo list data store

(35) (a) Clerk control sends a success message to the clerk I/O regarding the response of the complaint

(b) Clerk control sends a success message to the clerk I/O regarding the selection of winning delivery company

(c) Clerk control sends a success message to the clerk I/O regarding the modification of the taboo list

(36) (a) Clerk responses the complaint succeeds

(b) Clerk select the winning delivery company succeeds

(c) Clerk modifies the taboo list succeeds

Delivery Company:

(37) Delivery company is prompt to enter his/her login credentials

(38) Delivery company's login credentials are passed to login control

(39) Login control sends a request to the suspended list data store to check whether or not the user is suspended

(40) Suspended list data store returns suspended list information regarding the login credentials

(41) If the user is not suspended, the login control sends a request to the account info data store to check if the login credentials are correct

(42) Account info data store returns an account information regarding the login credentials

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- (43) (a) login control sends a success message to login I/O
- (b) login control sends an error message to login I/O
- (44) (a) Delivery company login succeeds
- (b) Delivery company login failed
- (45) Delivery company chooses among dealing with complaint, bidding for delivering orders, providing order tracking information
- (46) Delivery company's choice is passed to the delivery company control
- (47) (a) Delivery company control sends the delivery company's response to the complaint/report data store regarding his/her complaint received
- (b) Delivery company control sends the delivery company's bidding price to the bidding data store regarding the order he/she bids for
- (c) Delivery company control sends the tracking information that the delivery company provided to the order data store
- (48) (a) Delivery company control sends a success message to the delivery company I/O regarding the response of the complaint
- (b) Delivery company control sends a success message to the delivery company I/O regarding the submission of the bidding price
- (c) Delivery company control sends a success message to the delivery company I/O regarding the update of the tracking information
- (49) (a) Delivery company responses the complaint succeeds
- (b) Delivery company submit the bidding price succeeds
- (c) Delivery company update the tracking information succeeds

Computer Company:

- (50) Computer company is prompt to enter his/her login credentials
- (51) Computer company's login credentials are passed to login control
- (52) Login control sends a request to the suspended list data store to check whether or not the user is suspended
- (53) Suspended list data store returns suspended list information regarding the login credentials
- (54) If the user is not suspended, the login control sends a request to the account info data store to check if the login credentials are correct
- (55) Account info data store returns account information regarding the login credentials
- (56) (a) login control sends a success message to login I/O
- (b) login control sends an error message to login I/O
- (57) (a) Computer company login succeeds
- (b) Computer company login failed
- (58) Computer company chooses to deal with the complaint
- (59) Computer company's choice is passed to the computer company control
- (60) Computer company control sends the computer company's response to the complaint/report data store regarding his/her complaint received
- (61) Computer company control sends a success message to the computer company I/O regarding the response of the complaint
- (62) Computer company responses the complaint succeeds

Manager:

- (63) Manager is prompt to enter his/her login credentials
- (64) Manager's login credentials are passed to login control
- (65) Login control sends a request to the account info data store to check if the login credentials are correct

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- (66) Account info data store returns account information regarding the login credentials
- (67) (a) login control sends a success message to login I/O
 - (b) login control sends an error message to login I/O
- (68) (a) Manager login succeeds
 - (b) Manager login failed
- (69) Manager chooses among deal with complaint/report, supervise the bidding, modify the taboo list, choose 3 suggested system, suspend users
- (70) Manager's choice is passed to the manager control
- (71) (a) Manager control sends the manager's final decision (stay or reverse) to the complaint/report data store regarding the discussion report or the unsolved complaint
 - (b) Manager control sends the manager's request to retrieve the suspicious bidding activity to the bidding data store
 - (c) Manager control sends the manager's modification of the taboo list to the taboo list data store
 - (d) Manager control sends the manager's modification of the 3 suggested system to the suggested system data store
 - (e) Manager control sends the suspended user information to the suspended list data store
- (72) Bidding data store returns the suspicious bidding activity
- (73) (a) Manager control sends a success message to the manager I/O regarding deciding the complaint/report (stay or reverse)
 - (b) Manager control sends a success message to the manager I/O regarding the retrieve of the suspicious bidding activity
 - (c) Manager control sends a success message to the manager I/O regarding modification of the taboo list
 - (d) Manager control sends a success message to the manager I/O regarding modification of the 3 suggested system
 - (e) Manager control sends a success message to the manager I/O regarding suspending the user
- (74) (a) Manager decides the complaint/report succeeds
 - (b) Manager retrieves the suspicious bidding activity succeeds
 - (c) Manager modifies the taboo list succeeds
 - (d) Manager modifies the 3 suggested system succeeds
 - (e) Manager suspends the user succeeds

2. Scenarios for each use case(normal and exceptional scenarios) alongside their diagrams

a) Manager/Administrator Diagrams

b) Manager/Administrator Diagrams

a.1) Deal with the complaint and the report.

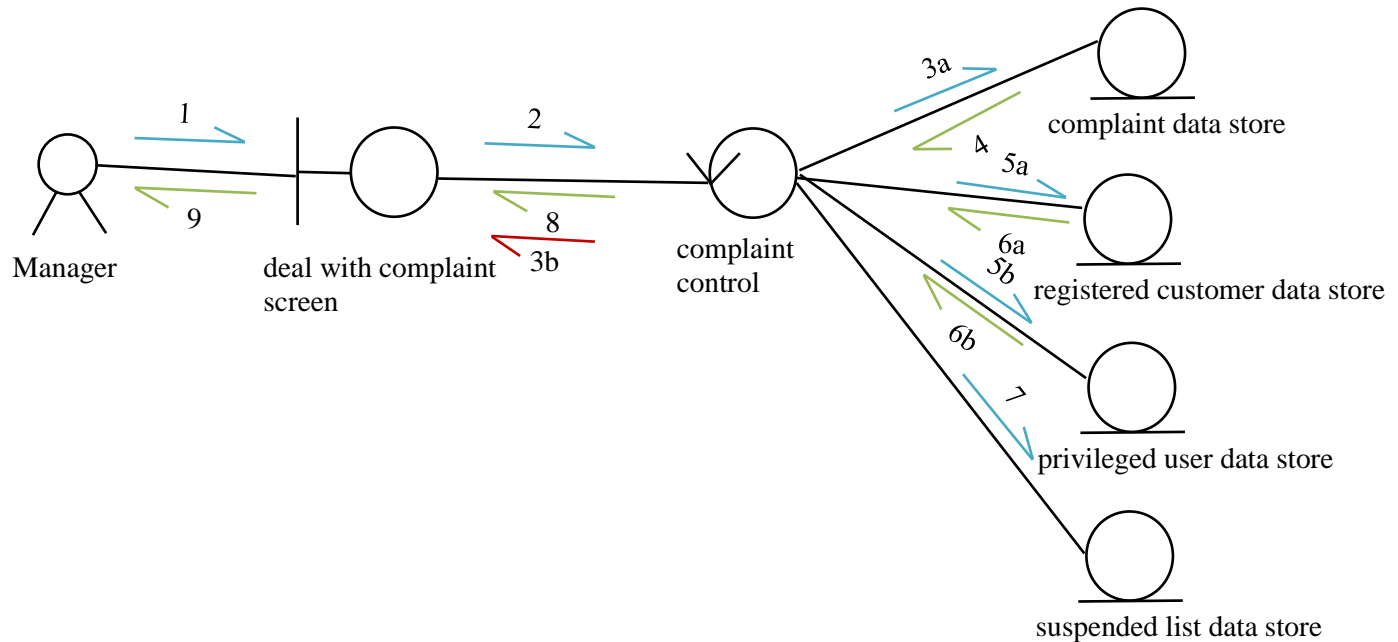
Normal Scenarios:

- 1) The manager provides his/her justification about the complained or reported case, then he/she can make the final decision, whether the case is stayed or reversed. If the case is stayed, the complained or reported party's warning will be raised by 1. If the case is reversed, the complainant or reporter's warning will be raised by 1.

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Exceptional Scenarios:

- 1) The manager makes his/her final decision about the complained or reported case without providing the justification, which results on an error message displayed on the screen



Numbered Action:

- 1) Manager is prompt to enter justification of complained or reported case, then select stay or reverse
- 2): Manager's choice is passed to complaint control
- 3a): Complaint control sends the justification and decision to complaint datastore
- 3b): Complaint control sends an error message to the screen saying justification cannot be empty
- 4): Complaint datastore returns the user information, who will be raised warning.
- 5a): User information is sent to registered customer datastore
- 5b): User information is sent to privileged user datastore
- 6a): Registered customer datastore returns the users' total warning after updating
- 6b): privileged user datastore returns the users' total warning after updating
- 7): User information is sent to suspended list datastore if the warning equals to 3
- 8): Complaint control sends a success message to the screen saying complaint finished
- 8): Manager deals with complaint succeeds

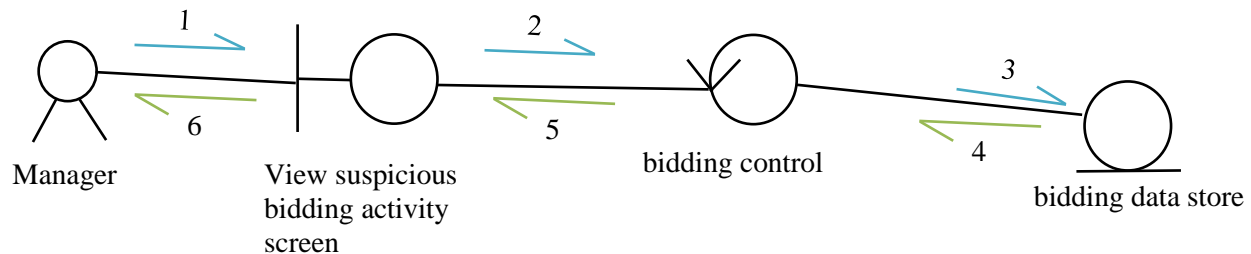
a.2) Check the suspicious bidding activity.

Normal Scenarios:

- 1) The manager checks the suspicious bidding activity, which is auto generated by the system if the clerk's choice isn't the lowest price one. If the manager thinks the clerk is

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cheating, then he/she should go to suspend page to suspend the clerk manually.



Numbered Action:

- 1) Manager is prompt to click the view button to see all suspicious bidding activities
- 2): Manager's choice is passed to bidding control
- 3): Bidding control sends a request to retrieve all suspicious bidding activities from bidding datastore
- 4): Bidding datastore returns the clerk's information and justification (if provided) associated with the suspicious bidding.
- 5): Clerk's information and justification (if provided)
- 6): Manager retrieves the suspicious bidding activity succeeds

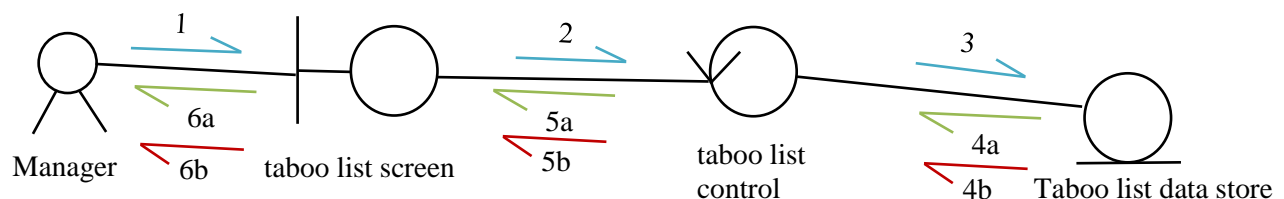
a.3) Maintain the taboo list

Normal Scenarios:

- 1) The manager updates the taboo list by creating a new taboo word or deleting an existing taboo word

Exceptional Scenarios:

- 1) If the manager tries to create a new taboo word which is already exist in the taboo list, or if the manager tries to delete a taboo word which doesn't exist in the taboo list, a error message will be displayed.



