Fashion Village

Requirements Document

Team 10
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Contents

1 Project Proposal

1.1 Team Skill/Experience Inventory:

Technical skills/experience: computer languages, platforms, environments: e.g. Java, Web Services, .NET etc.

Student	Skills
Badr Modoukh	C, C++, Java, C#, PHP, ASP.NET MVC, HTML, CSS, SOCKET PROGRAMMING
Sajjad Patel	C, C++, HTML, CSS, SOCKET PROGRAMMING
Nick Thomas	C, C++, HTML, CSS, SOCKET PROGRAMMING, PHP, ASP.NET MVC, Android Programming, Java
Timothy Ngai	C, C++, Java, C#, HTML, CSS, PHP, ASP.NET MVC

1.2 Client or Mentor:

Client or Mentor's Organization	Fashion Village
Client or Mentor's name and contact (i.e. email address)	Nafisa Bawa 416-820-5956 fashion_village@hotmail.com
Client or Mentor's position (e.g. owner, professor, etc.)	Director of Fashion Village

1.3 Brief description of required system:

The proposed system will allow Fashion Village to sell clothes and accessories online. The customer will register online to be granted permission to purchase clothes offered by Fashion Village. After the customer has purchased what they are looking for they can checkout using one of the compatible options (PayPal). The customer can also provide feedback to Fashion Village to help the organization learn how to best serve customers. Managers will have an eagle eye view of sales and will have permission to use the information to generate sales reports to have a better understanding of how the companies doing. They will also administer feedback information and have permission to use the information to generate feedback reports.

1.4 Description of any Technological Constraints:

- Must be web based
- Compatible with PayPal

1.5 Key System Components:

Customer Account Management Module

This component will allow customers to register to Fashion Village and manage their accounts and orders so that they can use the services that Fashion Village has to offer.
Functions include:

- Manage Account
  - create account
  - delete account
  - update account
  - view account

- o view purchase history
- Create feedback for purchased item (customer can provide feedback for the item they purchased)

Reporting Module

This component provides reporting on sales activity and feedback from customers.
Functions include:

- sales report generator per month
- sales report generator per quarter
- sales report generator per fiscal year
- feedback report generator per month
- generate tax summary

Shopping Cart

This component will control the customer's current shopping cart. The payment of this method will involve using PayPal once checkout is clicked.
Functions include:

- customer adds items to shopping cart
- customer removes items from shopping cart
- view all items in shopping cart (number of products with subtotal of price)

Product Management Module

This component will allow the manager to manage the products that Fashion Village has to offer.
Functions include:

- Manage inventory(CRUD)
  - o create product
  - o retrieve product
  - o update product description and inventory
  - o delete product and inventory

Ordering Module (for checkout)

This component will contain the functions for the checkout process.
Functions include:

- calculate total price of purchases
- place order
- finish payment transaction with 3rd party system (PayPal)

Shipment Management Module

This component handles the products that need to be shipped out to the customers.
Functions include:

- add product for shipment
- remove product from shipment
- view all products for shipment
- check shipping status

