

Software Requirements Specification Document (CS360)

StoreX



Group Number: 6

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1 Introduction

1.1 Document Purpose

The document covers software requirements of an e-commerce website, StoreX. This document will focus on the first release version of the product and describes requirements of the whole website, which includes the Admin and the user side.

1.2 Product Scope

The function of StoreX is to provide a wide array of items to be bought by a cash on delivery method or for viewing different items. The users browse through the items and if they want to purchase something, they will have to register an account to do so and carry on with the purchase. This will help the store manager increase his sales by connecting to a larger customer base. This would especially remain useful for people living at a distance. This project will streamline the process of buying items and will have the added convenience of having them delivered straight at your door. It would be useful for any local store/outlet/market etc. who do not have an online service yet or their online service is not up to the mark. As compared to the status quo, we will be using the latest technologies which will make our application scalable and will make it faster and efficient. This website can be accessed through any computer or mobile phone or tablet having an active internet connection. Other than that, this website can run on any modern web browser applications such as Google Chrome, Mozilla Firefox etc.

1.3 Intended Audience and Document Overview

This SRS document is intended for the teaching assistants and the instructor. The SRS covers our product, StoreX. It contains an overall description of the product, its functionalities, requirements, assumptions made during development and non-functional requirements. This document will help us plan the design of the final product while also making sure the expectations of the users are met. The SRS is organised into three main parts, overall description, functional requirements and non-functional requirements, in that order. Overall description covers the uses of the website. Functional requirements cover the tasks the website should be able to perform for its users. Non-functional requirements other than the functions it should be able to perform e.g. performance requirements, software quality, security etc.

1.4 Definitions, Acronyms and Abbreviations

Admin	The person who has all the control of website, who is in charge of adding items and controlling their prices.
Analytics	Provide data regarding products. For example, how many products are in stock, which are the most popular items etc.
Concurrent users	Users that are using the website at the same time
CSRF	Cross-Site Request Forgery
DoS	Denial of service attack

Inventory	The storage of the items to sold
Item	An individual article or unit with an ID, title, price
Response time	Time taken for the user to get their answer
User	Customers who use the website.
XSS	Cross-site scripting

1.5 References and Acknowledgments

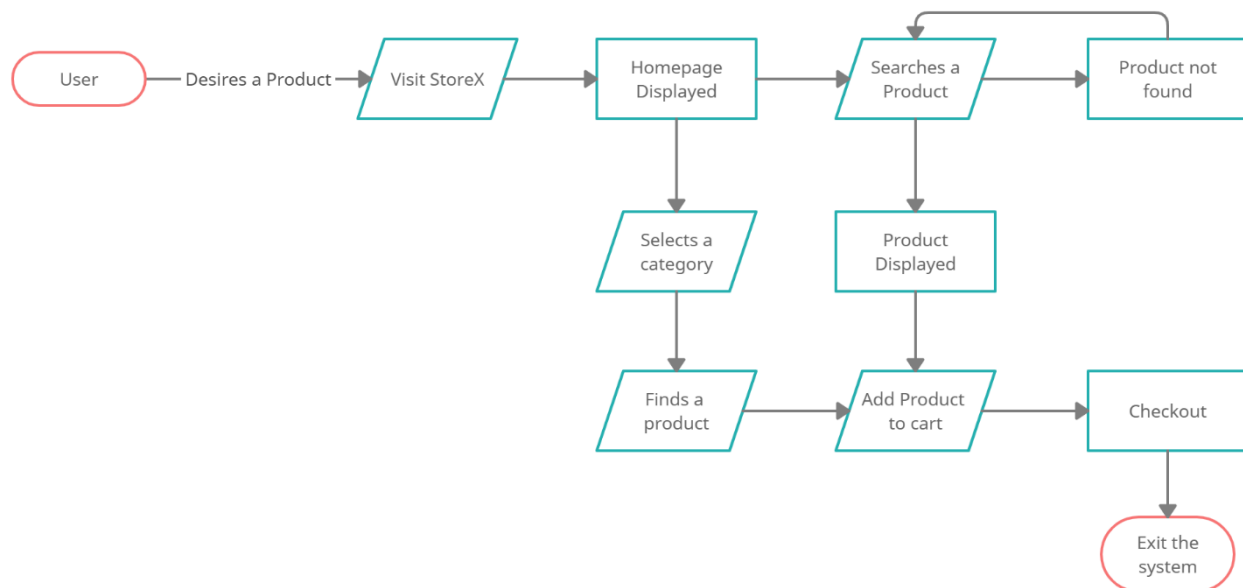
We used popular e-commerce websites such as <https://www.aliexpress.com/> , <https://www.amazon.com/> and <https://www.daraz.pk/> as references for our project. This helped us see the different features that need to be implemented and how a user-friendly interface should look like.