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Numbered Action:

- 1) Manager is prompt to create or delete a taboo word
- 2): Manager's choice is passed to taboo list control
- 3): Taboo list control sends the manager entered word and his/her choice to taboo list data store
- 4a): Return an update success message
- 4b): Return an update fails message
- 5a): Update success
- 5b): Update fails
- 6a): Manager updates the taboo list succeeds
- 6b): Manager updates the taboo list failed

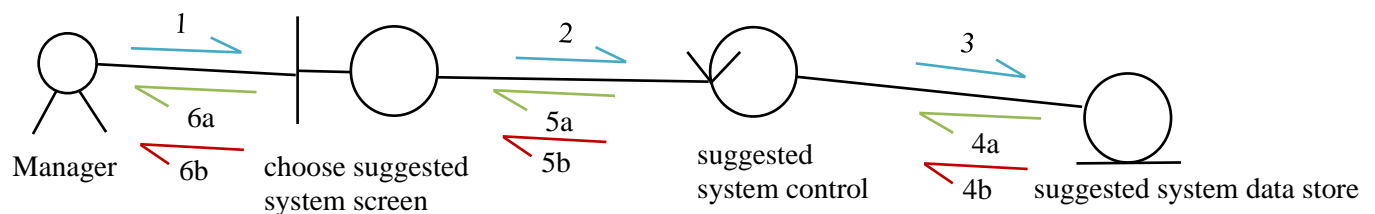
a.4) Choose 3 suggested system

Normal Scenarios:

- 1) The manager updates the suggested system by choosing 3 different systems

Exceptional Scenarios:

- 1) If the manager tries to choose 3 systems which has repetition, an error message will be displayed



Numbered Action:

- 1) Manager is prompt to choose 3 suggested system
- 2): Manager's choice is passed to taboo list control
- 3): Suggested system control sends the manager's choice to suggested system data store
- 4a): Return an update success message
- 4b): Return an update fails message
- 5a): Update success
- 5b): Update fails

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6a): Manager updates the suggested system succeeds

6b): Manager updates the suggested system failed

c) Visitors/Browsers Diagrams

b.1) Apply to be a registered customer.

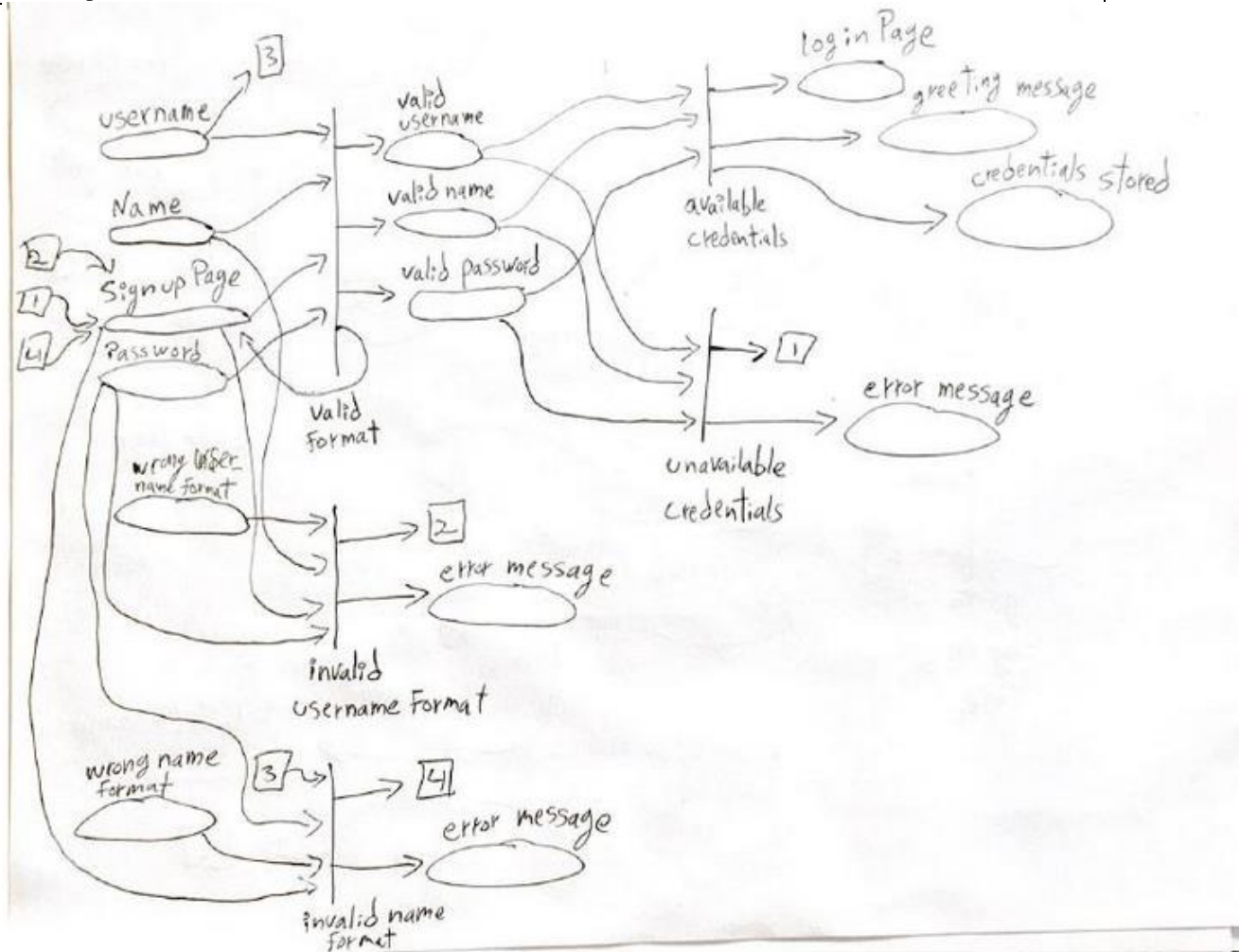
Normal Scenarios:

- 2) A visitor can become a registered customer on the sign-up page by providing a unique email, name, and password. The visitor provides the right inputs such as a first name and last name for the name entry, an email format which is not store on the datastore for the email entry, and a password which cannot be empty for the password entry.

Exceptional Scenarios:

- 2) A visitor provides an empty string on any of the entries which results on an error message displayed on the screen.
- 3) A visitor provides the incorrect format on the email entry which results on an error message displayed on the screen.
- 4) A visitor provides the correct format but a duplicated email which is already on the datastore excel file. An error message will be displayed to the user.

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b.2) Browse the listings pages of the computers and part and discussion forums.

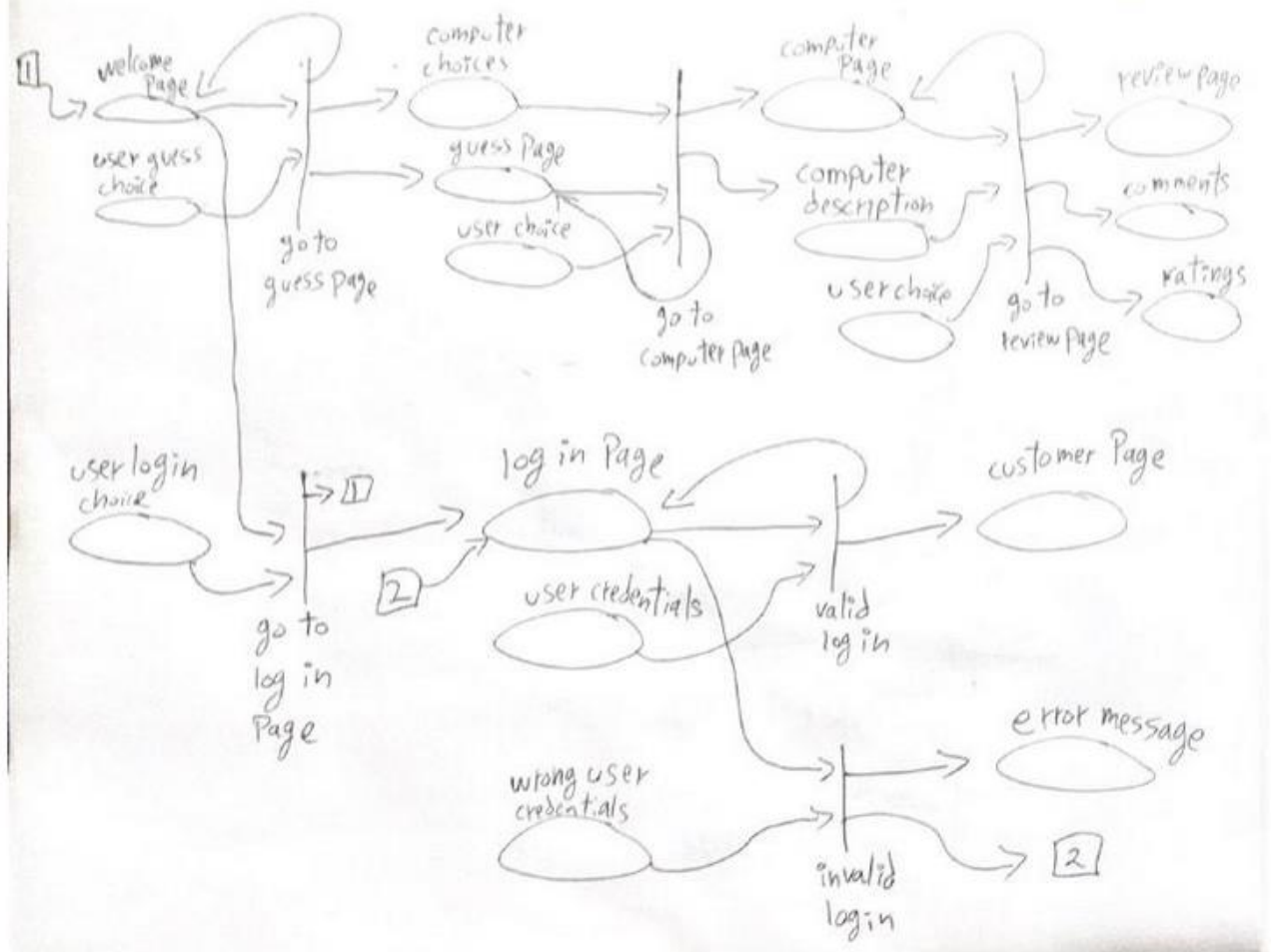
Normal Scenarios:

- 2) A visitor will browse between the different computers pages where they can see the different computers the system can offer, their respected star ratings, their respected description, and any registered customer reviews.

Exceptional Scenarios:

- 1) A visitor goes to a log in page without having a registered account or provides the wrong credentials will result on an error message displayed to the user.

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d) Registered Customers Diagrams

c.1) Browse the system on the different choices of computer pages, computer part pages, discussion pages.

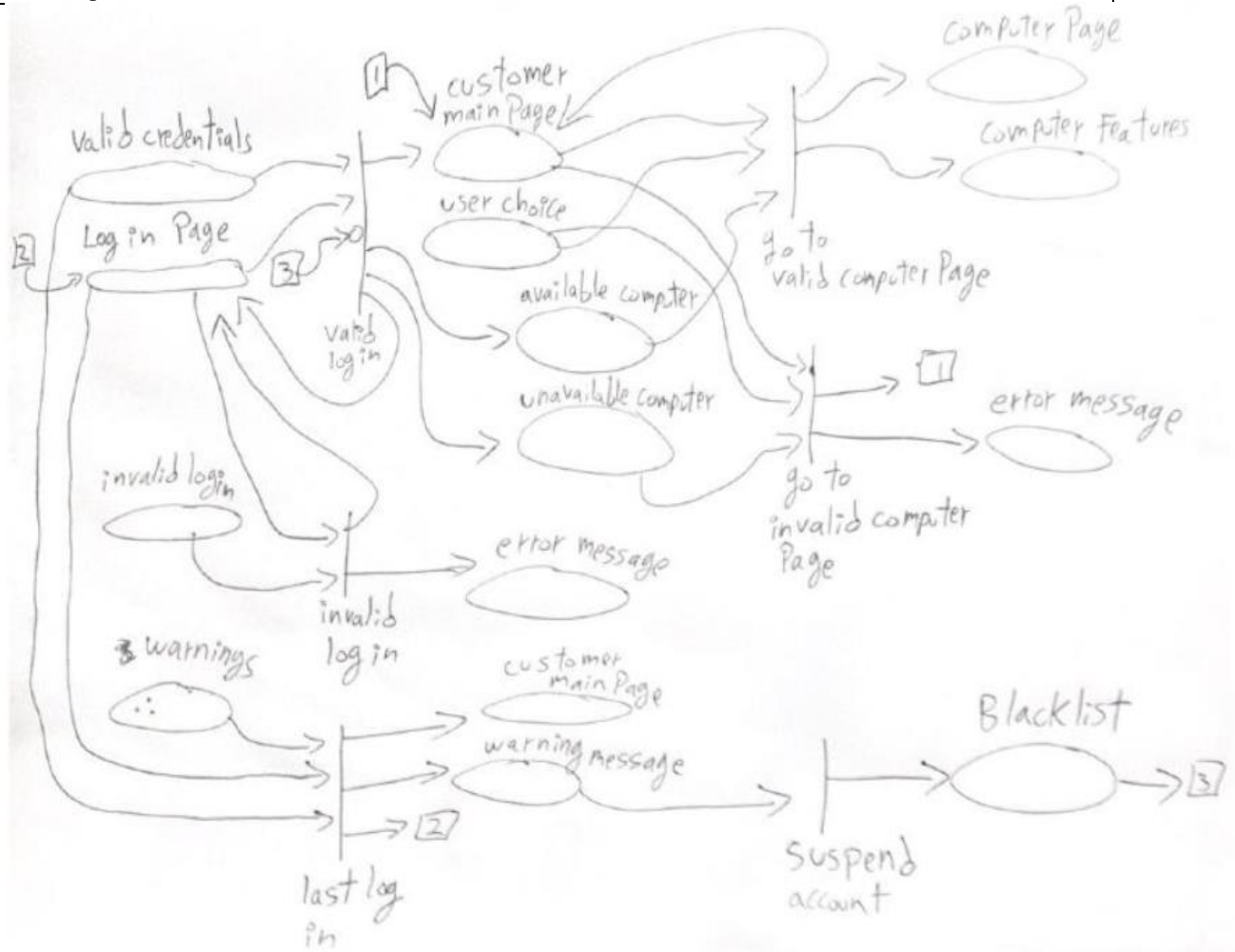
Normal Scenarios:

- 1) The customer will navigate the system and see the different choices of computer pages with their ratings and comments.

