

Group19 - Lab 5

Q1. Identify all the stakeholders and users of the systems.

Stakeholders:-

- Developers
- Customers
- Retailers
- Admin
- All for one - Nitish Yadav

Primary Actors:-

Stakeholder who initiates an interaction with the system to achieve a goal

- Customers
 - Registered Customers
 - New Customers
- Retailers
- Admin

Secondary Actors:-

who respond to the actions performed by primary actors

- Payment Gateway
- Login/Logout Firebase Authentication
- E-Mail/SMS integration
- Outfit customization app

Q2. List the various features exercised by each user of the system and describe all of them in detail (the user requirements and system requirements both)

- Login/Signup
This feature is used for login of the existing customers or to make a new account for the new customers.

- Search
 - Filter
 - Sort

This feature allows users to search their products using typing the name/brand and also for better searching experience users has the option of Filtering and sorting the certain items.

- View/Edit user profile

This feature allows the user to list the information and edit their information in case it is needed.

- View Product information
This is the feature that shows all the details of the product like price, photos of the product, specifications etc...
- Add to wishlist/cart
 - View/edit wishlist/cart
This feature allows the user to add a product in a cart or wishlist.
- Confirm order
The functionality which ensures the customers that they successfully ordered the product using Emails or sms.
- Payment
In order to pay the bill we have provided various payment options for the convenience of the users.
 - Payment option-Cash on delivery, Debit/Credit card, UPI
 - View Invoice-Allows the user to view the summary of the order
 - Enter promotional coupons/offers -On a special day when there is a discount or sale type of scheme we notify people with the Emails or sms so that users can not miss the opportunity.
- Product Review/Feedback
Users can write their personal opinion based on usage of the product and point out good and bad things about the products. This feature is beneficial to the website in order to improve the customer satisfaction plus, users can also see the review prior to buying the products.
- View past orders
In case a user needs to repeat the past order or want to tell someone about the product in future then this feature makes ease in this type of situation.
- Track orders
After successfully confirming the product user can track the location of the product while delivery is ongoing.
- Add/edit product
This feature is only available for the verified retailer who wants to edit the products related information or add a new product.
- View Statistics/inventory
Using this feature allows the retailers and admin to see the statistics about the product sold.

Q3. Specify all the non-functional requirements for this system

1. Security

- Payment - The payment will require a two-factor authentication where a user will confirm the payment via a notification on the app and notification/OTP on the confirmed mobile phone so no one else but the user can order with his/her permission

- User data - User data will be encrypted and stored in our servers and will be only accessible to the website owners given that the user is allowed to share his/her information.
- Login Logout - Two-factor Authentication, Authentication with Firebase using Google

2. Response time

The web application should have less response time. It mainly depends on the database used and the server types/server numbers to which it is assigned. The ability of the system to handle the users during peak hours/sale.

3. Data Integrity And Retention

Retention refers to managing the loss of data and at this stage, our system needs to have resources that prevent such circumstances.

4. Responsiveness

The web app should run on all platforms available and should fit accordingly for better user experience.

5. Availability

The website should be available for 24x7. Customer care available from 8:00 AM to 8:PM.

6. Information Reliability

Users can trust and rely on the information provided on the website, and the brands present on the website.

7. System Reliability

The ability of the system to perform well and minimize failures. The overall mean time should be high.

Q4. Specify user interfaces for each user of the system.

