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Functional Requirement Document

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Introduction:

The concept of the project is to develop an Online Marketplace website where the user can Buy, Sell, Trade/Want products. There is no payment gateway integration and the payment method for buying/selling items on the website (for time being) is via Cash on Delivery. The website aims to earn via Google Ads, Ads provided by the users and the user memberships. The website is basically a meeting platform for various people who want to buy/sell items.

Type of users:

- Buyer
- Seller

Note: The roles of a buyer and seller are interchangeable on the website i.e. the buyer can be a seller and vice versa.

Document Objective:

The main objective of this document is to gather all the functional and non-functional requirements for this project which is an Online Marketplace Website with sole intension of the services to end-users quite easily. The document also will also serve as the guide for the development team to understand the challenges that may come while development of project.

Project Scope:

- To develop an Online Marketplace website
- Target audience country is Jamaica
- Website language is English and the currency used will be Jamaican Dollars (JMD)
- There is no shopping cart or payment gateway integrated into the website. The transactions by the user for buying and selling the product is COD.
- The website has a place for Google Ads and advertisement by the users.
- The members can showcase their storefronts on the WebsiteHomepagefor a specific duration by payment to the admin outside the website
- The basic registration to the website is free and there are two types of memberships Prime and Gold.

Definitions and abbreviations:

The terms used in the project are defined as follows:

Term	Definition
Buyer	The user who uses the website to buy a product
Seller	The user who uses the website to sell a product
System	The project (website) under development

References:

The list of referred websites is as follows

Website		Description	
	www.etsy.com	For design perspective	

Intended Audiences:

The various roles for users of the website are as follows:

Website users:

- Buyer
- Seller

Admin Users:

- Admin
- Sub Admin

^{***}NOTE: The screen shot visual representations of functionality in this document are intended only to help convey the functional needs, and in no way is it a commitment nor requirement that the end product look exactly like these screen shots.***

Proposed process of Analysis and development of intended system:

A disciplined process is used to conduct a knowledge transfer for the reference websites related in developingthis project. Aniterative process of questionnaires and analysis was used to develop a requirements baseline for the websites and documents under study. Followed by several discussions/meetings the FRD will be prepared. With the development process and QA sideways, we intend to deliver this project with client's expectation.



Figure 1- Knowledge Transfer Process

Technical Analysis:

Considering all the requirements and the features proposed, the site will be developed in the following technology:

Technology used while developing this system	Browser Compatibility	
- PHP 5.3	- IE 9 and onwards	
- MySQL 5.2x	 Mozilla Firefox 18 onwards 	
- JavaScript	 Google Chrome 8 onwards 	
- JQuery	- Safari 5 onwards	
- HTML 5/CSS 3.0		

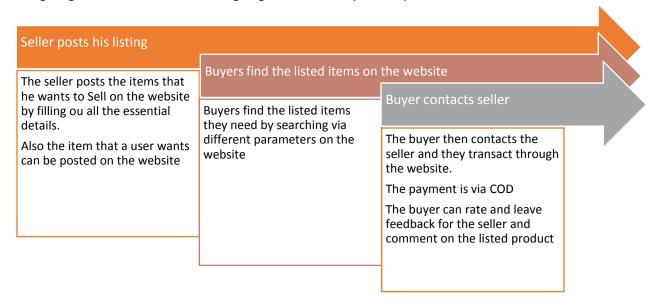
Screen	Resolutions
-	320x480
-	360x640
-	768x1024
-	800x1280
-	980x1280
-	600x1280
-	1920x900
-	2560x1600
-	2880x1800
-	1280 x 1024

- 1336 x 768
- 1280 x 800
- 1920 x 1080

How does it work?

- The user registers and logs in into the website. Registration into the website is free and the registered user can be both buyer and seller.
- If the user wants to buy an item he searches it on the website with the use of categories, filters and search bar. After finding the product, the user clicks on it and reads all the related information and checks about the delivery of the product. If the user wants to buy the product, he contacts the seller via the Message and notify the seller and the seller is thus notified about the interest of the buyer regarding the product. The seller can then agree upon the transaction and sell the product via COD.
- If the Seller wants to sell the item he posts the item details on the website and fills in all the essential data required to it. If the listed product is required by the buyer, he gets notified and reverts to the buyer for further transactions. The seller can upgrade his membership to Prime or Gold; each of which will have their privileges.
- The website is basically a platform for the buyers to meet sellers and vice versa.