Exceptional Scenarios:

- 1) The customer while navigating in the system choose a computer which is discontinued because the assigned computer company has been removed from the system. They can still see the computer features and ratings but won't be able to add it to cart.
- 2) The customer has been suspended by the manager where at first trial will be a able to log in and a warning message will receive before not been able to log in at all.

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c.2) Complain about purchased item, clerks, and delivery companies.

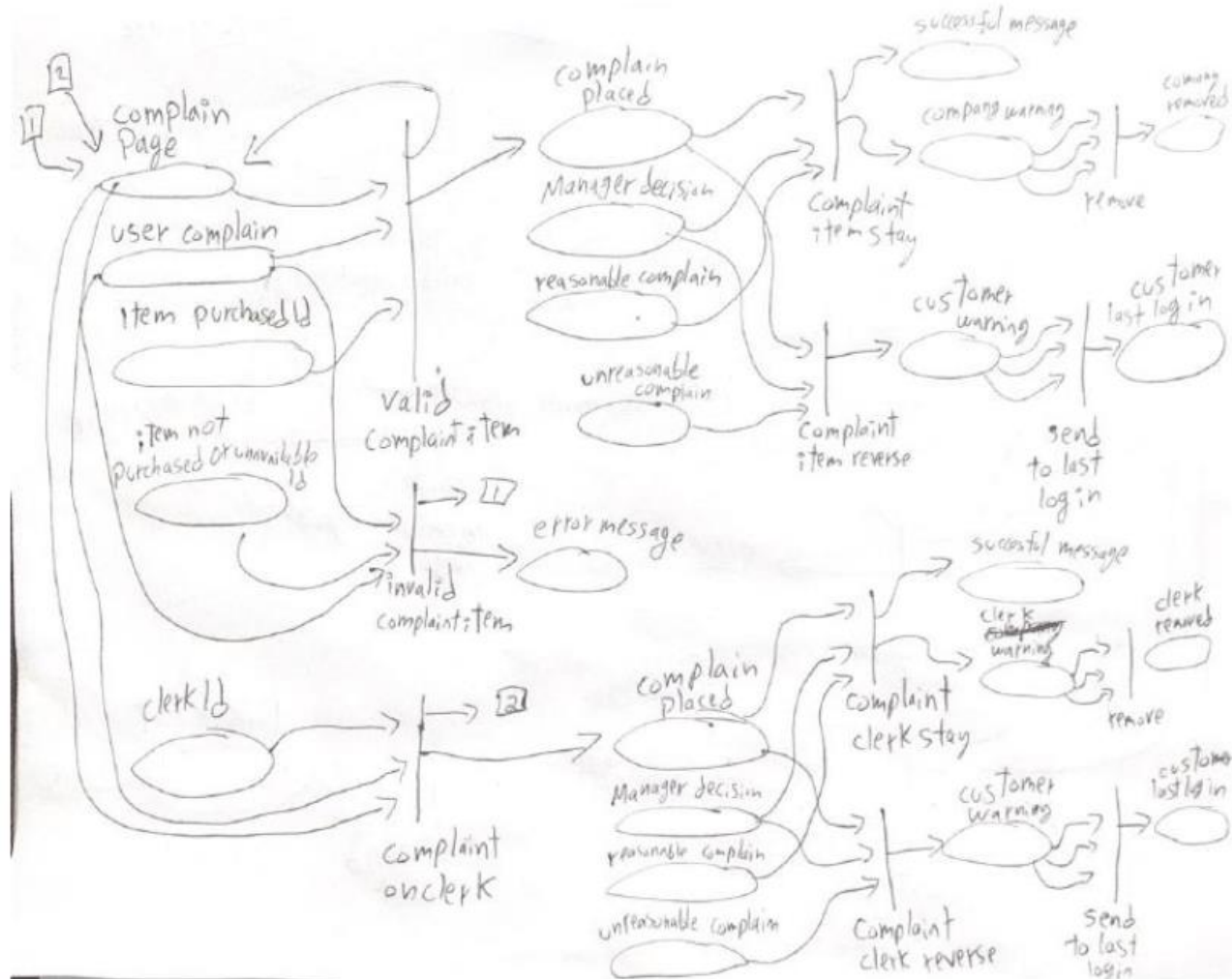
Normal Scenarios:

- 1) The customer complains about a purchased item, a clerk, and delivery companies by given a reasonable reason where the final verdict will be decided by the super manager.

Exceptional Scenarios:

- 1) The customer places a complaint about a purchased item, a clerk, or a delivery companies without giving a reasonable reason where the super manager will take action and place a warning towards that customer.
- 2) The customer place as complaint on an item which has not been purchased or is discontinued will result on an error message.

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c.3) Complain about other customers because of finding violating words in comments.

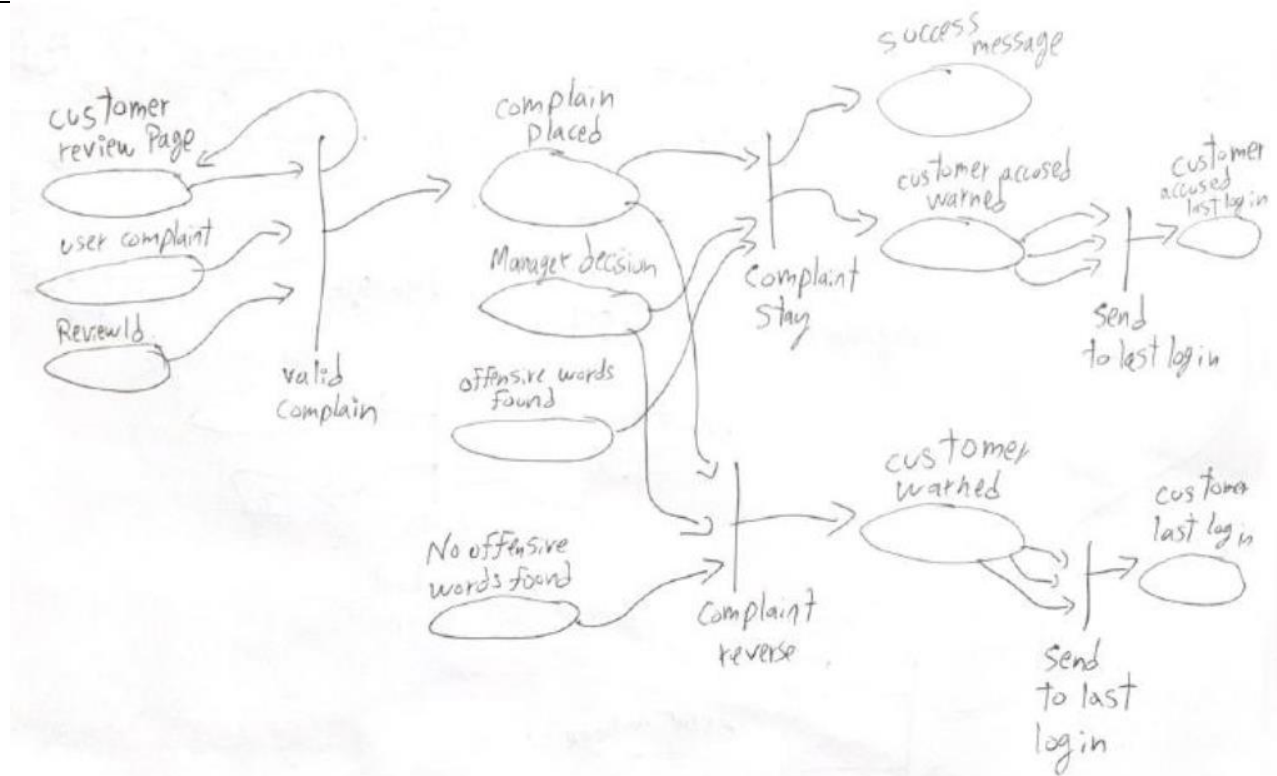
Normal Scenarios:

- 1) The user places a complaint about finding bad words on a comment where it will be reviewed by the super manager.

Exceptional Scenarios:

- 1) The user places a complaint about finding bad words on a comment which does not violate any norm where the super manager will make a decision and place a warning towards that customer.

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c.4) Make purchase option by providing a valid credit card with funds on the account.

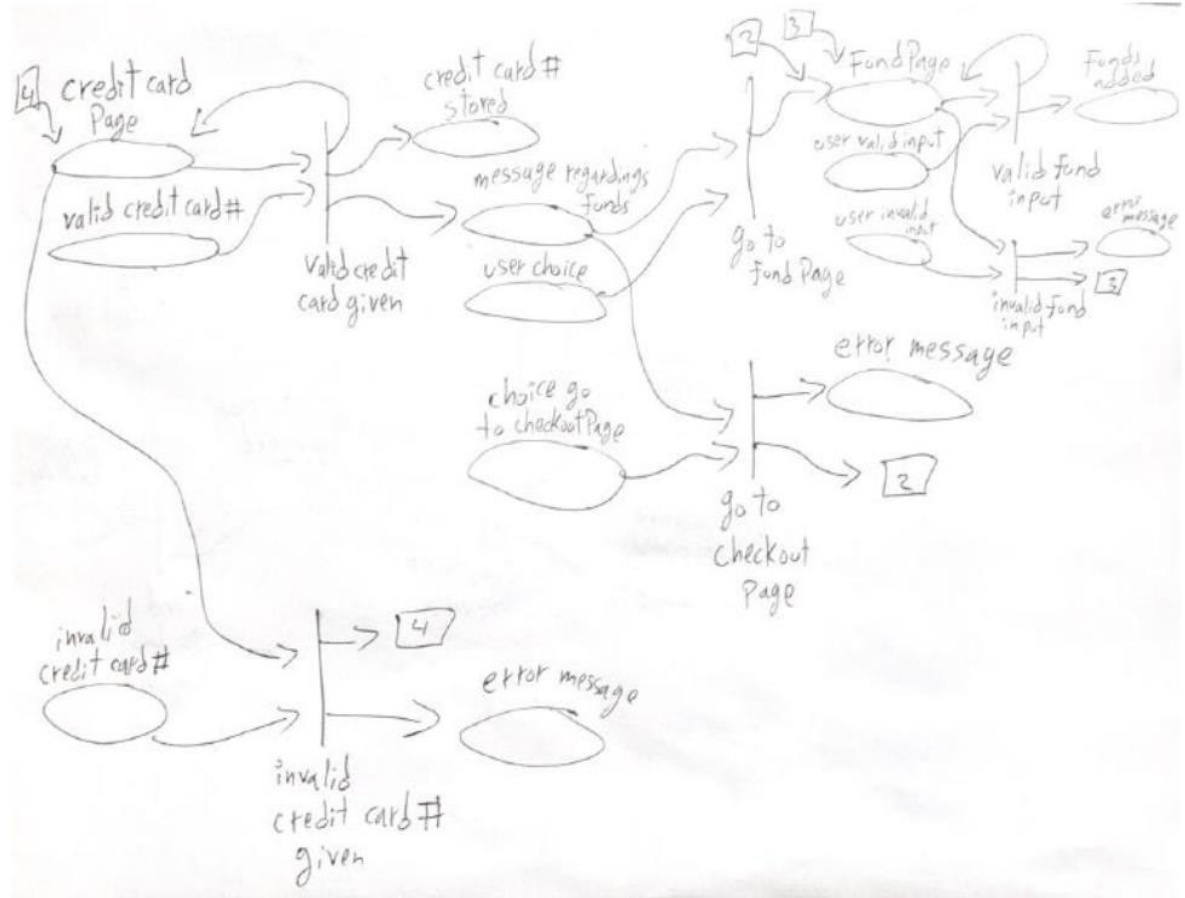
Normal Scenarios:

- 1) The customer provides a valid credit card to the system and goes to provide virtual funds to the account before making the first purchase or the account have no balance.