2 Overall Description

2.1 Product Perspective

This product is used by users to purchase their required goods online. The major components of this system are an admin, a user and an application that is used by the user to purchase from StoreX online while being in the comfort of their homes. Users visit the website, check out different categories of products, select their required category, add their required product from the category to the cart, place their order and get it delivered at their place. This is a product being made on demand for StoreX as they aim to increase their online presence and profits by allowing the customers to buy from their houses. This product is being made from scratch and has no prior version that was released before this one.

2.1.1 Interaction with the Environment



2.2 Product Functionality

- The product is an ecommerce website which allows users to buy different products online.
- The users can search through a range of consumer goods.
- The user can place an order and choose payment and delivery options.
- The user can view discount offers and latest product deals.
- The user can subscribe to the website newsletter which advertises new products.
- The product has two interfaces, one for customers and the other for administrator.
- The admin can view orders placed by customers.

- The admin can add or remove items from the website.

2.3 Users and Characteristics

There are two types of user that we anticipate will use this product: User and Admin. The User will be the ones who will browse our catalogue of products and select and purchase from them, as per their needs. Their frequency of use will be moderately high, as they will have to purchase groceries and other items on a regular basis. Their technical expertise is assumed to be sufficient to be able to navigate the website properly. They will not have administrative privileges; hence, they cannot use administrative functionalities, and can only use user functionalities. Prior experience of using online shopping websites is assumed too but is not a strict requirement.

The Admin will have access to administrative functionalities and can update the website/product catalogue accordingly. Their frequency of use is moderate, as they will need to check and update stock inventory time to time, along with handling email notifications and other tasks. Admin's technical expertise is assumed to be moderate to high, so that they can effectively manage the website and inventory etc. and can also utilise analytics and other tools to improve their product business. Admin will have access to administrative privileges so that along with managing stock, they can send out emails to users as well as deal with their complaints and suggestions. Prior experience of managing an online shopping website is strongly preferable.

The most important user are the Users who will be browsing and buying products from the online store. They will be the ones generating revenue for the business, and so their needs will be given a higher priority than the Admin's. There will be increased focus on the front end for Users too, as that has an important impact on their user experience.

2.4 Assumptions and Dependencies

One assumption is that our client is a hypothetical one, and so we will hypothetically draw assumed requirements from the client according to the product that we are building. These requirements may not all reflect real-world requirements, and so if they are incorrect, they could negatively affect our system design. There might arise a need to reuse small software components (e.g. login/signup) for which libraries already exist, and so dependencies on those components exist.

The deadline of 25th April, 2021 is a significant time constraint for us, as we will have to complete the whole project by then, and we have designed our system according to what we think can be achieved by then. There is a monetary constraint as well, due to having an estimated budget of Rs 91,000, and so the assumption is that we will be able to finish our project within the budget. If this assumption is incorrect, it can lead to changing our design to make it simpler, or to extending past the deadline, which is not feasible. Moreover, a potential performance constraint exists as well due to utilizing unpaid hosting services, which will only provide a limited number of resources for our hosted project. It is assumed that these will be sufficient for our project, but if they prove not to be, we may have to restrict the number of users accessing the website simultaneously.

Moreover, we have assumed that we will be able to learn ReactJS and Firebase in time for the development phase, as we intend to develop the front and back end in these frameworks, respectively.

3 Specific Requirements

3.1 Functional Requirements

3.1.1 Category: Sign up and Login

RQ 1 - Admin Login

- **Description**
The system will allow the admin to log into the StoreX for performing various tasks.
- **Input**
Admin login details i.e. email ID and password.
- **Processing**
Authentication, the email ID and password entered are compared with the ones stored in the database. If they are the same, admin is logged in, otherwise unable to login.
- **Output**
The admin is logged in and a message indicating that the admin has logged in is displayed.