1.6   Context Diagram(s):
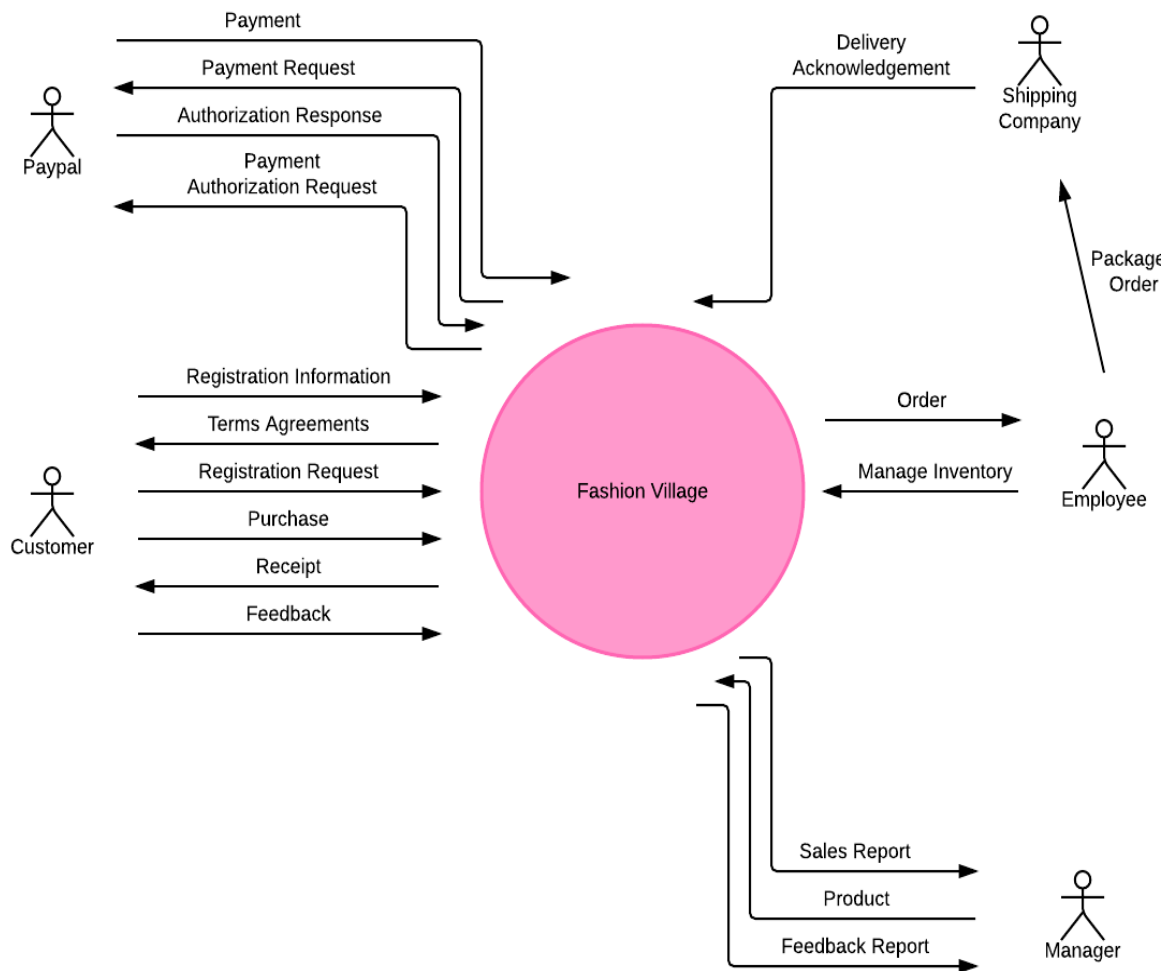
2   The Business Problem

2.1   The Business

Fashion Village is a privately owned clothes distribution company located in the Greater Toronto Area who distribute clothes to stores. The current business allows customers to call the business to order a set of clothing and have them delivered.

2.2   Problem Statement

Issue:
Currently Fashion Village is only using their phone lines to receive remote orders. As the business has grown this basic system cannot keep up with call/order traffic and is causing the company to lose customers due to long wait times to place an order.

Vision:
The vision for Fashion Village is an online store system. The system will allow its customers to view products and special offers online and make orders directly online with a feature that allows the customer to provide feedback to the business. The system will also support the company's management team to manage the products and feedback reports, generate sales reports; as well as support the employees to manage and process orders.