Exceptional Scenarios:

- 1) The customer tries to purchase an item before providing a credit card account with virtual funds which will result on an error message.

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c.5) See private history purchase, account, available money, and complaints received and filled.

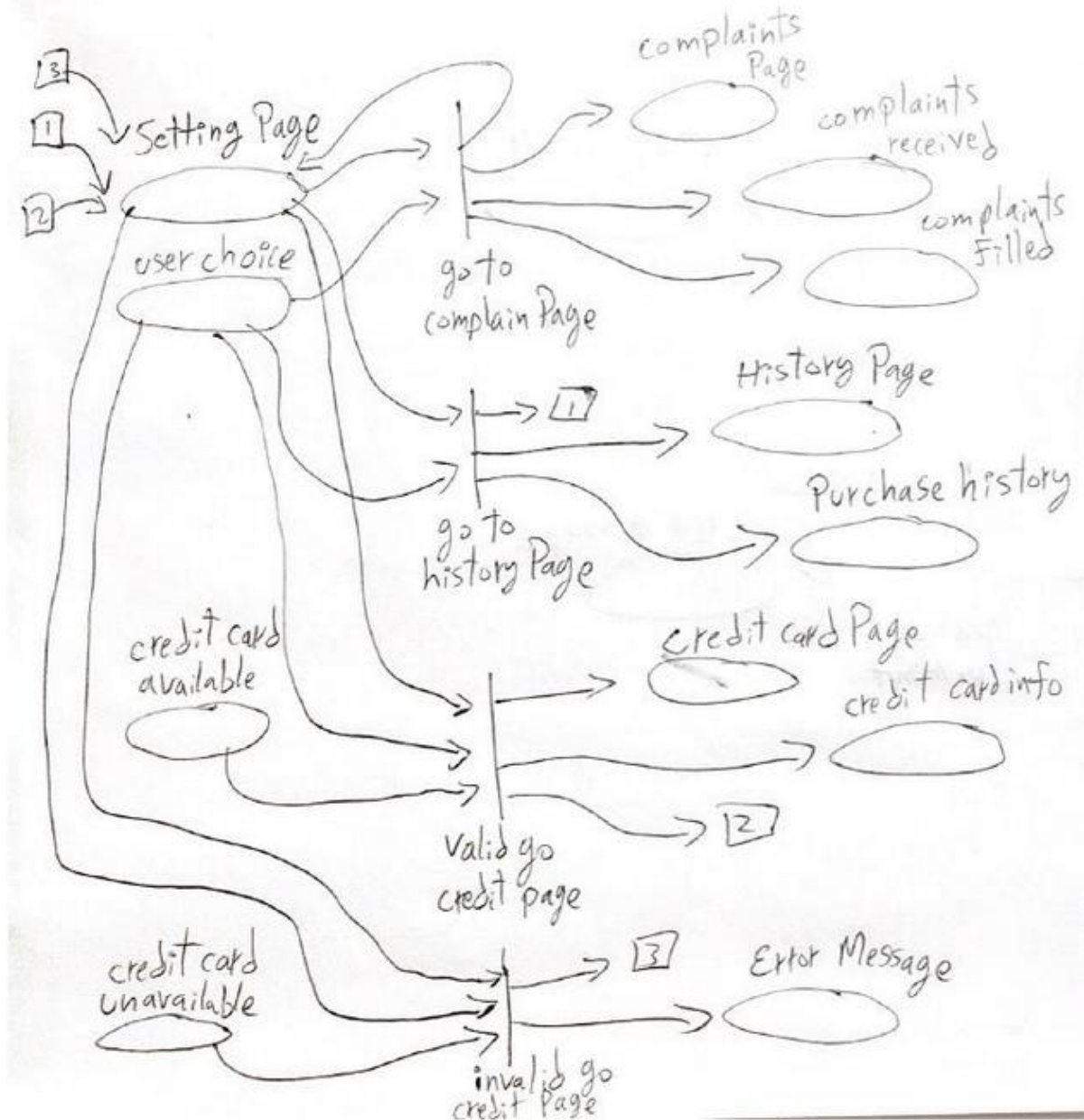
Normal Scenarios:

- 1) The customer goes to the respective account to check private history purchase, current balance and complaints received and filled.

Exceptional Scenarios:

- 1) The customer tries to see the credit card account while not providing a credit card account will result on an info message.

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c.6) Comment and star votes on the item already purchased.

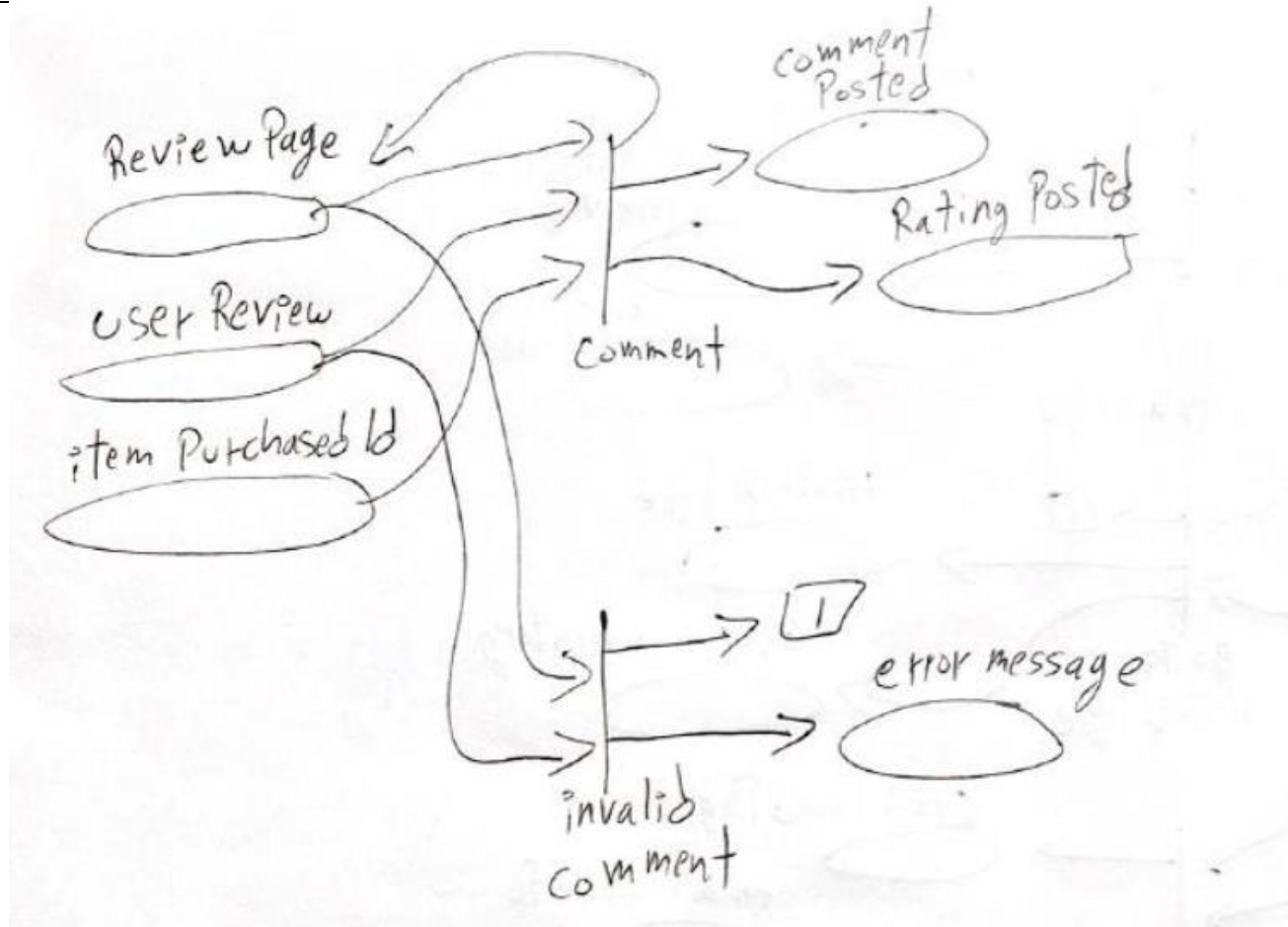
Normal Scenarios:

- 1) The customer comments and gives a rating on an item already purchased.

Exceptional Scenarios:

- 1) The customer tries to comment and give a rating on an item which has not been already purchased which will result on an error message.

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e) Store Clerks Diagrams

D1) Choose the most reasonable bidding price between the delivery companies.

Normal Scenarios:

- 1.) The clerk looks at the different bidding price options and picks the lowest option.

Exceptional Scenarios:

- 1.) The clerk chooses a bidding price option which is not the lowest among the bidding prices which results on an error message and a justification needed.

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f) Delivery Companies Diagrams

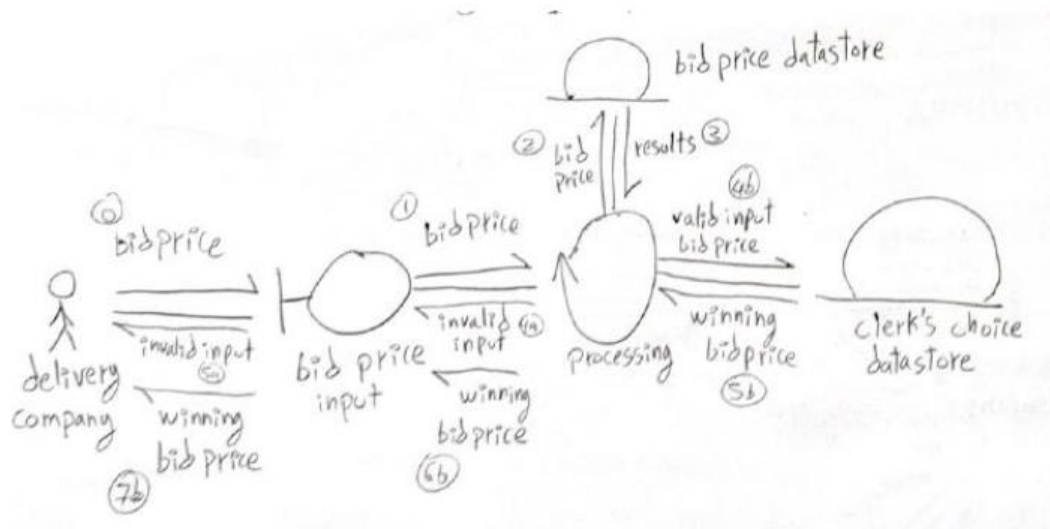
E1) Provide a bid price.

Normal Scenarios:

- 1.) The delivery company provides a bid price in their respective section.

Exceptional Scenarios:

- 1.) The delivery company provides an incorrect format of a price which will result on an error.



E2) Provide a tracking information to the customer.

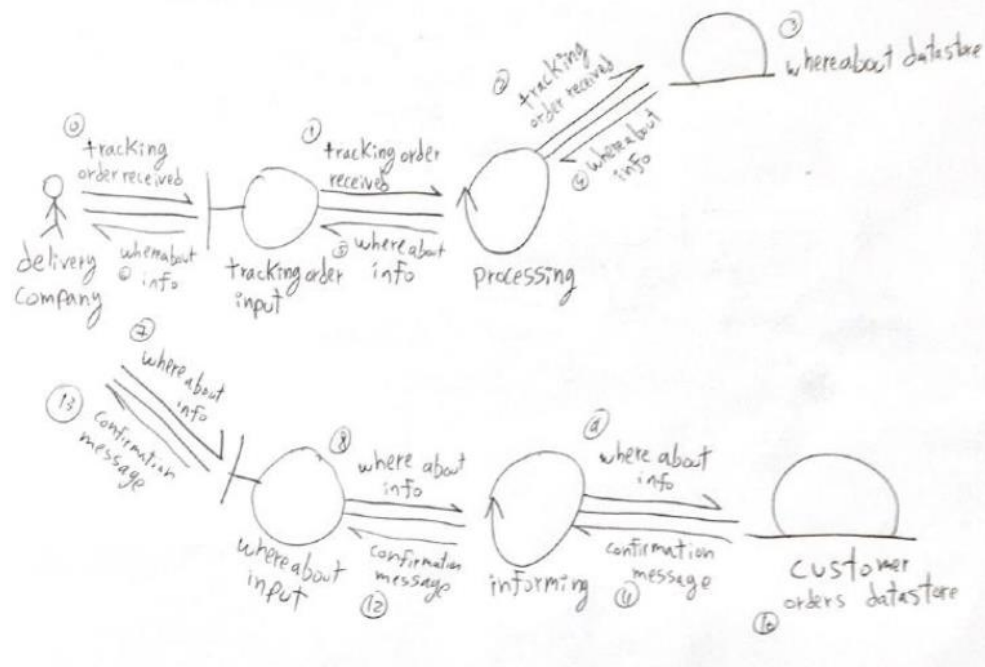
Normal Scenarios:

- 1.) The delivery company provides whereabouts based on the tracking order of the customer.

