Software Requirements Specification

for

Vaistreet

Version 1.0 approved

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Feasibility Analysis -

The web app (Vaistreet) on which we are working is currently the lead project at Safcodes Pvt. Ltd which is a legitimate startup. Hence it was not relevant if we did the feasibility analysis. Our product is a web app which focuses on consumer issues who use two different websites for social media and e-commerce and have to switch between them thoroughly. Vaistreet bridges this gap by bringing Social media and E-commerce together. It seems to be a very promising product because the interface provided to the users is very interactive. The product looks very feasible and hence it shows great opportunity to work upon and develop.

Moreover the demand and wish for such type of websites have grown in the past years with users wanting these two platforms to be integrated and be offered at an interface which is both user friendly, attractive and has potential. This web app seems to fulfill these conditions and hence looks to be having a high potential to remove all basic similar websites as it has some extensive features which has never been implemented before.

1. Introduction -

Vaistreet is awebsite which brings a single platform of web application which integrates social media and e-commerce. This app will feature on how a user can view product catalogue and buy them through a payment portal and on the same page have the options of browsing the newsfeed and sharing their recent activities and reviews on the newsfeed and also having a one-to-one chat with the registered users and communicate with each other.

1.1 Purpose -

This is a web application which is a combination of an e-commerce as well as social media. Anyone who is socially active and likes doing shopping on web is a perfect customer for this web app. It solves the issue of revisiting different websites for doing shopping and being connected to a social media when you can do it at the same place. Overall the scope for this project is quite vast and it looks very promising.

1.2 Document Conventions -

In this SRS document we are using Calibri font and will be using appropriate bullets for describing or pointing out different features of the product. Font size is 16 for headings and sub headings and 14 throughout the document. The headings and sub-headings are bold and the contents are italics. Bullets and sub-bullets have been used to clearly show the listing of items lying under a heading.

1.3 Intended Audience and Reading Suggestion –

This SRS documentation can be a reference of reading by anyone who wishes to develop a new product which has a bright future in the market. It can be read by entrepreneurs, investors, product managers and users for gaining deep knowledge about what the product exactly does and knowing and recognizing its scope in the real market. Similarly developers can also read it as a reference and understand the frameworks used and use it with an innovation for themselves.

Some of the abbreviations used ahead in the document -

- ➤ AI Artificial Intelligence
- > OTP One Time Password
- > SRS Software Requirement Specification
- IEEE Institute of Electrical and Electronics Engineers

1.4 Product Scope -

This software bridges the gap between social media and e-commerce by providing a single interface for both functionalities. Users can use the chat inbox feature to chat with their friends and view other's timeline and on the other hand, navigate to the online store where they can buy online goodies and share it with their friends.

Strategically this is a great business idea of Vaistreet which is being developed under Safcodes Pvt. Ltd. as its upcoming project. People often look for these types of app and Safcodes has rightly targeted it and looks promising with their idea. Hence this can gross high attention and revenues in the market.

1.5 References -

- Use Case Diagram Page 13
- Software Engineering Book A Practitioner's Fifth Edition By Roger S. Pressman
- IEEE template for SRS
- http://safcodes.com/

2. Overall Description

2.1 Product Perspective -

Our product is one of its kind as there are several social media sites as well as e-commerce sites growing these days. There are some sites similar to this but they are having very basic functionalities. It proves out to be unique as it replaces all the previous similar websites by integrating inbuilt chat and video call, viewing priorities as per the user's street (idea is that user can view or select items from their nearby street as per their current location), a journal with daily tips, push notifications and creation of user's custom street.

The web app uses a very user friendly interface through which he/she can navigate through the trending items and add them to the cart, also at the same time their location is bring tracked, they can do one-to-one chat with their friends and get reviews and also share about their recent purchase.

- A minimalist UX
- A news feed for the user showing information and details about brands and shops nearby
- User Profile page enlisting his activities
- A communication feature for users(chat ,forum ,etc)
- A page for trending or highly rated nearby markets
- Search feature granting user access to information about any shop, brand, etc
- Segment for latest deals, coupons and collections
- Feature to follow a certain brand or shop and stay updated.

2.2 Product Functions -

The product is divided into phases depending on the hierarchy and difficulty of the features. The functions listed later are to be integrated only when the earlier features have been implemented.

The functions are -

PHASE I (Design and Architecture Module)

- Project Requirement analysis
- Project design wire framing
- Complete UI/UX Designing
- Client approval

PHASE II (Social Network -Module)

- User login and registration Facebook, Google, Phone number
- > OTP Verification
- Forget password and change password
- User profile with edit option
- User location detection
- Showing nearby streets.
- Users can Create Street.

- Live telecast Upload audio and video to the group
- Daily tips.
- Audio and Video calls integration
- One to one chat implementation.
- Push notification.