3   Stakeholders

Stakeholder	Role	Power (L/M/H)	Interest (L/M/H)	Opposition (L/M/H/none)
Fashion Village CEO Nafisa	Authority, Sponsor, End User	H	H	None
Employees	End User, Business Domain Expert	L	H	None
Store Manager	End User, Business Domain Expert	M	H	None
Registered Customers	End User	L	H	None
Non-Registered Customers	End User	L	M	None
PayPal	Supplier	L	H	None
Shipping Company	Supplier	L	H	None
IT Developers	Technical	L	H	None
IT Backup & Security	Technical	M	H	None
IT Infrastructure	Technical	M	H	None

4   Business Rules

	Description
	Description
1.	Only PayPal payment is allowed
2.	Customer has to use either Canadian or US currency
3.	Customer has to wait five business days for product to ship
4.	Customer has to be located in Canada or US
5.	Customer has to be PayPal verified
6.	Customer can cancel their order within five minutes after the order is requested. After five minutes, the customer cannot cancel their order
7.	Customers must have a registered online account to make an online order. Customers that don't have an online account cannot place an online order

5 System Use Case Diagram (s)
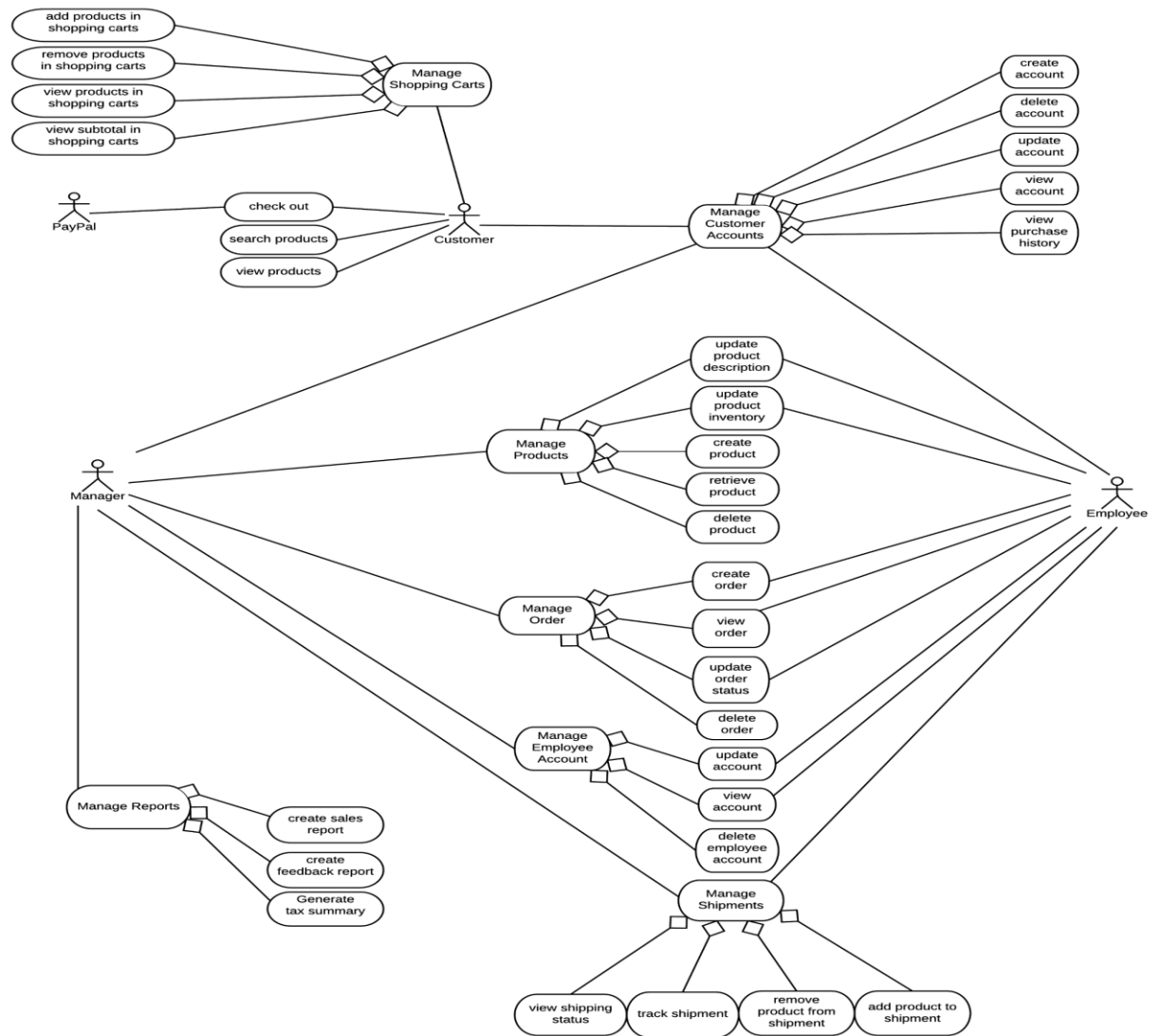
6   Use Case Specifications

6.1   Use Case Name: **Manage Shopping Cart – Add Product**

6.1.1   Author Name: **Badr Modoukh, Sajjad Patel, Nick Thomas, Timothy Ngai**

6.1.2   Primary Actor: **Customer**

6.1.3   Applicable Business Rules:
- Fashion Village CEO Nafisa: Wants products to be sold fast and efficiently. Wants registered customers to be satisfied.
- Registered Customer: Wants to be able to add, remove, and view products and subtotal of products.

6.1.4   Use Case Preconditions:
Customer must be registered.

6.1.5   Use Case Successful Post Conditions:
Product is successfully added to shopping cart. Product is successfully removed from shopping cart. Customer views all products in shopping cart (if any). Calculates subtotal of products in shopping cart.

6.1.6   Main Flow:
1. Customer authenticates himself.
2. Customer clicks on View Products.
3. System presents all available products.
4. Customer selects a product.
5. System retrieves product information (price, name, description).
6. Customer clicks on Add to Shopping Cart.
7. System adds product to shopping cart.
   Customer repeats steps 2 – 7 until indicates done.