Exceptional Scenarios:

- 1.) The delivery company gets banned from the system by the manager.

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g) Computer Companies Diagrams

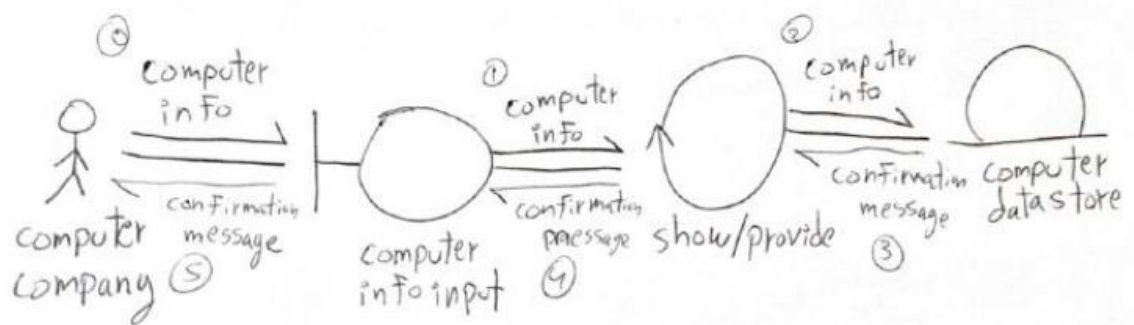
F1) Provide computer information such as prices, computer features and characteristics.

Normal Scenarios:

1.) The computer company provides information about the computers.

Exceptional Scenarios:

1.) The computer company gets banned from the system by the manager.



3. E/R Diagram

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```
def register_to_become_customer(user_name, user_password
    ,user_email):

    if (user_name is not in name_format):
        return error_message

    if (user_email is not in email_format):
        return error_message

    if (user_password is empty string ):
        return error_message

    if (user_password is already on datastore):
        return error_message
    else:
        store in datastore
        return welcome_message
```

Customer Methods:

1. Comment and star on item already purchased.

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```
def comment_and_star(user_Id, username, computer_name, user_comment, user_rating):

    if computer_name has been purchased:
        user_comment, flag_taboo_word = taboo_check(my_string)
        post(user_comment)
        post(user_rating)
        store(order_Id, user_Id, username, user_comment, user_rating)
        if flag_taboo_word:
            update_warning(username)
    else: // the item has not been purchased
        return error_message

def taboo_check(string):
    if the word in string exists in taboo_list data store:
        replace the word to "*"
        flag_taboo = True
    else:
        flag_taboo = False
    return string, flag_taboo

def update_warning(username):
    if username warning < 3:
        increment the warning by 1
    if username warning = 3:
        put username in suspended_list datastore
        user is kicked out of the system
```

2. Make purchase option.

```
def make_purchase(user_Id, username, item_name):

    if (username has provide credit_card) and (credit_card_balance
        is not 0.00 ):

        add_to_shopping_cart( user_Id, username, item_name)
    else:
        return error_message
```

3. Complain on item already purchased.

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```
def complain_on_item(user_Id, username, item_id):

    if item_id has not been purchased:
        return error_message
    else:
        post_complain( user_Id, item_id)
```

4. Complain on clerks and delivery companies.

```
def complain_on_clerk(user_Id, username, clerk_Id):

    if clerk_Id not on datastore:
        return error_message
    else:
        post_complain(user_Id, clerk_Id)

def complain_on_delivery(user_Id, delivery_Id):

    if delivery_Id not on datastore:
        return error_message
    else:
        post_complain(user_Id, delivery_Id)
```

5. Complain about customer reviews.

```
def complain_on_comment(user_Id, comment_Id):

    if comment_Id not on datastore:
        return error_message
    else:
        post_complain(user_Id, comment_Id)
```

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6. Check my information (credit card, balance, complaints filled, complaints received, purchase history).

```
def check_my_info(user_Id):
    credit_card, balance, history_purchased, complaints =
        gather_info( user_Id)
    if credit_card is None:
        return error_message
    else:
        show(credit_card)
        show(balance)
        show(history_purchased)
        show(complaints)
```

Clerk's Methods:

1. Update the taboo list.

```
def update_taboo_list(taboo_list_file):

    new_words = new_words_list

    remove_words = remove_words_list

    for word in remove_words:
        remove_word(taboo_list_file, word)

    for word in new_words:
        add_word(taboo_list_file, word)

    return taboo_list_file
```

2. Choose a reasonable bidding price.

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```

def choose_bidding_price(bid_price_list):

    best_bid_price = min( bid_price_list)

    best_bid_delivery = match(best_bid_price)

    return( best_bid_price, best_bid_delivery)

```

Delivery Companies' Methods:

1. Provide a bidding price.

```

def provide_bidding_pice(delivery_companies_list):

    bidding_prices = delivery_companies_list['Bidding Prices']

    return bidding_prices

```

2. Provide tracking information to customer.

```

def provide_tracking_update( Tracking_Order, customer_Id):

    whereabouts = Tracking_Order.locate()

    inform_user( whereabouts, customer_Id)

```

Computer Companies' Methods:

1. Provide information about computers' prices, specifications, and characteristics.

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```
def provide_computer_info( item_Id, item_file):

    Item_price = item_file.get_price( item_Id)
    Item_characteristics = item_file.get_characteristics( item_Id)
    Item_spec = item_file.get_spec( item_Id)

    post(Item_price, Item_characteristics, Item_spec)
```

Manager's Methods:

1. Suspend any user even less than 3 warnings with his/her justification

```
def suspend_user(username, justification):
    if username is already suspended or justification is empty:
        return error_message
    else:
        put username in suspended_list datastore
        update the status of user account datastore to 'suspended'
```

2. Deal with complaint/report, make his/her final decision (stay or reverse)

```
def deal_complaint(complainant, complained_party, decision, justification):
    if justification is empty:
        return error_message
    else:
        update decision and justification in complaint datastore
        inform both party
        if decision is stay:
            update_warning(complained_party)
        else: // decision is reverse
            update_warning(complainant)

def update_warning(username):
    if username warning < 3:
        increment the warning by 1
    if username warning = 3:
        put username in suspended_list datastore
        user is kicked out of the system
```

3. Maintain the taboo list, create or delete the taboo word

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```
def maintain_taboo(action, taboo_word):
    if action is create and taboo_word is not in taboo_list datastore:
        put taboo_word in taboo_list datastore

    elif action is delete and taboo_word is in taboo_list datastore:
        delete taboo_word in taboo_list datastore
    else: // create a taboo word which already exists
        // delete a taboo word which not exists
    return error_message
```

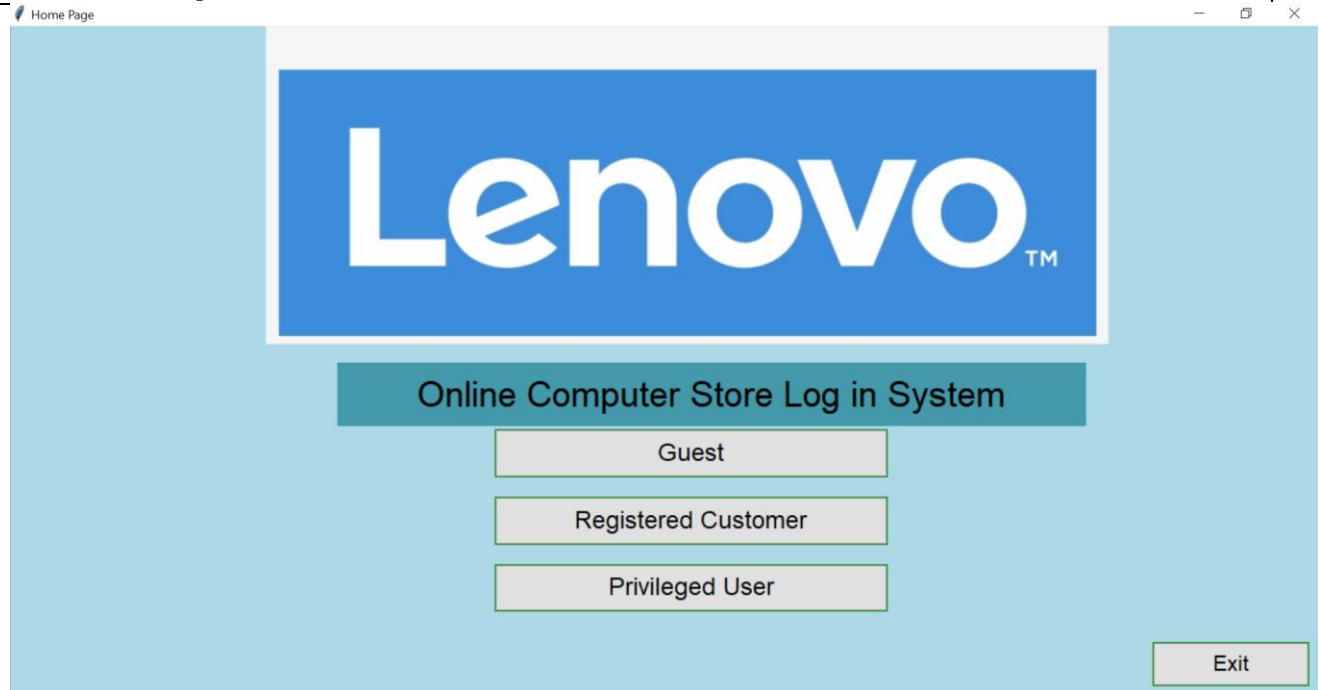
4. Choose 3 different suggested system

```
def choose_suggested_system(system1, system2, system3):
    if 3 systems are all different:
        update the suggested_system datastore with these 3 system
    else: // repetition exists
        return error_message
```

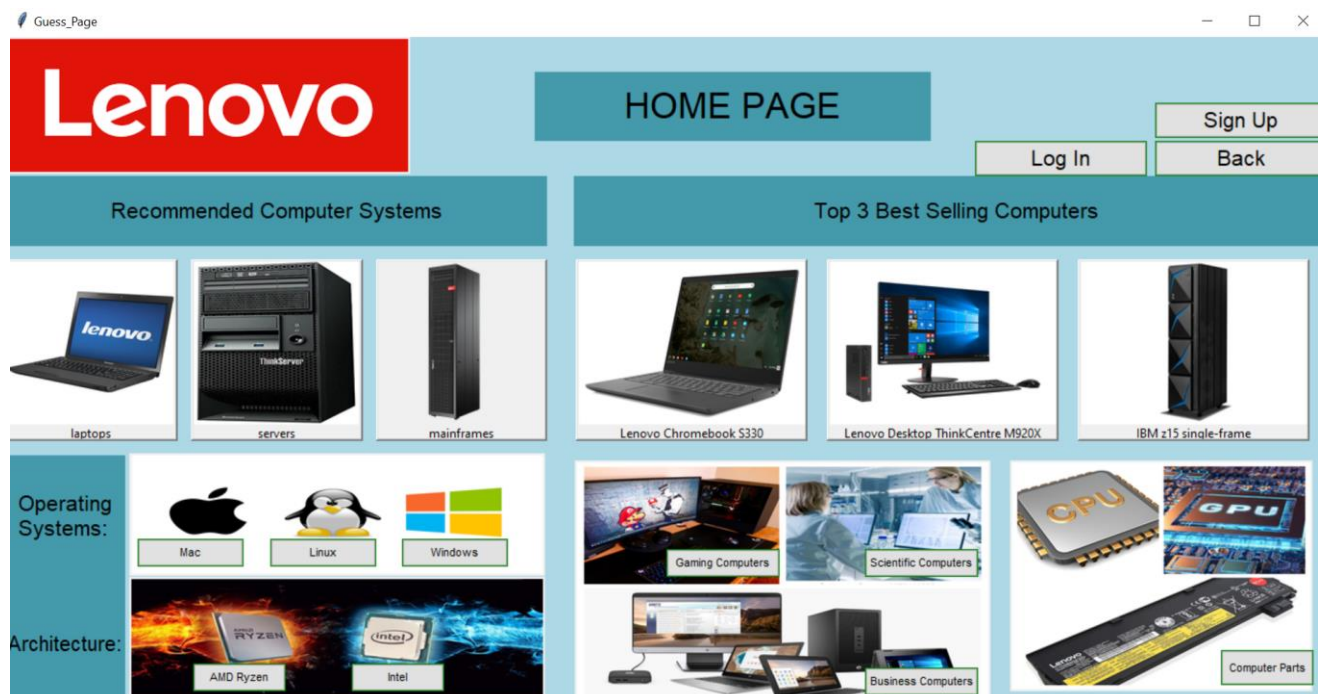
5. System Screens

5a) First screen where the users of the systems can decide to where they belong to(visitors/guest, registered users, and the privileged user).