2.3 User Classes and Characteristics

There are two types of user classes-

- ✓ Registered User Class
 - 1. Login into their accounts
 - 2. View and Buy products
 - 3. View product details
 - 4. View the complete product catalogue
 - 5. Apply filters to their search
 - 6. Add products to their cart
 - 7. Pay for the product through the payment portal
 - 8. View/Cancel/Track their bought products
 - 9. Create and post reviews on their newsfeed
 - Chat one to one with online registered users
- ✓ Unregistered/Guest User Class
 - 1. View the catalogue
 - 2. View the newsfeed
 - 3. View the product details
 - 4. Search for a product
 - 5. Register into a new account

2.4 Operating Environment

It is a web app hosted online, so it can be accessed by any user without being hindered by the type of OS he/she is using. User can access the site from any part of the world.

2.5 Design and Implementation Constraints

- The website can be having bugs which may cause the website to react abnormally
- The database maybe too small to acquire a large number of users
- The external payment gateway (Pay U) might be limiting feature to integrate
- The AI of the app in order to search or show recommendations might be a constrain

2.6 User Documentation

This is a web based app so it won't be having a user manual or documentation attached to it. However user can find every necessary thing in the About Us section where most of the details will be mentioned.

2.7 Assumptions and Dependencies

The web host server provider to keep the site hosted 24*7 so that its usability is not limited. The internet access is assumed to be available as it is not possible to access the website from any offline source. The website is assumed to determine the user's current street using GPS. The website is assumed to work on the algorithm for showing recommended products based on the frequency of search and similarity. The website is dependent on the libraries used like – Bootstrap, MongoDB, Font Awesome, Angular JS, Node Js, Express framework and Mongoose OD.

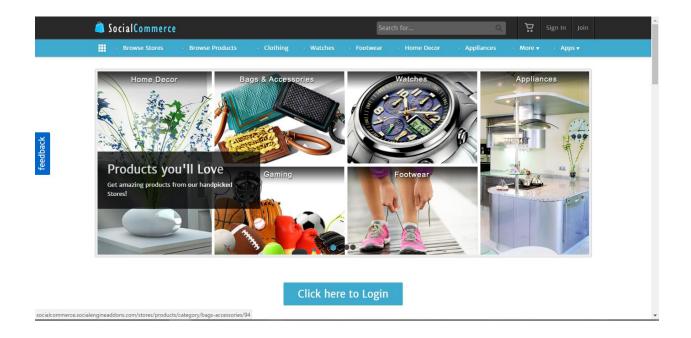
3. External Interface Requirements

3.1 User Interfaces

The User interface is based on responsive design so that users can use the web app from any of their devices. Also the UI is very user friendly and interactive so that user finds no problem in looking up for any content. The front end has been designed using proper navigation bars, jumbotron, tiles and divisions with

appropriate texture and color to make it user friendly. It is a very light weight design.

The sample UI of the website can be seen in the following snapshot -



3.2 Hardware Interfaces

This web app is hosted on the internet so there is no specific hardware interface or requirement needed. Moreover this web app has been designed in a responsive design so it adjusts itself well enough to be viewed and navigated on laptop, mobiles or tablets. User can use any browser like Chrome, Mozilla FireFox, Microsoft Edge, etc to view the website. The best resolution is however enjoyed when viewed on a bigger screen.

3.3 Software Interfaces

This web app uses various libraries for backend and front end. For the backend part, we are using - Express, Version - 4.14.0, Node.js - Version: 4.5.0, MongoDB, Version: 3.2.0 and Mongoose ODM, Version: 4.6.0.

For front end we will be using -Bootstrap, Version: 3.3.7, Font Awesome, Version: 4.6.0 and AngularJS, Version: 1.5.8

3.4 Communications Interfaces

The web app communicates with the user via email and SMS. While confirming the account after registration, the app sends an OTP via SMS. Similarly when the payment for a product is confirmed, an automatically generated invoice is sent to the user's email. Even the user can be notified about new products or availability of a product or drop in price of a product with the same.

4. System Features -

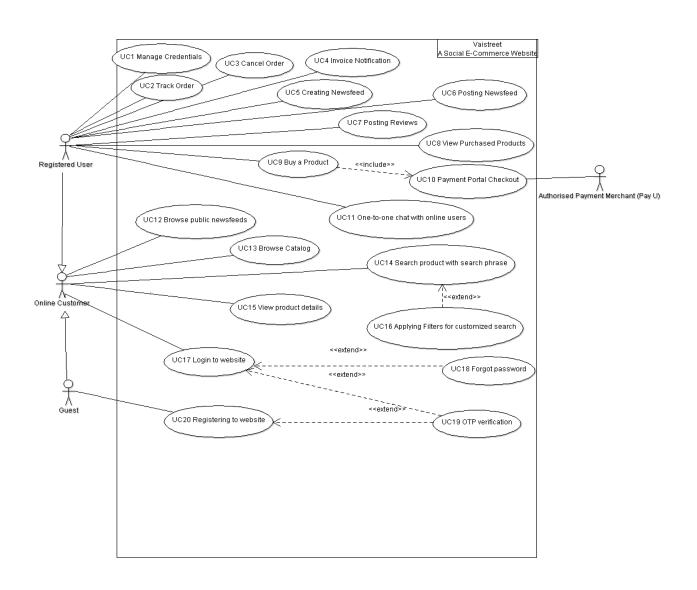
Identifier for Req.	Short Name	Short Description
RQ1	Browse Catalog	Any online user can view the catalog and browse for the available products on a well-organized web page.
RQ2	Search for product	Any online user can search for a particular product they need using a search phrase through the search product option.
RQ3	Applying Filters	This is an extended feature of search for product in which any online user can apply filters such as price (low to high), colour, discount, etc to get their desired