6.1.7   Alternate Flows:
1. Invalid Password
   a. System displays error message.
   b. User enters password again.
2. More than 3 password attempts
   a. System opens password recovery.
   b. User enters email address.
   c. System emails customer password.
3. Customer adds wrong product in shopping cart
   a. Customer clicks on particular product.
   b. System retrieves product information (price, name, description).
   c. Customer clicks on Remove Product From Shopping Cart.
   d. System removes product from shopping cart and adjusts subtotal.
4. Customer wants to remove all products (e.g. Customer doesn't want to purchase anything)
   a. Customer clicks on Clear All.
   b. System removes all products in shopping cart and returns to main page.
5. Customer cancels at any point (e.g. Customer closes browser or loses internet connection)

    a.   System saves products added in shopping cart (if any).

6.2   Use Case Name: Delete Product

6.2.1   Author Name: Sajjad Patel, Badr Modoukh, Nick Thomas, Timothy Ngai

6.2.2   Primary Actor: Manager

6.2.3   Applicable Business Rules:
- Fashion Village CEO Nafisa: Wants to be able to get old products or products they don't sell off the store.

6.2.4   Use Case Preconditions:
Manager must be registered.

6.2.5   Use Case Successful Post Conditions:
Product is successfully deleted (marked inactive).

6.2.6   Main Flow:
1. Manager authenticates himself.
2. Manager clicks on View Products.
3. System retrieves all product listings.
4. Manager selects product to be deleted.
5. System displays preview of product to be deleted.
6. Manager clicks Confirm.
7. System flags product as inactive.

6.2.7   Alternate Flows:
1. Invalid Password
    a. System displays error message.
    b. User enters password again.
2. More than 3 password attempts
    a. System opens password recovery.
    b. User enters email address.
    c. System emails customer password.
3. Manager deletes the wrong product
    a. System backs up all files and displays all inactive products (products are marked inactive for 30 days and then permanently deleted).
    b. Manager clicks on product that was accidentally deleted (marked inactive).
    c. System reposts product.
4. Manager cancels at any point (e.g. Browser is closed or loses internet connection)
    a. System saves last process.