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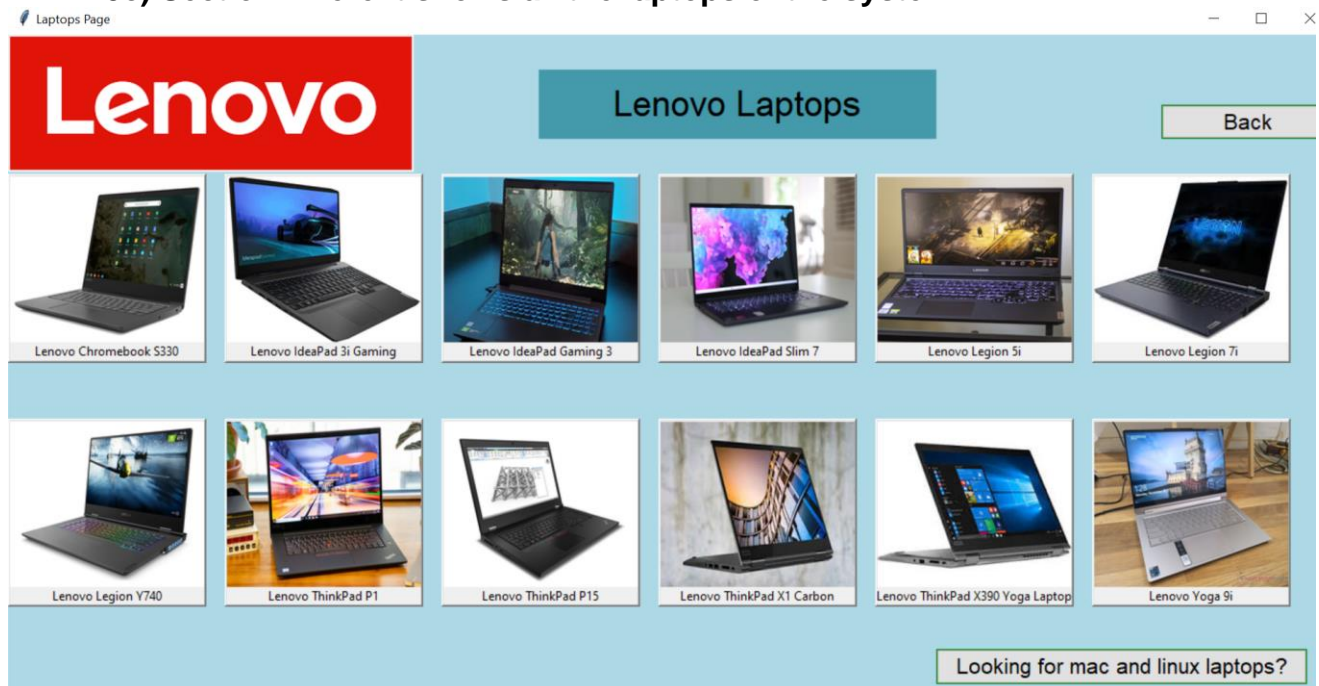


5b) Guess page which show the main sections of the system including the recommended computer system, the top 3 best selling computers, and some separated sections which show computers accordance with their main purpose, operating system, and architecture.

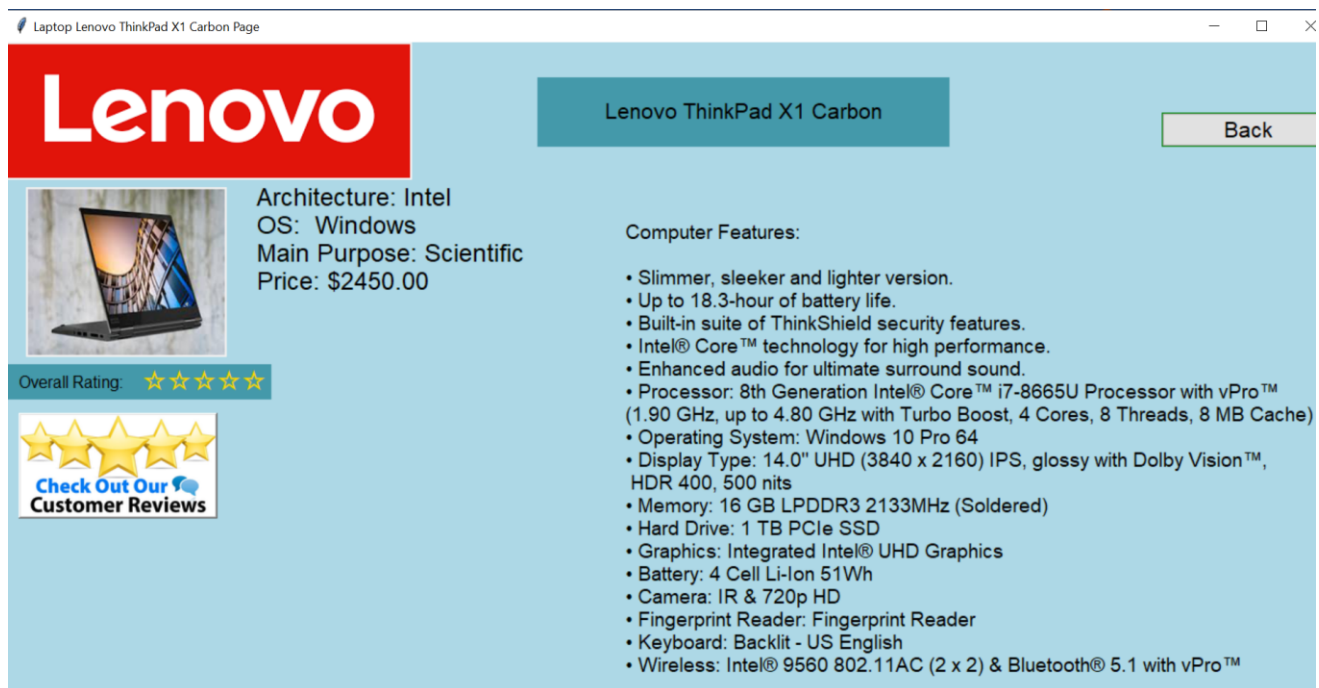


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5c) Section where it shows all the laptops of the system.

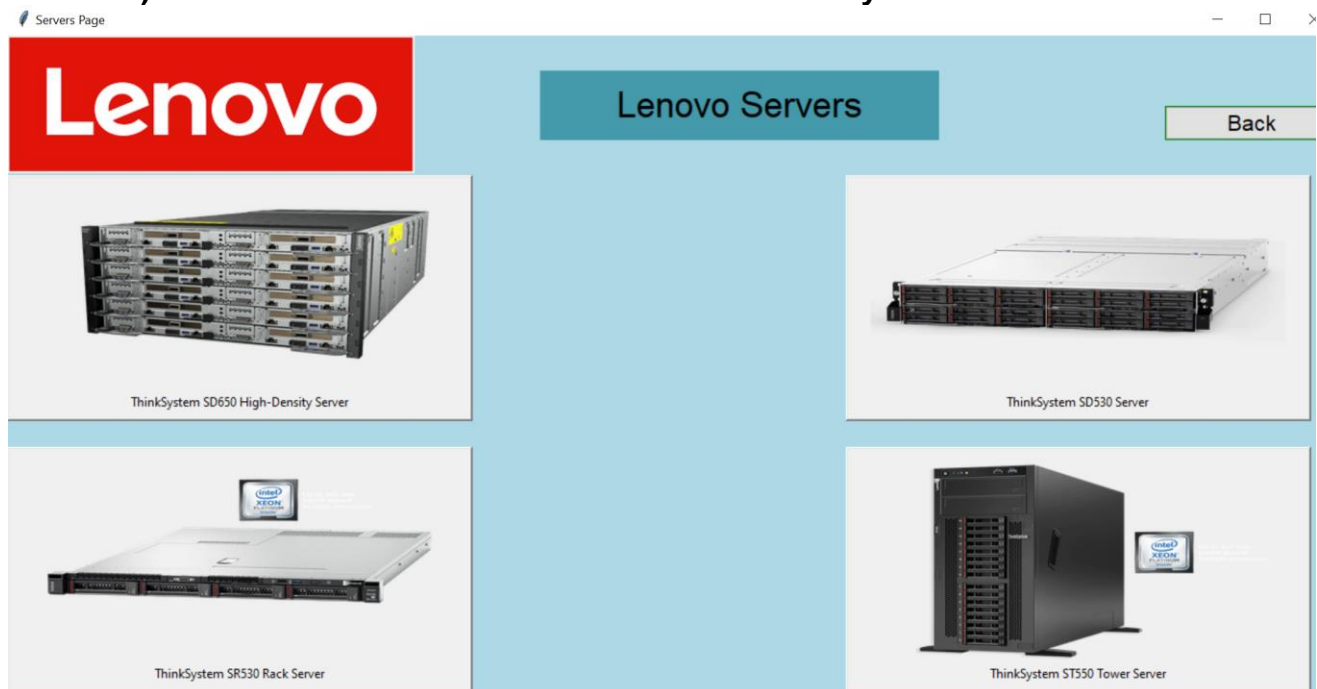


5d) Section when one laptop is clicked on. Where it will show the computer main features, price, main purpose, OS, and architecture.

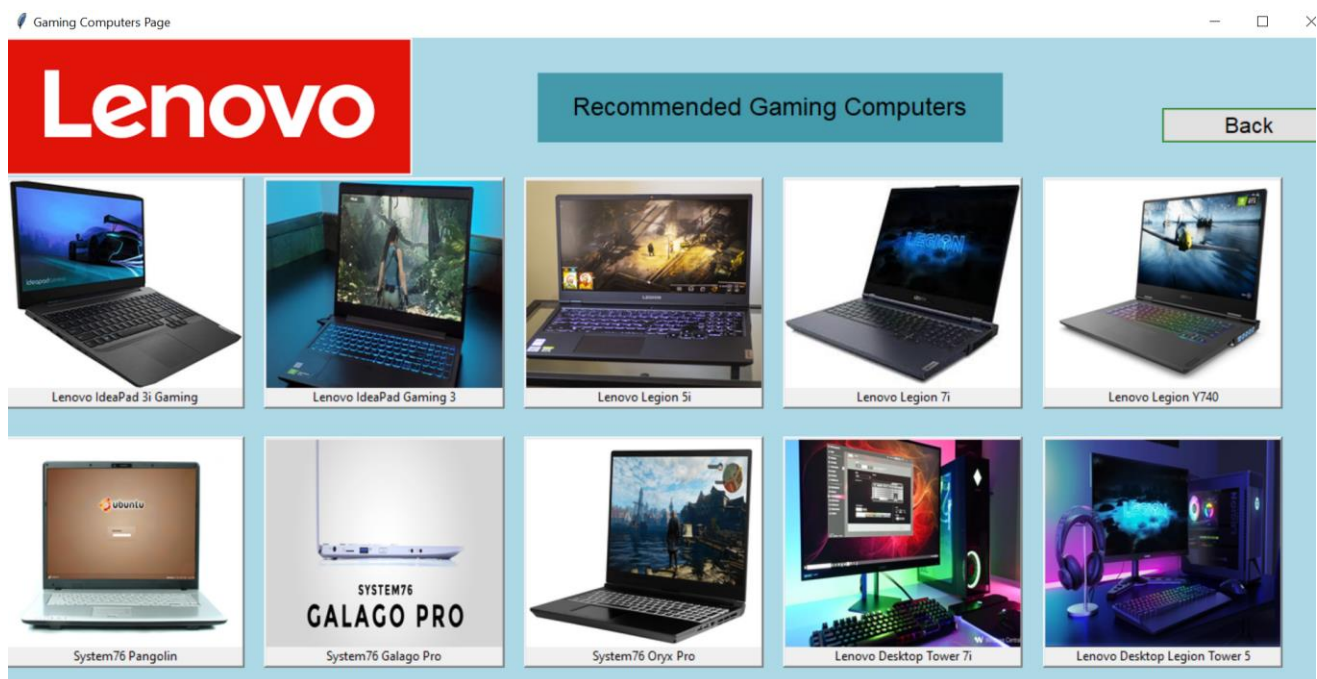


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5e) Section where it shows all the servers of the system.