The following diagram shows how the site is going to work in simple 3 steps.



Homepage:

The homepage consists of the following sections:

- Header:
 - o Logo
 - Search Bar/ Search by a specific category(filter)
 - o Browse categories
 - o Register / Sign In
 - Share button for Social Networks

- Middle Section:

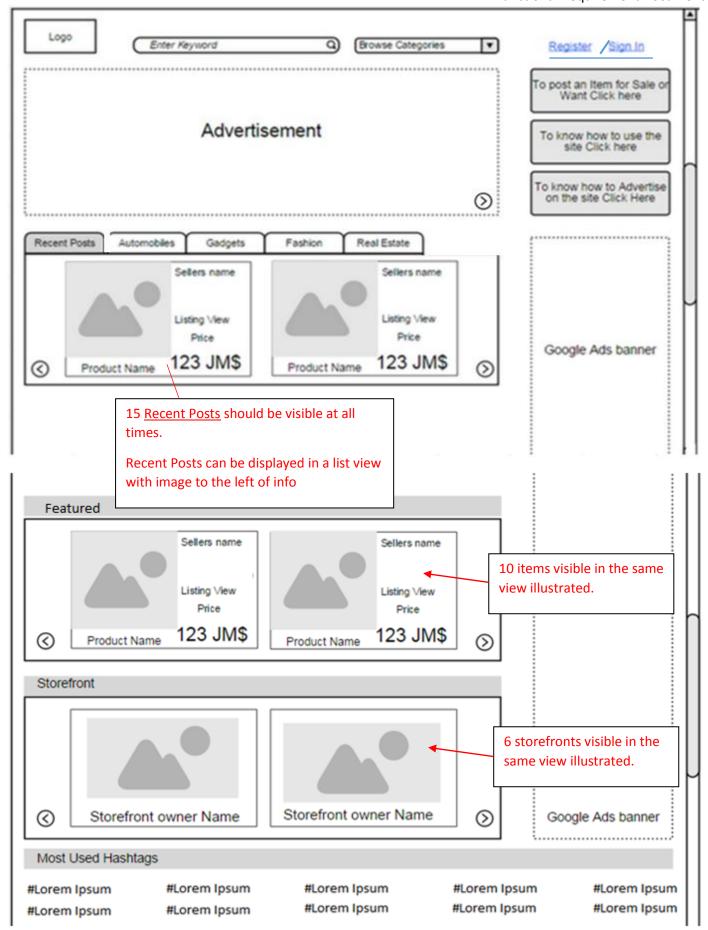
- o Ad banner for user
- Ad banner for Google Ads
- Button to Post an item to Sell or Want
- o Button redirecting to content on how to use the site
- o Button redirecting to content on how to advertise on the site
- o Tabbed bar showcasing the
 - Recent Posts(Recent posts from all categories)
 - Recent Posts made in various Categories (Automobiles, Fashion, Gadgets, Real Estate)

The 'All' category is not needed anymore and will not be included.

- Featured Section (Deals section will not be included now as in the previous FRD version)
 - → Featured section:(no deal structure. User will just pay to get items featured for a specific duration) Payment required
- Storefront section (Featured Storefronts)
- Most used hashtags section

Footer Section:

- o Terms of service
- Privacy policy
- o FAQ
- o About us
- Contact us
- Social media links



Terms of Service Contact Us Privacy Policy About Us FAQ

Follow Us









Edits:

- 1. 'All' category no more included
- 2. **Recent Posts:** As per the client's requirement, the scroll bar should show 15 listings. At the end of the listings there should be a 'View All' hyperlink. When the user clicks on it, he will be directed to a page where all the 15 Recent Posts will be listed in the List View.
- 3. Also, when the user will click on a particular category like Automobile, in the scrollbar, 15 latest listings will be shown to him and at the end there will be a 'View All' button. When the user will click on the View All button he will be directed to the page where all the products in that category are displayed. These products will be displayed according to recentness i.e. recent product first.
- 4. **Featured Section:** The Deals Section is replaced by the Featured Section. 10 items will be available in the view.
- 5. **Storefronts:** 10 Storefronts will be listed.