RQ 2 – Make new Admin(s)

- **Description**
The logged in admin will be able to assign admin privileges to other employees for better management of the system.
- **Input**
The email ID of the employee.
- **Processing**
An email is sent to the employee prompting him/her to provide his/her login details so that the current admin can grant admin access.
- **Output**
Message telling the admin that xyz employee has been granted admin privileges.

RQ 3 - User Login

- **Description**
The system will allow the user to log into the StoreX for purchasing any product required.
- **Input**
User login details i.e. email ID and password.

- **Processing**
Authentication, the email ID and password entered are compared with the ones stored in the database. If they are the same, user is logged in, otherwise unable to login.
- **Output**
If the username and password entered by the user match the one stored in the database, the user is logged in and taken to the homepage, otherwise a message indicating incorrect username or password is displayed.

RQ 4 - User Signup

- **Description**
The system will let the user create an account for themselves within the system which they can then use to purchase items.
- **Input**
Email, password, phone number, province, city, address.
- **Processing**
The system will take the input entered by the user and create an account against that input. All the input details entered by the user while creating that account will be stored for that user in the database.
- **Output**
An account will be created for the user and the user will be directed towards the respective page which they had been browsing before creating their account.

3.1.2 Category: Inventory and Orders Management

RQ 1 – Add Products

- **Description**
The logged in admin will be able to add new products to the store.
- **Input**
A form asking for details of the particular product which the admin wishes to add.
- **Processing**
Once the form is filled and submitted, the appropriate table will be updated depending upon the category of the product.
- **Output**
Message telling the admin that the product(s) have been successfully added to the database.

RQ 2 – Remove Products

- **Description**
The logged in admin will be able to remove products from the store (for example, if a product has been discontinued, the admin can remove it).
- **Input**
The admin is asked to enter the name of the product which is to be removed.
- **Processing**
The product is searched and once a match is found, the admin is asked whether he/she really needs to remove the product or not. The database is updated once approved.
- **Output**
Message telling the admin that the product(s) have been successfully removed from the database.

RQ 3 – Update Product Prices

- **Description**
The logged in admin will be able to update the prices of existing products when there is a sale or special promotion.
- **Input**
The admin is asked to enter the details such as name, category of the product. He/she then enters the new price of the product.
- **Processing**
The product is searched in the database and once a match is found, the price of said product is updated to the new price provided by the admin.
- **Output**
Message telling the admin that the price of the product has been updated successfully.

RQ 4 - View the Inventory

- **Description**
The logged in admin will be able to view the inventory of the store, for example the current number of products.
- **Input**
The admin presses the “view inventory” button on the admin page and selects the category of products which he/she wishes to view.
- **Processing**
The details of the products (name, category, price, stock) are selected from the database and displayed.

- **Output**
The inventory is displayed on the page in the form of a table.

RQ 5 – Stock update

- **Description**
The admin will be able to order more items for the store, which will be delivered by a supplier.
- **Input**
Admin will be shown a list of products. The admin will “click the order” more button and select the number of items to get. Admin can select a list of items and their quantity to order and click “confirm”.
- **Processing**
A list will be made and then an email will be sent to the admin’s supplier of the list of items and their respective quantity.
- **Output**
The message “order has been sent” will be displayed to the admin.

RQ 6 – Send Promotion email

- **Description**
The admin will have the ability to send the customers an email about promotions or deals.
- **Input**
The Admin will upload the prepared promotion flyer as an image.
- **Processing**
Website will then send an email with the label of promotions and then send it to registered customers.
- **Output**
The admin will be notified the emails were sent.

RQ 7 – View and dispatch orders

- **Description**
The admin will have the ability to see the pending orders from customers, and can mark them as dispatched after delivering them.
- **Input**
The Admin will click on pending orders to mark them as dispatched orders.
- **Processing**
The website will change the status of the orders which were clicked on from pending to dispatched.

- **Output**
The clicked-on orders will now be visible as dispatched orders.

3.1.3 Category: Shopping Cart and Checkout system

RQ 1 – Add Items

- **Description**
The users will be able to put the desired items into the shopping cart.
- **Input**
The user clicks the shopping cart icon besides each product.
- **Processing**
Upon clicking the button, the item will be added to the cart.
- **Output**
The total number of items in the cart will be incremented and the total amount will be changed.