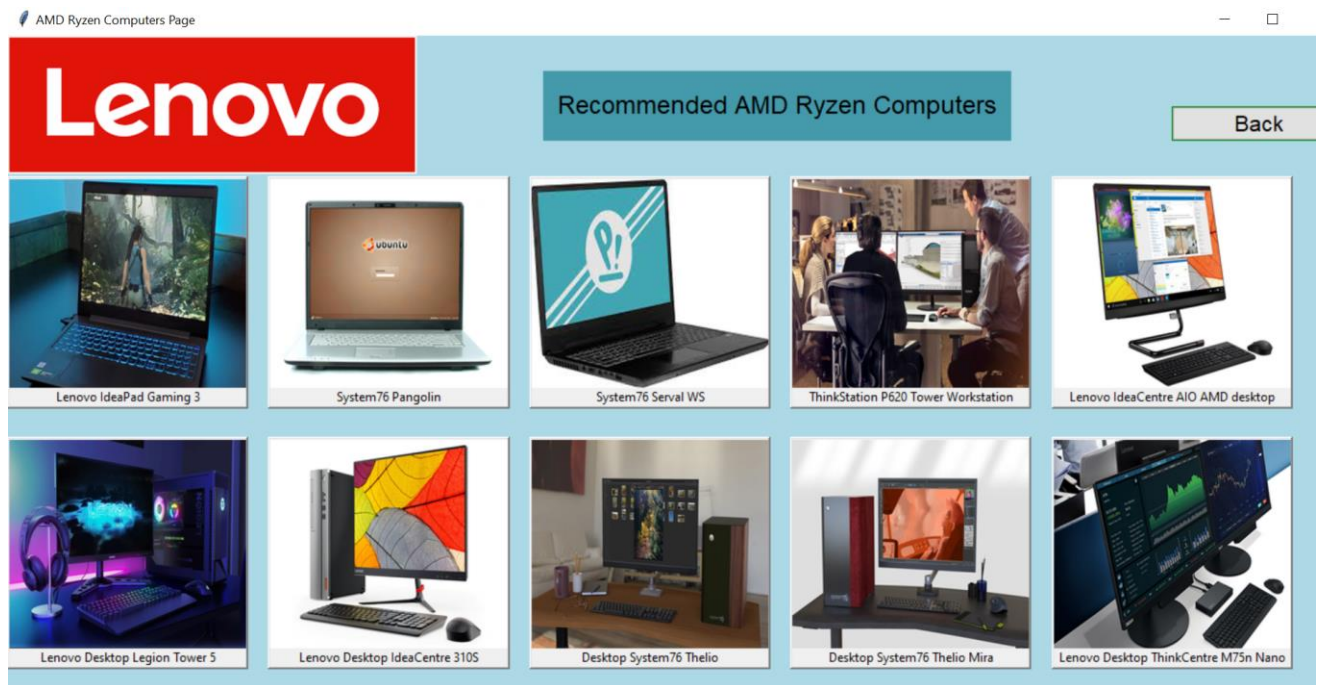


5f) Section where it shows top 10 best computers which main purpose is gaming

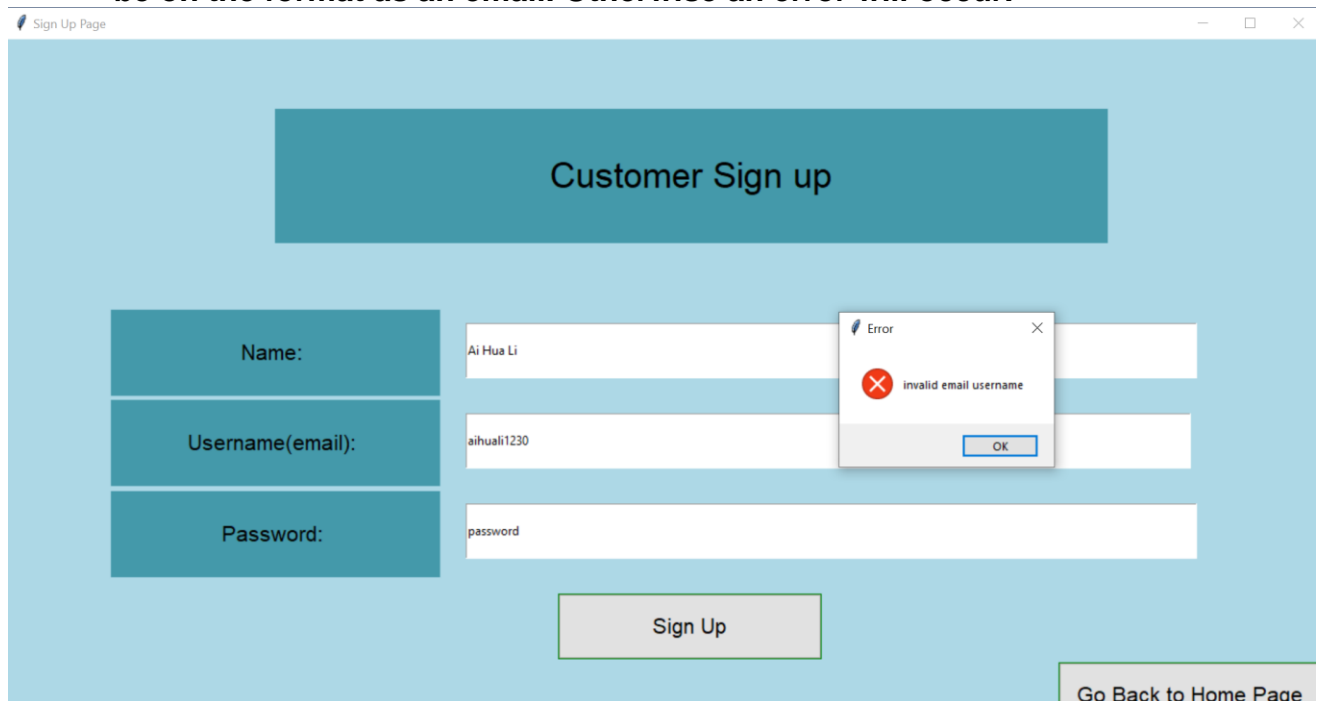


5g) Section where it shows top 10 computer which architecture is AMD Ryzen.

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5h) Sign up page for visitors to register as customers. The username must be on the format as an email. Otherwise an error will occur.



5i) Sign up page for visitors for the case the visitor provides the right format input. It will show a greeting message and it will automatically send the user

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to the log in page.

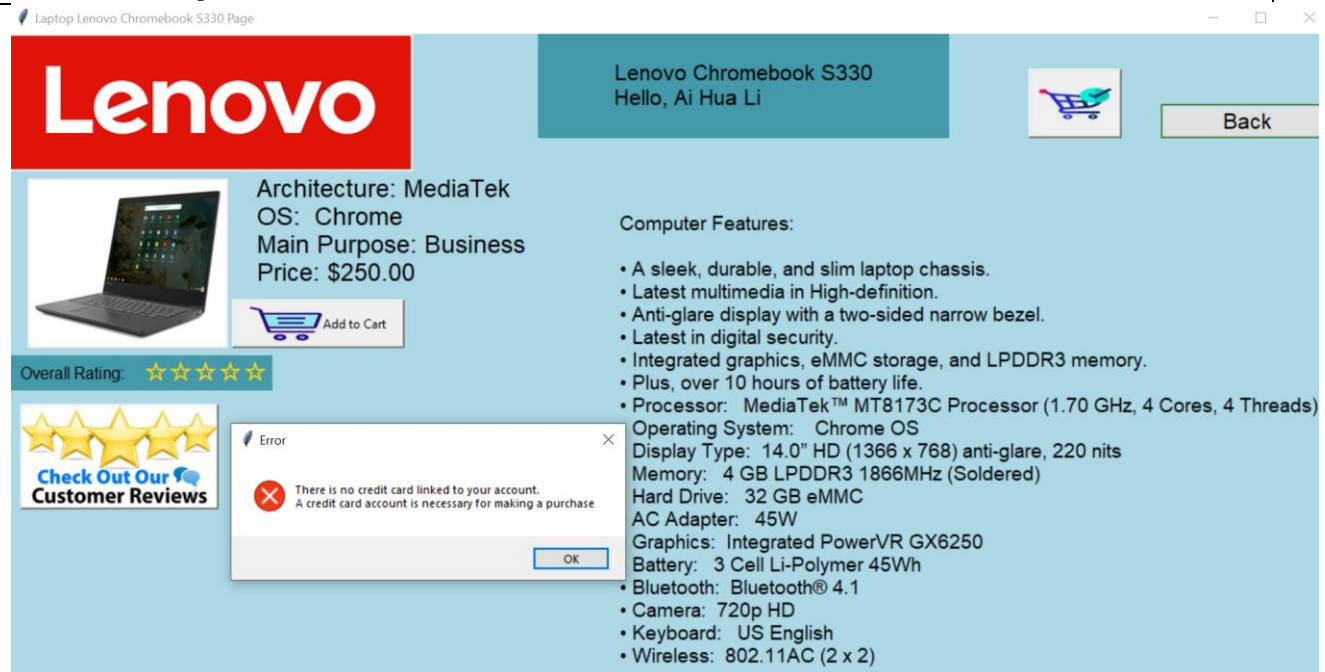
The screenshot shows a web browser window titled "Sign Up Page". The main heading is "Customer Sign up". Below it, there are three input fields: "Name:" with the value "Ai Hua Li", "Username(email):" with the value "aihuali1230@gmail.com", and "Password:" with the value "password". A "Sign Up" button is located below these fields. A success dialog box is displayed, stating "Success" and "Congratulation Ai Hua Li, you have created a new account", with an "OK" button. At the bottom right, there is a link "Go Back to Home Page".

5j) Sign up page for the case the visitor provides an email which is already on the datastore(the csv/excel file) system.

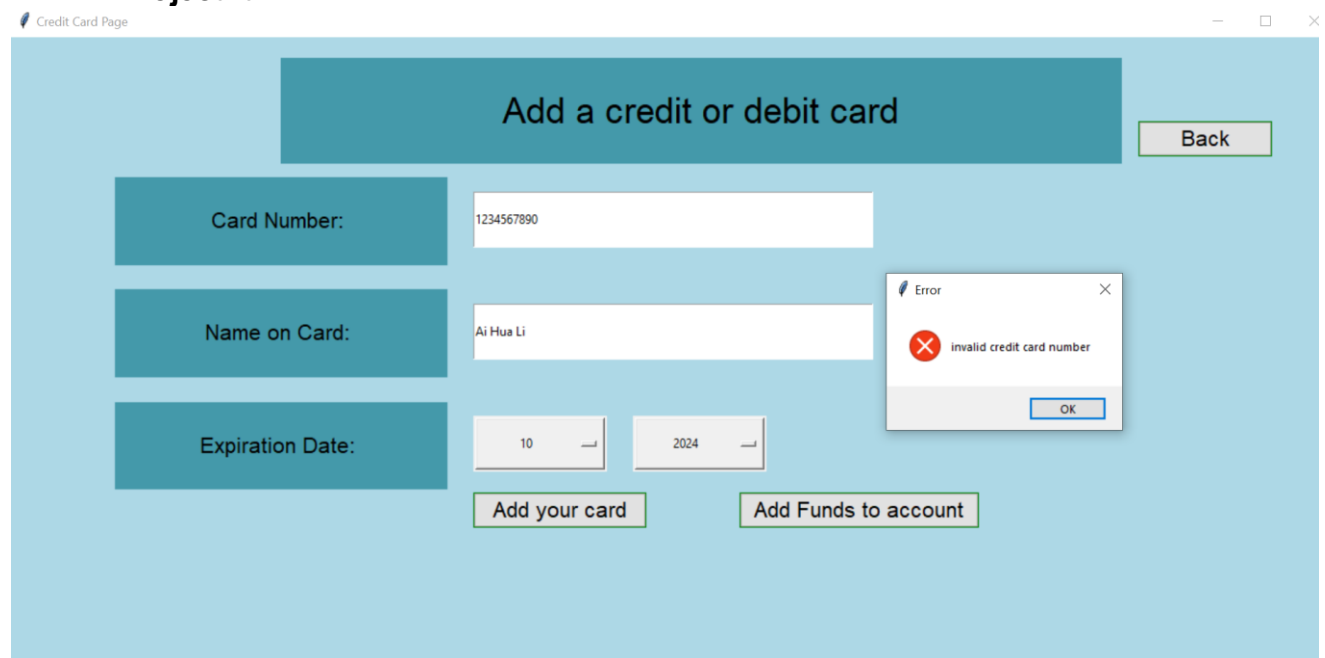
The screenshot shows the same "Sign Up Page" as before, but with an error dialog box. The "Name:" field contains "Ai Hua", the "Username(email):" field contains "aihuali1230@gmail.com", and the "Password:" field contains "password". The "Sign Up" button is visible. An error dialog box is displayed, stating "Error" and "username is taken", with an "OK" button. The "Go Back to Home Page" link is also present at the bottom right.