6.3   Use Case Name: Generate Reports – Monthly Sales Report

6.3.1   Author Name: Sajjad Patel, Badr Modoukh, Nick Thomas, Timothy Ngai

6.3.2   Primary Actor: Manager

6.3.3   Applicable Business Rules:
-   Fashion Village CEO Nafisa: Wants to look at the sales and tax summary of each month.

6.3.4   Use Case Preconditions:
Manager must be registered.

6.3.5   Use Case Successful Post Conditions:
-   Sales reports are successfully generated.
-   Tax summary report is successfully generated.

6.3.6   Main Success Scenario:

Actor Action (or Intention)	System Responsibility
1. Manager authenticates himself.	
2. Manager clicks on Report.	3. System generates options with different reports (report menu).
4. Manager clicks on Monthly Sales Report.	5. System generates month and year that is available.
6. Manager selects month and year.	7. System generates monthly sales report.

6.3.7   Alternate Flows:
1.   Invalid Password

1. User enters wrong password	
	2. System displays error message
3. User enters password again	

2.   More than 3 password attempts

1. User enters invalid password more than 3 times	
	2. System opens password recovery
3. User enters email address	
	4. System emails customer password

3.   Employee/Customer get into the report page

1. Employee/Customer try to get into the report page (e.g. changing URL)	
	2. System checks user authority
	3. System displays error message and returns to main page

4.   No data available to create report

1. Manager clicks on Monthly Sales Report	
	2. System displays error message (will not display options for date/month)

	3. System displays option to return to main page
4. Manager returns to main page	

5. Manager selected an invalid date/month on reports

1. Manager selects invalid date/month	
	2. System displays error message
	3. System displays valid date and provide options to manager
4. Manager selects valid date	

6. Cannot generate report

1. Manager selects month and year to generate reports	
	2. System displays error message
	3. System saves a log and returns to main page

7. Manager cancels at any point (e.g. Closes browser or loses internet connection)

1. Manager cancels at any point	
	2. System saves last process

6.4   Use Case Name: Checkout

6.4.1   Author Name: Sajjad Patel, Badr Modoukh, Nick Thomas, Timothy Ngai

6.4.2   Primary Actor: Customer

6.4.3   Applicable Business Rules:
- Fashion Village CEO Nafisa: Wants to receive payment from purchased products.
- Employee: Wants to get information of products being purchased.
- Store Manager: Wants to get information of products being purchased and money being paid.
- Registered Customer: Wants to be able to purchase products.

6.4.4   Use Case Preconditions:
Person that wants to checkout must be signed in and also must be a customer. Items must also be in the shopping cart.

6.4.5   Use Case Successful Post Conditions:
Customer successfully checks out.

6.4.6   Main Success Scenario:

Actor Action (or Intention)	System Responsibility
1. Customer clicks Checkout.	2. System displays description of all items in the shopping cart.
3. Customer clicks Confirm.	4. System contacts PayPal for payment.
5. Customer fills out information by PayPal and clicks Pay Now.	6. System receives confirmation of payment (PayPal sends payment to company account from customers account and gives a confirmation to the system).
	7. System sends order to employees and store manager to ship out.
	8. System thanks customer for purchase and emails customer invoice.
	9. System removes items from shopping cart and updates inventory.

6.4.7   Alternate Flows:
1. Customer enters invalid information for PayPal

1. Customer enters invalid information for PayPal (e.g. wrong name, wrong password)	
	2. System displays error message
3. Customer enters information again	

2. Customer cancels at any point (e.g. Customer closes browser or loses internet connection)

1. Customer cancels at any point	
	2. System saves last process

6.5   Use Case Name: Customer Feedback

6.5.1   Author Name: Sajjad Patel, Badr Modoukh, Nick Thomas, Timothy Ngai

6.5.2   Primary Actor: Customer

6.5.3   Applicable Business Rules:
- Fashion Village CEO Nafisa: Wants to be able to get customer feedback on company's service.
- Employee: Wants to get feedback so they can serve customers better.
- Store Manager: Wants to get feedback so they can improve employee's performance.
- Registered Customer: Wants to be able to give feedback so they can get better service.