RQ 2 – Remove Items

- **Description**
The users will be able to remove items from the cart in case they don't need it anymore.
- **Input**
The user clicks the remove item button near each item on the shopping cart page.
- **Processing**
Upon clicking the button, the item will be removed to the cart.
- **Output**
The total number of items in the cart will be decremented and the total amount will be adjusted.

RQ 3 – Show Cart

- **Description**
The users will be able to view the cart containing the items which they wish to buy.
- **Input**
The user clicks view cart button.
- **Processing**
Upon clicking the button, the user will be able to see the cart.
- **Output**
The total number of items, along with item details, in the cart will be displayed.

RQ 4 – Checkout

- **Description**
The users will be allowed to purchase the items in the cart.
- **Input**
The user clicks the “Proceed to Checkout” button.
- **Processing**
Upon clicking the button, the user will be redirected to a form where he/she will key in and confirm details (address etc).
- **Output**
A receipt containing all the items purchased along with the total price will be displayed.

RQ 5 – Order history

- **Description**
The users will be able to view the history and details of their past orders.
- **Input**
The user clicks the ‘View Order History’ button.
- **Processing**
Upon clicking the button, the user will be taken to a page where their order history is shown.
- **Output**
The user can now see details of their past orders like number and type of products bought, total bills of previous orders etc.

3.1.4 Category: Search products**RQ 1 – Search with Search Bar**

- **Description**
The users can search a specific product using the search bar.
- **Input**
The user enters product details in the search bar.
- **Processing**
The system fetches the product from database.
- **Output**
if found the product is displayed else “item not found” message is displayed.

RQ 2 – Find Product in a particular category

- **Description**
The users can look for products in a particular category and try finding their required product there.
- **Input**
The user can apply a category filter within the search bar. A drop-down menu will appear when they would want to apply a particular category filter. Once applied, users can search for products within that category using the search bar.
- **Processing**
The system fetches the products within the selected category from database.
- **Output**
if found the product is displayed else “item not found” message is displayed.

3.1.5 Category: Complains/Suggestions**RQ 1 – Contact Us**

- **Description**
The users will be able to contact the administrator to submit any complain or propose suggestions.
- **Input**
The users will click on the contact us button. Then they will be required to fill a form with their contact info and complain.
- **Processing**
The data will be sent to the server and stored in the database so that the administrator can see it.
- **Output**
A success message will be displayed.

RQ 2 – Deal with Complaints/Suggestions

- **Description**
The admin will be able to see the complaints received and be able to reply to them if needed.
- **Input**
Admin will click the “show Complaints/Suggestions” button on the Admin homepage.
- **Processing**
The website will then load the complaints/suggestions that were received from the customers.
- **Output**

The complaints/suggestions will be then displayed by date in descending order with option to send an email to the customer as a response.

3.1.6 Category: Main Interface

RQ 1 – Homepage

- **Description**
This is the main page of the system. The user will be directed towards this page when they first visit our application. This page lists all the categories of products being offered by StoreX. It is also used to show discounts on the best products as well as top selling items from different categories.
- **Input**
The user enters the URL for the website.
- **Processing**
The user is directed towards the homepage.
- **Output**
The homepage is displayed to the user.

RQ 2 – Top Selling Items

- **Description**
Users will be displayed top selling items in a slideshow.
- **Input**
Users will go to the homepage and browse items.
- **Processing**
The backend system will query the database to analyse sales data. It will then find the top selling items based on this statistic. The resultant items will then be sent to the website.
- **Output**
Images of top selling products will be displayed as a slideshow on the homepage.

RQ 3 – Show Sales and Discounts

- **Description**
An option for showing sales is displayed within the homepage. When the user clicks on that option, they are directed to another webpage that displays all the sales and discounts currently applicable.
- **Input**
The user clicks on the sales and discount option shown on the homepage.
- **Processing**
The system processes the user's click to show them the right output.

- **Output**
The user is directed to the sales and discounts page.

RQ 4 – Wishlist

- **Description**
The user can add items/products to a wish-list.
- **Input**
The user can select products and click on add to wish-list.
- **Processing**
The system adds the selected items to user's wish-list.
- **Output**
The wish-list has one more item in it which was added by the user, along with an incremented count value of the number of products in it.