5k) A register customer which tries to go the check out cart section can not proceed until a valid credit card number is linked to the account.

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5l) The credit card page where the customer can provide a credit card number. If that number does not follow the Luhn's algorithm, then the system will reject it.



5m) The credit card page where the customer can provide a credit card for the case the credit card number is a valid number.

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Credit Card Page

Add a credit or debit card

Back

Card Number: 376852547587386

Name on Card: Ai Hua Li

Expiration Date: 10 2024

Add your card Add Funds to account

Success

Your credit card info has been updated

OK

5n) This is for the case the user does not provide virtual funds to the credit card given.

Laptop Lenovo ThinkPad P15 Page

Lenovo

Lenovo ThinkPad P15
Hello, Ai Hua Li

Back

Architecture: Intel
OS: Windows
Main Purpose: Scientific
Price: \$1420.00

Add to Cart

Overall Rating: ★★★★★

Check Out Our Customer Reviews

Error

Your current balance is \$ 0.00
Go to Settings to provide funds to your account

OK

Computer Features:

- Intel® Xeon® or 10th Gen Intel® Core™ processors options.
- Ultra-powerful NVIDIA® Quadro RTX graphics.
- Redesigned interior that enhances thermals to improve cooling.
- Amazing audio and visuals experience.
- Military grade testing for durability.
- Perfect for students, engineers, CAD, and industrial professions.
- Processor: 10th Generation Intel® Core™ i5-10400H Processor with vPro™ (2.60 GHz, up to 4.60 GHz with Turbo Boost, 4 Cores, 8 Threads)
- Operating System: Windows 10 Home 64
- Memory: 8 GB DDR4 2933MHz
- Hard Drive: 256 GB PCIe SSD, OPAL
- Display Type: 15.6" FHD (1920 x 1080) IPS, anti-glare, 300 nits
- Graphics: NVIDIA® Quadro® T1000 4GB
- AC Adapter: 170W AC
- Camera: 720p HD
- Keyboard: Backlit - US English
- Wireless: Intel® Wi-Fi 6 AX201 802.11AX with vPro™ & Bluetooth® 5.1

5o) The add funds page where the customer can add fake virtual funds to the linked credit card.

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Add funds Page

Add Funds to your credit card account

Back

Current Balance: \$ 1,345.67

Add funds: \$ 1345.67

Confirm

5p) The user can add items to the shopping cart where a randomized unique tracking order will be generated for each order.

Laptop Lenovo ThinkPad X390 Yoga Laptop Page

Lenovo

Lenovo ThinkPad X390 Yoga Laptop
Hello, Ai Hua Li

2 items

Back

Architecture: Intel
OS: Windows
Main Purpose: Business
Price: \$970.00

Add to Cart

Overall Rating: ★★★★★

Check Out Our Customer Reviews

Computer Features:

- A 13.3" business laptop with a 12" footprint
- More than 17.6 hours* of battery life
- Enhanced security measures like PrivacyGuard with PrivacyAlert and ThinkShutter
- Processor: 8th Generation Intel® Core™ i7-8665U Processor with vPro™ (1.90 GHz, up to 4.80 GHz with Turbo Boost, 4 Cores, 8 Threads, 8 MB Cache)
- Operating System: Windows 10 Pro 64
- Display Type: 13.3" HD (1366 x 768) anti-glare, 250 nits
- Memory: 16 GB DDR4 2400MHz (Soldered)
- Hard Drive: 256 GB PCIe SSD
- Graphics: Integrated Intel® UHD Graphics
- Camera: 720p HD
- Fingerprint Reader: No Fingerprint Reader
- Keyboard: US – English
- Wireless: Intel® 9560 802.11AC (2 x 2) & Bluetooth® 5.1 with vPro™

5q) The manager suspends any user even less than 3 warning

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Edit Account Information

Modify:

Operations:

Name:

User Name:

Password:

Suspend Justification:

5r) The manager views all account information

View Account Information

Clerk Accounts:

Computer Company Accounts:

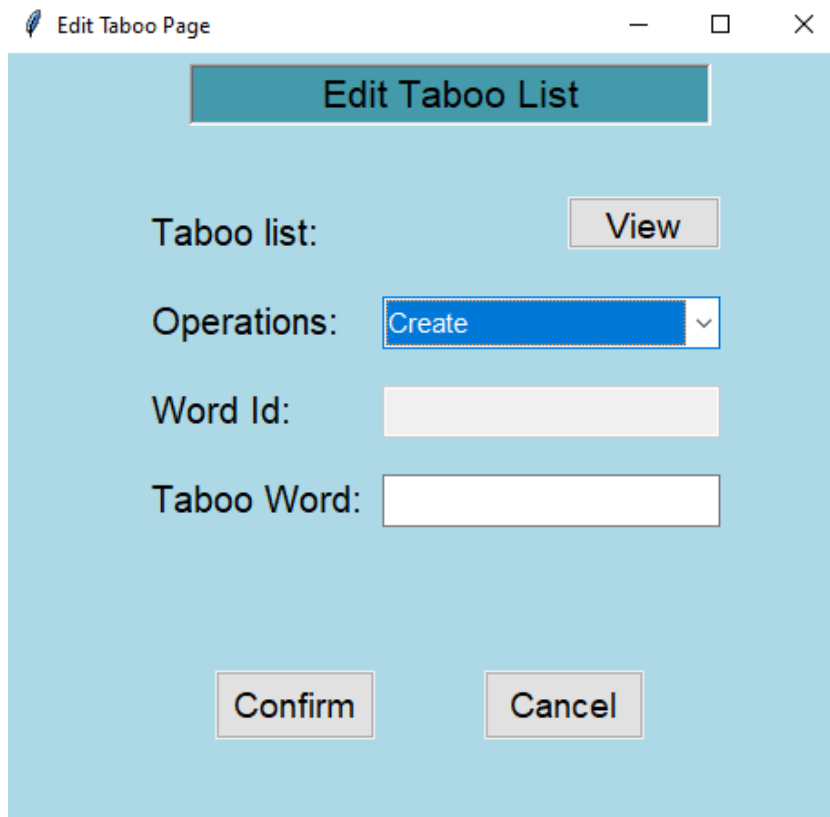
Delivery Company Accounts:

Customer Accounts:

Suspended Accounts:

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5t) The manager maintains the taboo list



The screenshot shows a web application window titled "Edit Taboo Page". Inside the window is a form titled "Edit Taboo List". The form contains the following elements:

- A "Taboo list:" label followed by a "View" button.
- An "Operations:" label followed by a dropdown menu currently showing "Create".
- A "Word Id:" label followed by an empty text input field.
- A "Taboo Word:" label followed by an empty text input field.
- At the bottom, there are two buttons: "Confirm" and "Cancel".

5u) The Manager deals with complaint and discussion report

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Edit Discussion Report Page

Edit Discussion Report

View:
All Discussion Report

ID	Reporter	Reported Comment ID	Reported Time	Status
0	chuan@gmail.com	0	21-04-21 10:12	stay
1	chuan@gmail.com	1	21-04-21 10:12	reverse
2	ziyi@gmail.com	4	21-04-21 10:13	stay
3	ziyi@gmail.com	5	21-04-21 10:13	reverse
4	chuan@gmail.com	6	21-04-21 10:28	stay
5	ziyi@gmail.com	8	21-04-21 10:28	reverse
6	ziyi@gmail.com	7	21-04-22 11:06	stay
7	ziyi@gmail.com	10	21-04-22 11:06	stay

Reported Comment Content

Coment ID: 4

Computer: Lenovo ThinkPad X390 Yoga Laptop

customer: chuan@gmail.com

☆☆☆☆☆

Reviewed on 21-04-21 10:11

Chuan Test2

Chuan Test2

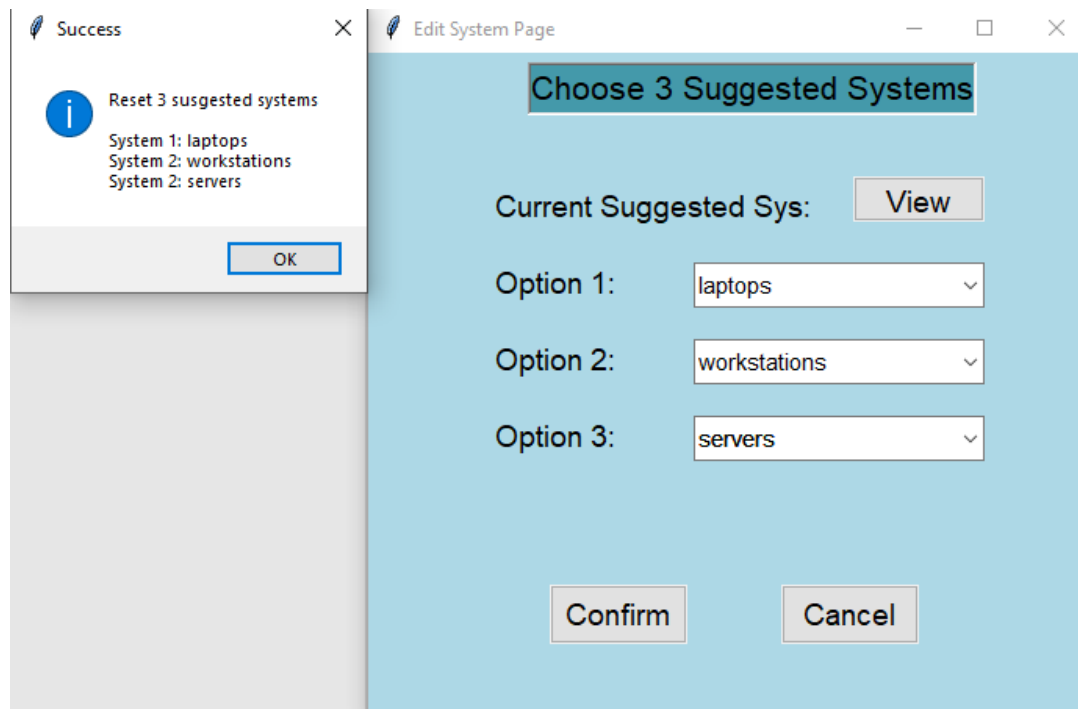
NOTICE: This comment is violated and will not be shown to customers

Manager Justification:

Manager Justification:

Violated
Non-Violated
Back

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6. Minutes of group meetings and possible concerns of teamwork

6a) Group Meetings

Date	Description	Time Duration
02/26	<ul style="list-style-type: none"> - Brief discussion to check if everyone understands the specification. - Decide which language will be used, which GUI, and possible creative feature. 	60 minutes
03/20	<ul style="list-style-type: none"> - Zoom meeting to demonstrate some features discussed in the group chat. (The first version of the log in system is created) 	~ 40 minutes
03/22	<ul style="list-style-type: none"> - Zoom meeting to demonstrate more features discussed in the group chat. (The design for the log system is created and 	~120 minutes

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	<p>improved, the first version of the main page for visitors is created)</p> <ul style="list-style-type: none"> - Clarify some doubts regarding the specification. - Start working on the first phase report. 	
03/31	<ul style="list-style-type: none"> - Zoom meeting to finish and review the first phase report. 	~240 minutes
04/19	<ul style="list-style-type: none"> - Zoom meeting to demo the features discussed in the group chat. (most of the features of the manager are finished, the computer pages are added) 	~180 minutes
04/23	<ul style="list-style-type: none"> - Zoom meeting to demo the features discussed in the group chat. (customer review feature is added along with the customer place complaints, add valid card number, provide virtual funds and shopping cart feature) - Start working and discussing on the second phase report 	~180 minutes

7. Address of the git repo (GitHub, GitLab, or Bitbucket)

<https://github.com/billydavila/Online-Computer-Store-System>