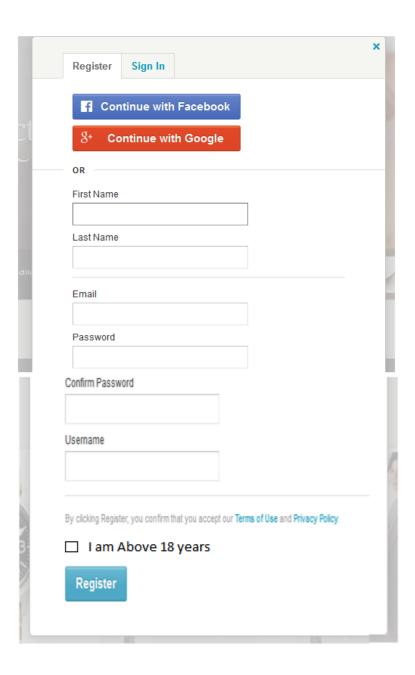
Registration and Sign in (Login)

Registration:

The registration process is common for all the website users. When the user clicks on the Register/Sign in button, a tabbed Register/Login pop up appears on the screen. The user can then register into the website by providing the appropriate details in the required fields or using Facebook and Google Plus registration.

The user can register into the website by filling in the following details:

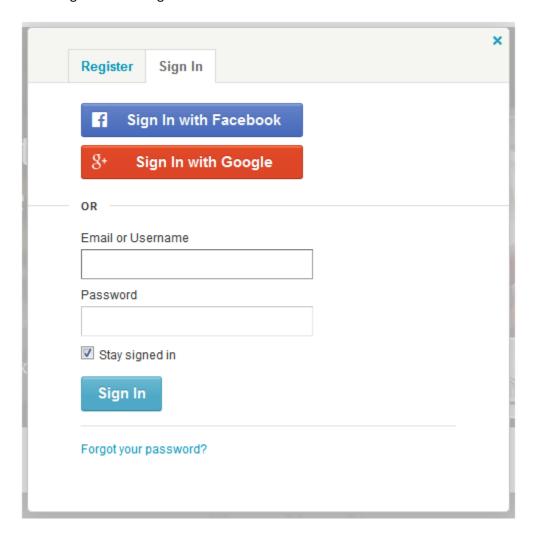
- First name
- Last name
- Email
- Password
- Confirm password
- Username
- Register button
- Register with Facebook
- Register with Google
- Tick box to confirm that user is over 18



Sign in:

The user can sign in into the website by entering the following details:

- Email or username
- Password
- Stay signed in checkbox
- Sign in button
- Forgot password
- Sign in with Facebook
- Sign in with Google



Forgot your password:

In case the user forgets his password, he has to click on the 'Forget your password' link. The user then has to enter his registered email, a reset password link will then be mailed to him from where he can recover his password.

Forgot your password?
Enter your email address and we'll send you a link to reset your password.
Submit

User Actions:

The user can use the website Buy or Sell or want items.

1. Buyer

- a. The user browses the website using the various searching parameters and finds a product of his choice.
- b. He then clicks on the product and views all the details on the product page.
- c. The delivery address and date is specified and then a message is sent to the seller about the interest in buying the product.

2. Seller:

- a. The seller posts the items or sale on the website by specifying all the details of the product.
- b. The sets up his storefront, can upgrade the membership, post the items in the **featured** section, recent posts and get his storefront showcased on the home page.
- c. The seller receives notification from a buyer in case the buyer is interested to buy his product. They can discuss the product delivery details on the message section and the payments can be done via COD.