3.1.7 Category: Email Notifications

RQ 1 – On Checkout

- **Description**
When a user clicks on checkout to complete the transaction, a confirmation email is sent to the user sharing the details of their order and confirming that their order has been placed.
- **Input**
The user clicks on the checkout button.
- **Processing**
The system processes the checkout and sends an automated email to the user with details of the purchase.
- **Output**
The user receives the confirmation email for products ordered.

RQ 2 – Newsletter Subscription

- **Description**
The users can subscribe to a weekly newsletter which displays information about latest products and discounts.
- **Input**
The user clicks the subscribe button and then enters their email address.
- **Processing**
The email address is added to the list of newsletter recipients in the database.

- **Output**
A success message is displayed, newsletter will be sent to the email address.

3.1.8 Category: Analytics for Admin

RQ 1 – Sales Analytics

- **Description**
This provides the admin with information of which product was sold and it's quantity, over a period of time.
- **Input**
The admin clicks the “show sales analytics” button.
- **Processing**
The data stored, which was recorded when a customer bought a product, is loaded and a table is generated.
- **Output**
A table is made which shows the item name and the number of times it was bought during the month. The table is displayed in descending order by number of items sold.

RQ 2 – Website Analytics

- **Description**
This provides the admin with information regarding the web traffic.
- **Input**
The admin will click the “show website analytics” button.
- **Processing**
Website saves the amount of clicks it visitors it received on a particular day for a month. The data is loaded as a table.
- **Output**
Table is then displayed in ascending order by date for a month. With number of visitors for each day.

3.2 External Interface Requirements

3.2.1 User Interfaces

Our Web application is going to be implemented as a graphical user interface. The interface on the main home page will be very easy to use and user friendly such that all the categories of products will be displayed as a list with an icon next to the category of each product for the user to be able to better understand the types of items that they will be able to find in that particular category. There

will also be different buttons throughout the homepage as well as other pages that will lead the user from one page to another when clicked. These buttons will be clearly visible so that the user can click them when required and reach their required page. The remaining left over items will also be displayed in front of each product's details.

3.2.2 Hardware Interfaces

Our web application will be able to run on all devices provided that they have a web browser be it a desktop, a laptop, a smartphone, a tablet and so on. Our system is not constrained by the operating system of the device on which it is running. However, the admin component of the system will not be responsive and therefore will only be supported on a desktop computer. The device must have some sort of clicking and typing interface as most of the functionality revolve around these two functions. Hence it will not be able to run on those ancient flip and open mobile phones. We will be using industry standard tools for communicating with the hardware.

3.2.3 Software Interfaces

The product is a website. It will run on any latest browser including Google Chrome, FireFox, Microsoft edge etc. The frontend of the website will be powered by React.js. The backend services will use google firebase. The data of the website will be stored in firebase database. The images and icons will be kept in Firestore storage. The frontend and backend will communicate using JSON data send through http. The data will include product items information as well as any real-time data generated while user is using the website.