For Customers:

- 1) **Login and signup Page:** A login page will be there asking customers to enter email/ phone number and password to login. There will also be icons for login through google/other social media, followed by a login button. There will also be a continue without login option for customers. A contact us button will be present in the bottom right corner.
- 2) **Home:** On the home page the customer can see search bar, icons for profile and help and cart/wishlist in the navigation bar. In the main page the customer sees some featured products. In the bottom bar the customer can see options to navigate to categories, and settings.(All these are subject to change)

- 3) **Category:** When the user searches for a specific category or product, a page with similar search results are displayed asking the user to select a product which will redirect them to the product page. There will also be a sort/filter option.
- 4) **Product page:** On a product page, the user sees the product details, montages/pictures with special features, followed by size, availability, reviews and an option to add reviews.
- 5) **Profile page:** Profile page consists of user image, followed by editable text boxes of name, email, address and phone number. A logout button will be present at the bottom right.
- 6) **Cart/Wishlist:** This page will show products with their quantities, cost and availability in swipe-to-remove blobs.
- 7) **Settings:** Here there will be options to change account settings, view/track past orders and other basic requirements.

For retailers:

- 1) **Login and signup Page:** A login page will be there asking retailers to enter email/ phone number and password to login, followed by a login button. A contact us button will be present in the bottom right corner. For signup, details will be asked and there will be an apply button, since every retailer needs to be approved by the admin.
- 2) **Home:** Displays the products added by the retailer, the status and an option to update the product. The nav bar will contain settings, stats and reviews page.
- 3) **Add/update product:** Here certain information will be asked including photos, cost, availability etc.
- 4) **Settings:** This will contain basic options, followed by logout options.
- 5) **Statistics:** Here line charts of day to day analysis of the retailers products(all combined) will be displayed, followed by options to manipulate the graph by time period, category and product.
- 6) **Issues/feedback:** For the customers who have added reviews or feedback to the products, here the retailer can anonymously see the reviews and if it is an issue, solve them and reply to the comments.

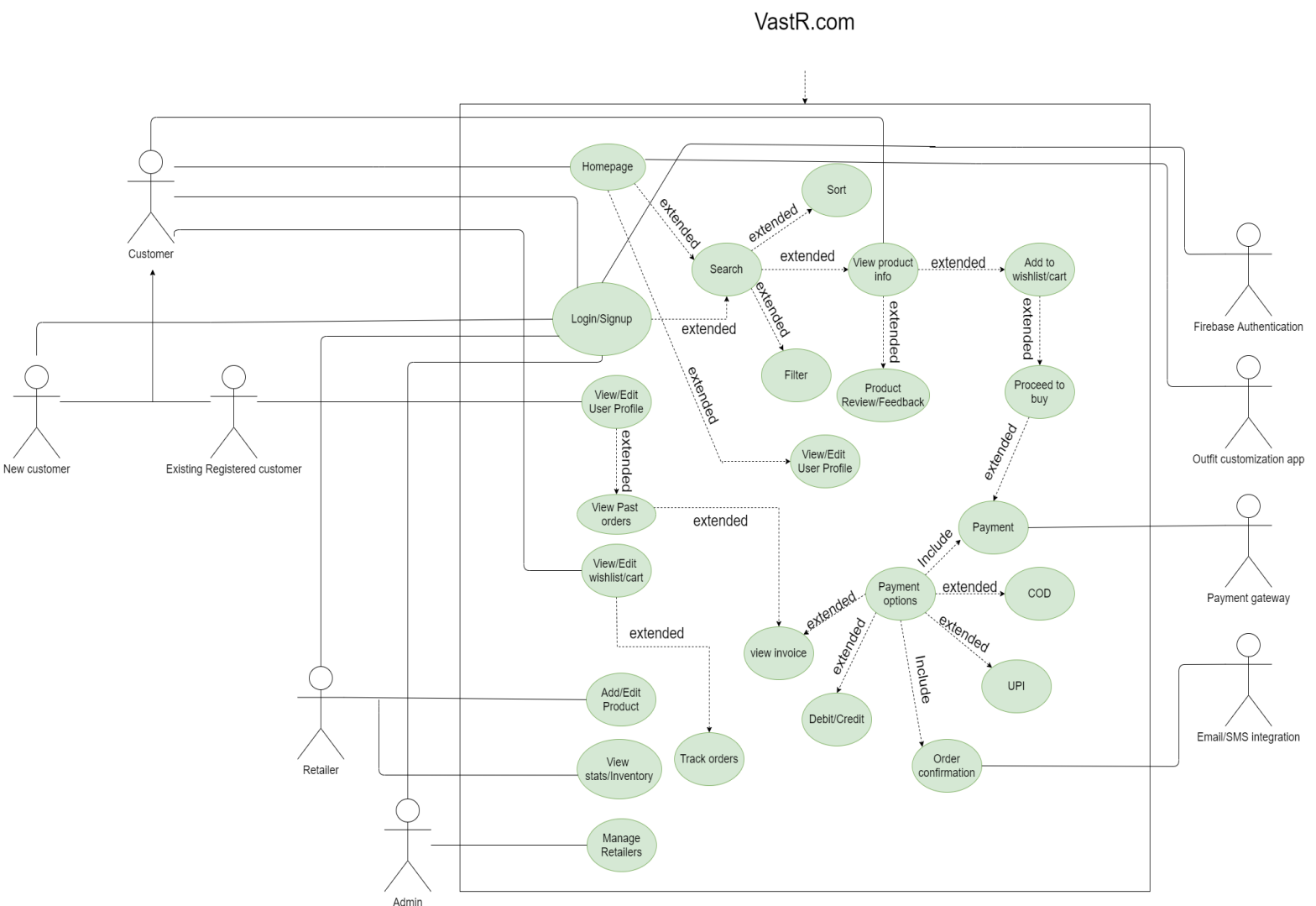
For admin:

- 1) **Login and signup Page:** A login page will be there asking retailers to enter email/ phone number and password to login, followed by a login button. A contact us button will be present in the bottom right corner.
- 2) **Home:** For admin, the home page will show the recent activity of the app.
- 3) **Manage retailers:** Here admin sees what all retailers customers have been complaining against/ have received poor feedback so that he can take action for that. He can also see new retailer requests and hence approve/deny their application.
- 4) **Statistics:** Here line charts of day to day analysis of the page in general will be displayed, followed by options to manipulate the graph by time period, category and product, retailer etc.
- 5) **Settings:** This will contain logout, and other basic options.

Q5. 'Open Issues'- issues that are identified but not taken care of.

1. For a single entity of customer and retailer there needs to be separate accounts associated with them. A retailer acting as a customer cannot use his account to look at all the products offered by all the retailers.
2. Comparing the prices of the same product on the other websites.
3. Order tracking of the product done by a third party delivery service so the status updates need to be provided by them via mails or sms to the users. We can not control that part.
4. If a user wants to cancel the product and wants to refund or replace the product after the confirmation then it's not possible in our implementation.
5. Login/logout, emails/sms service, payment gateway, custom products are implemented using third party services so any issue occurring on these affects our website. If any of the above updating then at that time our website shouldn't be available.

Q6. Develop use-case diagrams for your project.



Q7.

Requirements/Needs/Objectives

The primary objective of our project is to build a Software as a Service(SaaS) that removes the gap between the sellers and the buyers which exists in the physical shopping system . This enables for the buyers to shop from anywhere across the country and get the product delivered at their doorstep with ease and convenience. Along with that it enables the sellers to get countrywide reach and scope of customers overcoming all the boundaries. Apart from this our project is aimed to provide an extremely user friendly platform which is very easy to access helping the new customers to become acquainted with the website. Also our aim is to improve efforts on both the sellers and buyers side by including a online payment gateway which transfers funds directly from buyers wallet to sellers. Along with these our objective is also to provide a reliable system with minimum scope of failure and best user experience .

To provide these features with best user experience we will be using the latest trending technologies and techniques to provide maximum efficiency and very less chances of failure . To add to it third-party API's for several purposes will be required to provide additional functionalities and advanced features . Along with this several designing tools and technologies are required for the development of the software and along with a server host to perform all the backend processing and a supporting database to store all the data from the users is required.