		product as fast as possible.						
RQ4	Browse Newsfeed	Any online user can browse the newsfeed posted by other users and can get the reviews from their blogs						
RQ5	Product Details	Any online user can view the product details such as price, seller, availability, etc and plan their purchase.						
RQ6	Registration	A guest user needs to register to the website in order to purchase or make the site fully functional for them. To become a registered user, they need to register to website.						
RQ7	OTP Verification	The new user needs to verify his/her identity by providing with the OTP (One Time Password) received on their phone just after registration.						
RQ8	Login to website	Once the user is registered, they can login to the website and browse the functionalities.						
RQ9	Forgot Password	If the user forgets, their password, then they can click forgot password and set a new one from the verification link provided through mail or SMS.						
RQ10	Manage Credentials	The registered user must manage their credentials by providing correct personal information as well as contact information.						
RQ11	Buy a product	The registered user can purchase a product once they are sure about buying the product and checkout through payment portal.						

RQ12	Authorized Checkout	This is an extended feature of purchasing of a product as an authorized payment merchant (PayU) directs the website through a checkout portal to help the user to pay for the product through a trusted payment gateway.						
RQ13	Invoice Notification	After the successful payment, the user receives an automatically generated invoice in which all the billing details are clearly mentioned.						
RQ14	View Purchased Product	The user can view their ordered product from the "view my orders" option and get to know delivery and shipment status.						
RQ15	Track Order	The users can track their purchased product in order to see the current shipment status of the product, the courier services and get the estimated date of delivery.						
RQ16	Cancel Order	The user can cancel the order if they are not willing to receive it after payment and give the appropriate reasons for canceling and proceed to a portal for refund.						
RQ17	Create News feed	When the users receive the product, they can share their reviews and thoughts about the product they bought by creating a newsfeed.						
RQ18	Uploading Newsfeed	The users can upload posts, reviews, photos and experience for the product they bought on the newsfeed to help other users in choosing their product.						

RQ19	Post Product Reviews	They can post reviews and give a rating to the product so that it can be considered useful to the next buyer.
RQ20	One-to-one Chat	The registered user can chat with other registered user who is currently online in an one to one chat box and communicate just as they do in social media and share and discuss about the products.

Use Case Diagram -



5. Non Functional Requirements

Identifier for	Short Name	Short Description						
Req.								
RQ1	Internet Speed	It's very important to have a nice internet speed in order to access the website properly and efficiently. Slower connections might interrupt transactions or slower loading of pictures.						
RQ2	Accessibility	It should be as much user friendly as it can in order to hinder any user to access any particular feature they are looking for.						
RQ3	Payment Gateway	The payment portal is one of the key features which a customer is worried upon. So having an authorized payment partner is mandatory. Also the gateway should perform the transaction quickly.						
RQ4	Encryption	The database should be well encrypted as it contains personal information as well as debit card or banking details.						
RQ5	Virus	The website should also be free from any virus or malicious program that might acquire in the user's PC while accessing the site.						
RQ6	Server Timeout	It is necessary that if a transaction fails, the amount should be refunded to the user account in a few span of days.						
RQ7	Availability	The web app should be available to all the Operating Systems and all the browsers in order to gather the maximum number of users.						
RQ8	Maintenance	The website should be regularly maintained by the admin portal so that it is free from bugs and it keeps on updating new features.						

6. Requirement Traceability Matrix —

RQ	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1		R				D		D												
2	R		D			D		D												
3		D						D												
4																				
5																				
6	D	D					D	R	R	R										
7						D		D	D											
8	D	D	D			R	D		D								D	D	D	D
9						R	D	D												
10						R														
11												D								
12											D									
13														R	R	R				
14													R		R	R				
15													R	R		R				
16													R	R	R					
17								D										R	R	
18								D									R		R	
19								D									R	R		
20								D												

7. Development Traceability Matrix -

	Use case addressing the requirement	Classes addressi ng the requirem ent	Methods addressing the requirement	Unit Test Cases addressing the requirement
RQ1	UC13			
RQ2	UC14			
RQ3	UC16, U14			
RQ4	UC12			
RQ5	UC15			
RQ6	UC20			
RQ7	UC19, UC20, UC17			
RQ8	UC17			
RQ9	UC18, UC17			
RQ10	UC1			
RQ11	UC9, UC10			
RQ12	UC10			
RQ13	UC4			
RQ14	UC8			
RQ15	UC2			
RQ16	UC3			
RQ17	UC5			
RQ18	UC6			
RQ19	UC7			
RQ20	UC11			