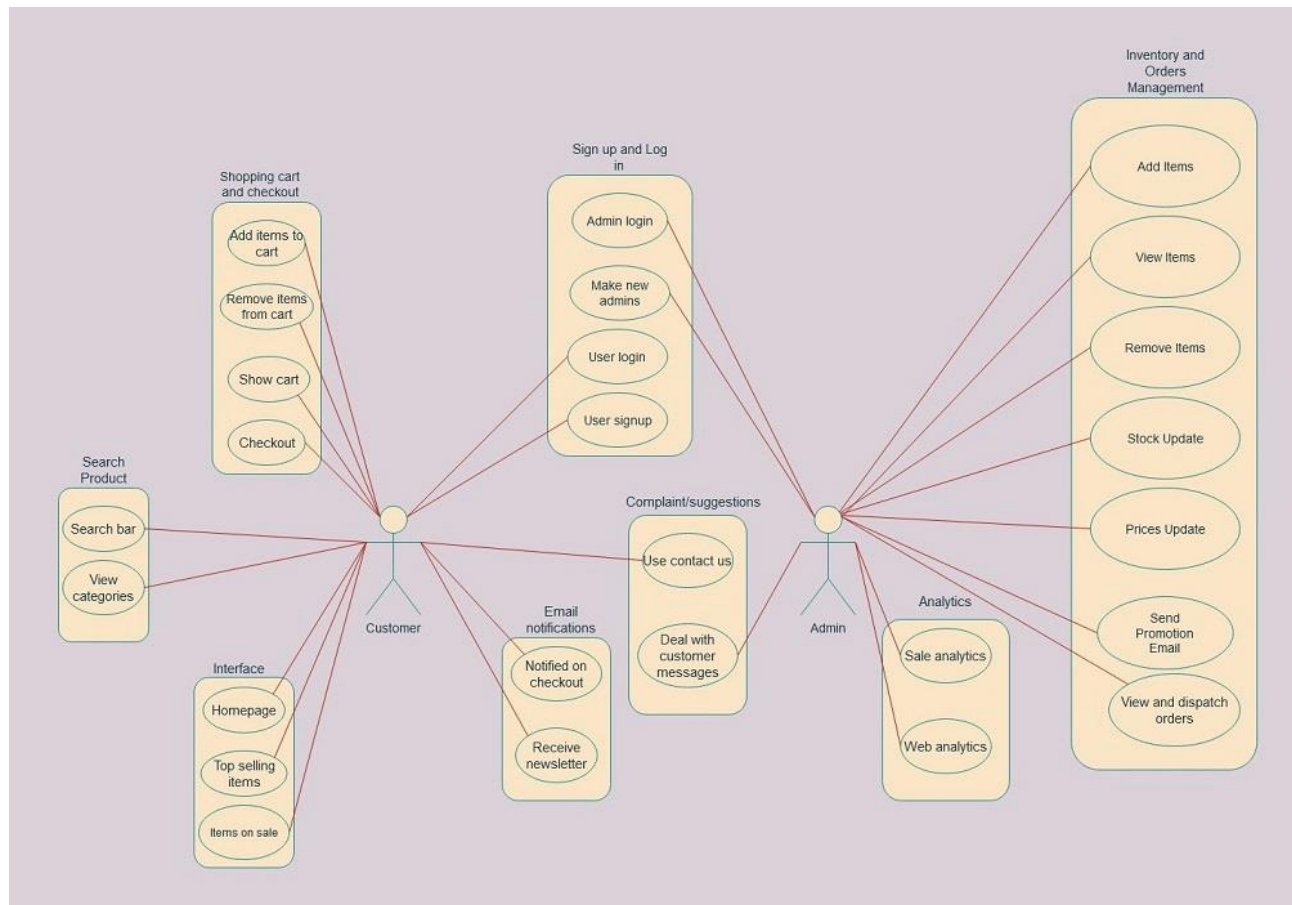
3.3 Use Case View

3.3.1 Use Case Table

1. Use Case table

Primary Actor	Associated Use cases
User	<ol style="list-style-type: none">1. Login/Signup2. Product Search3. Shopping cart4. Add items to cart5. Remove items from cart6. View cart7. Checkout8. Homepage9. Browse by categories10. Order history11. Display top selling items12. Recommendations13. Email receipt14. Show remaining items in carts15. Place items in wish-list16. Subscribe to newsletter17. Contact us.18. Display items in slideshow19. Notify customer if wish-list re-stocks
Admin	<ol style="list-style-type: none">20. Login21. Provide admin privileges to someone22. Add a new product23. Delete a product24. Add discount to products25. Display sales data26. Website traffic and user engagement analytics27. Stock update28. Complaint management29. Send promotional email30. View inventory31. View and dispatch orders

3.3.2 Use Case Diagram



3.3.3 Use Case Description

Use Case 1:

Use Case: Homepage	
ID	UC8
Actors	User
Pre-Conditions	1) The user wants to open the website homepage for StoreX, and so needs a computer and browser. 2) The user must have a working internet connection.

Flow of Events	1) The user can enter the base URL of StoreX in their browser. 2. The browser will then open the homepage of StoreX.
Post-Conditions	1) The user can now browse and navigate through the homepage of StoreX.