6.5.4   Use Case Preconditions:
Person that wants to provide feedback must be signed in and also must be a customer.

6.5.5   Use Case Successful Post Conditions:
Customer successfully submits feedback.

6.5.6   Main Success Scenario:

Actor Action (or Intention)	System Responsibility
1. Customer clicks Feedback.	2. System displays feedback page.
3. Customer fills out information and submits.	4. System displays preview of customer feedback.
5. Customer clicks Confirm.	6. System sends feedback to administrator.
	7. System redirects to feedback page.

6.5.7   Alternate Flows:
1. Customer wants to make changes to feedback

1. Customer clicks on purchase that he/she put a feedback about	
	2. System retrieves feedback
3. Customer makes changes and submits revised version	

2. Customer cancels at any point (e.g. Customer closes browser or loses internet connection)

1. Customer cancels at any point	
	2. System saves last process

6.6 Use Case Name: View Shipping Status

6.6.1 Author Name: Sajjad Patel, Badr Modoukh, Nick Thomas, Timothy Ngai

6.6.2 Primary Actor: Employee

6.6.3 Applicable Business Rules:
- Fashion Village CEO Nafisa: Wants employees to be informed of a purchased product in a fast and efficient way.
- Employee: Wants to be informed that an item has be purchased and needs to be delivered.

6.6.4 Use Case Preconditions:
- An order must already have been placed and paid for.
- An open shipment must exist.
- Employee must be authenticated.

6.6.5 Use Case Successful Post Conditions:
Shipment has be viewed.

6.6.6 Main Success Scenario:

Actor Action (or Intention)	System Responsibility
1. Employee clicks on View Shipments.	2. System populates a list of all open shipments (an open shipment is automatically created upon completion of an order).
3. Employee clicks on a line item.	4. System displays a detailed view of the order and any shipments associated with it.

6.6.7 Alternate Flows:
1. Employee does not have access to the shipping module

1. Employee without shipping module access attempts access	
	2. System must notify the user that they do not have access and redirect them to the main page

2. Employee tries to view a shipment on an incomplete order

1. Employee attempts to view shipment of incomplete order	
	2. System displays an error message stating that the order is incomplete
	3. System redirects user to order page

6.7   Use Case Name: Add Product to Shipment and Create Shipment

6.7.1   Author Name: Sajjad Patel, Badr Modoukh, Nick Thomas, Timothy Ngai

6.7.2   Primary Actor: Employee

6.7.3   Applicable Business Rules:
-   Fashion Village CEO Nafisa: Wants shipping weight and price to be optimal. Wants open shipments to be shipped within 5 days of completed order. Wants shipments to be made only to Canadian or U.S addresses.
-   Employee: Wants to add product to shipment and create shipment.

6.7.4   Use Case Preconditions:
-   An order must already have been placed and paid for.
-   An open shipment must exist.
-   Employees must be authenticated.
-   Employees must have access to this module.

6.7.5   Use Case Successful Post Conditions:
-   Shipments have been created with appropriate products.
-   An order can be deemed as shipped or partially shipped.
-   Tracking numbers for shipments must be available.
-   Shipping invoice is available.

6.7.6   Main Success Scenario:

Actor Action (or Intention)	System Responsibility
1. Employee accesses shipment details screen.	2. System displays order information and associated shipments and inventory of requested products.
3. Employee can add products to the shipment.	4. System updates the amount of inventory of products and the amount of products in the shipment as the user adds them. The system must also display real time mass of the shipment.
5. Employee deems the shipment too large and creates an additional shipment.	6. System creates new shipment and links it to this order.
7. Employee adds more products to the second shipment.	8. Refer to step 4.
9. Employee ships the shipment.	10. System creates a shipping invoice as well as mailing company order form (at this point is when the change in inventory is updated).