Use Case 2:

Use Case: Product search	
ID	UC2
Actors	User
Pre-Conditions	1) The user should have a system that can be connected to the internet 2) The user should be connected to the internet 3) The user should be present on the homepage of StoreX
Flow of Events	1) The user clicks on the search bar 2) If they would want to search for only one particular category of products, they will use the drop-down menu to select a category. Otherwise, they will not do anything at this step. 3) The user will then type the name of the product (e.g. Coffee) and click on the search button.
Post-Conditions	1) List of all the products that match the user's query will be fetched from the database and displayed in front of the user

Use Case 3:

Use Case: Add items to cart	
ID	UC4
Actors	User
Pre-Conditions	1) User should be browsing through the various items present on StoreX.
Flow of Events	1) The user would want to add an item to the cart. 2) The user will press the “Add to cart” button
Post-Conditions	1) Items shall be added to the cart with an alert showing success.

Use Case 4:

Use Case: Checkout	
ID	UC7
Actors	User
Pre-Conditions	1) The user must have added one or more items in the cart.
Flow of Events	1) The user clicks on the “Proceed to Checkout” button. 2) The user will be redirected to a form where they will fill in and confirm their details/address etc. 3) The user will finally click on the ‘Place Order’ button.
Post-Conditions	1) The user’s order will be placed and will be now visible to the admin. 2) A receipt containing all the items purchased along with the total price will be displayed as well as emailed to the user.

Use Case 5:

Use Case: Add new products	
ID	UC22
Actors	Admin
Pre-Conditions	1) The admin must be logged into the website.
Flow of Events	1) The admin clicks on add new product button. 2) The admin fills in a form with the details of the new product. 3) The form will be submitted, which will update the relevant tables with details and stock of the new product.
Post-Conditions	1) A message will appear telling the admin that the new product has been successfully added to the database.

4 Other Non-functional Requirements

4.1 Performance Requirements

- The response time for the website shall not exceed 0.5s.
- The website should be able to handle 100,000 concurrent users at a time.
- The system must implement standard web security practices to prevent any chance of attack.
- The downtime for the website shall not exceed 30 minutes on any day in-order to prevent significant loss in revenue for the owner.
- Website maintenance should be easy and cost-effective such that the maintenance cost shall not exceed 10% of the total cost each year.
- The UI should be user friendly such that it should not take more than 5 minutes for any new user to understand the interface.

4.2 Safety and Security Requirements

4.2.1 Safety Requirements

- The website should safely store user's data ensuring that there is no data breach. It should prevent attackers from being able to get access to user.
- It should use HTTPS instead of HTTP because data transfer over HTTP is not encrypted. Data is transferred between systems as plain text if HTTP is used as a protocol for communication. HTTPS on the other hand ensures end-to-end encryption of data when transferring it between systems. Hence many users don't even use e-commerce platforms that use HTTP for end to end communication.
- There should be an application gateway between the system and the rest of the network so that all the network traffic is received at this gateway and the gateway only allows authorized packets to reach the system.

4.2.2 Security Requirements

- The website should be secure from DoS attacks
- Alongside using cookies, the website should have a unique token for every round trip for every user to prevent CSRF attacks

- The Website should follow the Same Origin Policy.
- Ensure Validation of cookies and query strings against a rigorous specification of what should and should not be allowed. This will ensure prevention of XSS attacks.
- Query structure should be specified independent of the user to prevent SQL injection attacks
- Frame-busting must be implemented to ensure that frames can not be included in other websites.

4.3 Software Quality Attributes

4.3.1 Usability

The web-based application should be user-friendly i.e. should be easy to learn, navigation should be simple. For the store to be user friendly, a simple, clean, responsive, intuitive and reliable design will be required. Other than that, a guide will be prepared to aid new users, which will be available on the website.

4.3.2 Reliability

The system shall be used by multiple users simultaneously. It is desired that the website does not crash when multiple users are logged in or are browsing simultaneously. The data should be stored in a secure hard disk and data should be backed up regularly to prevent any loss of data. All in all, the users shall be able to access the website 98% of the time without any failures.

4.3.3 Performance

Our system will have a very fast response time i.e. the site should load in 3 seconds when the number of simultaneous users are > 5000. Each request should be processed within 10 seconds.

4.3.4 Portability

Portability is established in terms of operating systems, hardware devices, browsers, software systems, and their versions. For now, a cross-platform, cross-browsing, and mobile-responsive solution is a common standard for web applications. Our web based system will be accessible on all latest devices i.e. mobile phones, laptops, tablets.

4.3.5 Availability

It is desired that any user shall be able to buy a product whether it's 6AM in the morning or whether its 12PM at midnight as it is designed to be a 24 hours store. In the case of unplanned system downtime, all features will be available again after maximum one working day.

4.3.6 Maintainability

Each page of our store will contain a button which would redirect the user to form where they could report any bugs or errors. These bugs and errors will be discussed by the support team and they would aim to fix these errors as soon as possible (support team might alert the users that the particular feature would be down for maintenance).

Appendix A – Top 10 User Stories

1. As an admin, I can add and remove items from the website products page so that the user can see the most updated list of inventory available with us.
2. As an admin, I can see the orders placed by the customer including the product details, delivery location and customer contact information. This helps me ship the right products to the right customers at the right location.
3. As an admin, the sale analytics would help me to view all the transactions to get a better understanding of my profits, losses and overall revenue.
4. As a user, I want to be able to view and buy products from the comfort of my home so that I won't have to stand in long queues and my time is saved.
5. Seeing the discounts as a user helped me make a more informed decision about which products to buy as per my requirements.
6. As a user, being able to see my order history helps me re-order items which I most frequently buy, very quickly, which saves my time while ordering.
7. As an admin, I want to receive complaints and suggestions from my customers. This will allow me to improve my business.
8. As a user, the ability to see most popular items sold is very useful to me, as that means they are of higher quality.
9. As a user, I want to be able to add certain items to a wish-list, so that I can shortlist them for purchasing later as well as get updates if out of stock items come back in stock.
10. As a user, I want to get the receipts for my orders emailed to me so that I can keep track of them and know that my order is confirmed, along with receiving the total bill.

Appendix B – Architectural Spike (One Story)

<Write one story which fall under the “Architectural Spike”>

Appendix C - Group Log

- **03 / 02 / 2021**

All group members were present. We mainly discussed the SRS document, and got our confusions regarding the Appendix sections and the traceability aspect clarified by the TA.

We were advised to do research and go through the websites of other online stores and decide our features/requirements from those websites, rather than attributing all requirements to a hypothetical client. Keeping our SRS document organised and well-formatted was also a point of discussion.

Furthermore, the importance of organising our project work, division of tasks etc. on Trello from the get-go was emphasised on, along with communicating and coordinating on the Slack group channel too.

- **08 / 02 / 2021**

We had a Short group meeting for 30 minutes. We discussed the different components of the SRS document and how to approach them after which we divided the tasks equally by mutually discussing everything. We have decided to begin our individual assigned parts of the SRS shortly and have another meeting soon upon the completion of these individual tasks.

- **10/ 02 /2021**

All group members were present. We mainly discussed the functional and non-functional requirements, and the TA reviewed our use cases and mentioned the importance of prioritising them during implementation. Confusions were cleared regarding what exactly to write in the software quality attributes part.

- **15/ 02 / 2021**

We held a 1 hour meeting to finalise the SRS. We reviewed all our work, suggested improvements to each other and did formatting to ensure our document remained consistent throughout. We also filled the Appendix D together and once the document was completed, we ended the meeting.

Appendix D – Contribution Statement

Name	Contributions in this phase	Approx. Number of hours	Remarks
Mati Ur Rehman	Completed section 3.2.3, 4.1, 2.2, 3.3.1 along with five functional requirements and two user stories	12	Along with completing my assigned work I also researched on ways in which we can distinguish our product from others of its kind in the market.
Muhammad Hamza Shahzad	Completed section 3.2.1, 3.2.2, 2.1, 4.2.1, 4.2.2 along with five functional requirements and two user stories	12	I helped in managing the team and organising meetings
Muhammad Hamza Sajjad	Completed Section 2.3, 2.4, 3.3.3 (Top 5 use case descriptions), three functional requirements, one use case, two user stories	12	I collaborated with teammates in meetings, recorded minutes, and helped with the formatting and proofreading of this document.
Muhammad Raahem Asghar	Completed section 3.3.2, 4.3, along with six functional requirements and two user stories	12	I helped in formatting and proofreading the document.
Muhammad Haris	Completed section 1, 5 functional use requirements, 2 user stories and use case diagram	12	The team divided the work equally among members and I was assigned these sections to complete