6.7.7   Alternate Flows:
1. Employee does not have access to this page

1. Employee without shipping module access attempts access	
	2. System must notify the user that they do not have access and

	redirect them to the main page

2. Employee attempts to create a shipment on an order that has already been shipped

1. Employee attempts to create a shipment on a shipped order	
	2. System notifies the user that there are no more products to ship for this order
	3. System does not create a new shipment

3. Employee attempts to create a shipment without an associative order

1. Employee attempts to create a shipment without an associative order	
	2. System requests the user to link this shipment to an order. The system displays a list of open orders
3. Employee can select an open order	
	4. System will display the order details and any associative shipments

4. Employee attempts to add products that are not in stock

1. Employee adds more products than in inventory	
	2. System notifies the user that this product is out of stock. System updates the product information for that order to out of stock (if this has not already been done)

5. Multiple employees request a higher amount of inventory than what is available

1. Multiple employees request that same product and combined amounts to more than inventory	
	2. System will prioritize the order with the earliest order. System notifies other employees who have made the request
3. Employee is notified that inventory has run out. Employee can choose to complete a partial shipment (alternate flow 7)	

6. There is not enough inventory to complete an order

1. Not enough inventory to complete an order	
	2. System notifies the employee that there is not enough inventory
3. Employee can prepare a shipment as close to the order as possible and ship shipment	
	4. System updates the order to partially shipped (the business rule "orders must be shipped within 5 days" will be suspended for this order. This order will still get priority in alternate flow 6)

6.8   Use Case Name: Search Products

6.8.1   Author Name: Sajjad Patel, Badr Modoukh, Nick Thomas, Timothy Ngai

6.8.2   Primary Actor: Customer

6.8.3   Applicable Business Rules:
- Fashion Village CEO Nafisa: Wants registered customers to find all available products offered.
- Registered Customer: Wants to be able to find desired product.

6.8.4   Use Case Preconditions:
Customer must be registered.

6.8.5   Use Case Successful Post Conditions:
Registered customer is able to find a particular product they are looking for.

6.8.6   Main Success Scenario:

Actor Action (or Intention)	System Responsibility
1. Customer authenticates himself.	
2. Customer clicks on search bar.	
3. Customer enters particular product name.	4. System displays all available products related to search term.
5. Customer selects a product.	6. System retrieves product information (price, name, description).

6.8.7   Alternate Flows:
1. Invalid Password

1. User enters invalid password	
	2. System displays error message
3. User enters password again	

2. More than 3 password attempts

1. User enters invalid password more than 3 times	
	2. System opens password recovery
3. User enters email address	
	4. System emails customer password

3. Customer enters invalid characters into search bar

1. Customer enters invalid characters into search bar (e.g. numbers, punctuation marks)	
	2. System displays error message
	3. System displays options to return to main page
4. Customer returns to main page	

4. Customer cannot find particular product in search

1. Customer enters particular product name	
	2. System displays error message (e.g. product not find)
	3. System displays option to return to main page
4. Customer returns to main page	

7 Non-Functional requirements

	Requirement Type	Description
1.	Look and feel	Has to be simple to use and has to be approachable, attractive, and professional looking. Looks and acts like other online shopping sites so that it will be familiar.
2.	Usability and Humanity	The website shall be usable by customers with limited experience of using computers.
3.	Performance	Has to handle huge numbers of transactions, data, and concurrent users. Available 24/7
4.	Operational	Operates on all popular browsers.
5.	Security	Access: Only registered users can buy and view products. Privacy: All customer information must be protected and cannot be printed; customer information is not released to others. Integrity: Inventory and product information are always updated. Audit: All sales information are recorded and verified before acceptance. Payment methods validated before purchase.
6.	Cultural and Political	Site should be religious neutral and not offensive to any types of groups.
7.	Legal	Must adhere to all Canadian tax and business legislation.