Categories on the website:

A. Automobiles

- a. Vehicle
- b. Parts
- c. Bicycle, Parts & Accessories
- d. Services

B. Electronics/Gadgets

- a. Cell phones
 - i. Devices
 - ii. Parts & Accessories
 - iii. Services
- b. Computers (PCs, Laptops & Tablet)
 - i. Computers
 - ii. Parts & Accessories
 - iii. Services
- c. Entertainment
 - i. Video games & Consoles
 - ii. Accessories
 - iii. Other
- d. Other (Home, Office etc.)
 - i. Other
 - ii. Parts & Accessories
 - iii. Services

C. Fashion

- a. Women
- b. Men
- c. Jewellery
- d. Shoes

D. Real Estate

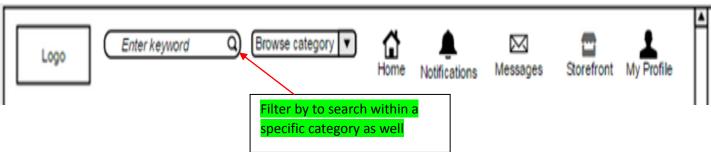
- a. <u>Home</u>
 - i. For Sale
 - ii. For Rent
- b. <u>Business</u>
 - i. For Sale
 - ii. For Rent/Lease
- c. Land for Sale

E. School books & Supplies

- F. Miscellaneous
- G. All Services (All the services from the categories are listed here)

User Dashboard:

The user dashboard will be common for the buyer and the seller.



a. Home:

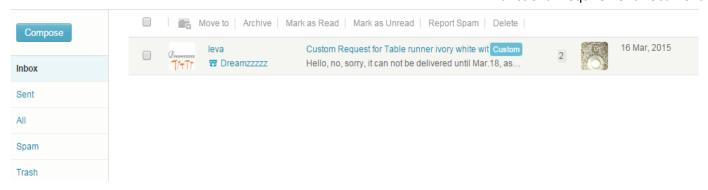
• The home button redirects the user to home screen. The logo also provides the same functionality when the user clicks on it.

b. Notifications:

- The user can follow a sellers those he likes. The user will get the notifications about all the new items posted by the sellers he follows.
- The user will receive push notifications.

c. Messages:

- The user receives all the new message notifications.
- On clicking the icon, he gets directed to the messages sections where he finds all hisconversations.
 The various sections are compose message, all messages, received messages, sent messages, spam messages and trash messages.
- o The user can mark the message as Read or Unread and Spam.
- Once the message is deleted it will go to the trash folder from where the user can delete it permanently.
- Details of each section:
 - Compose message: The user can type in the username of the other user on the site and can send that person a message.
 - All messages: This section will consist of the entire conversation between the users i.e. the
 received as well as the sent messages. The user can choose to delete the entire thread from
 here.
 - Inbox: The received messages are contained here. The user can reply to thereceived message.
 - <u>Sent:</u> The sent messages are in this section.
 - <u>Trash folder:</u> All the deleted messages, threads are stored here from where they can be deleted permanently.
 - Spam messages: The messages marked as spam are kept in this folder.
 - Move to functionality: The user can move the message or thread to trash or spam.



d. Storefront:

• A storefront is a place where all the items listed by the user are listed. The user can manage his inventory from the storefront.

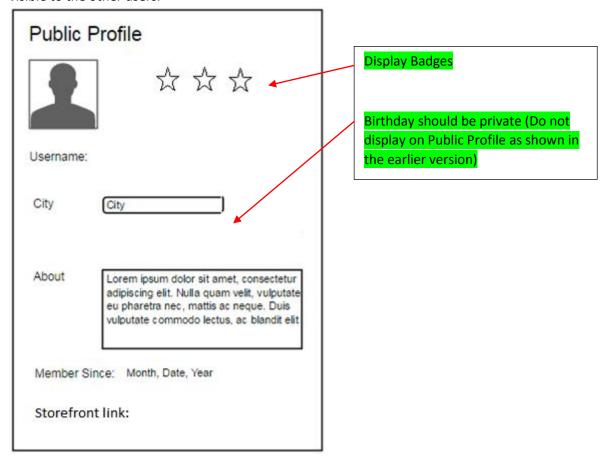
e. My Profile:



- o User image and username will be displayed.
- O View Profile:
 - Public profile: All the uploaded personal information content uploaded by the user is available over here.
 - Followers: A list of people who has followed the user is shown
 - Edit profile: The user can edit his profile using this functionality

1. Public profile:

The public profile will show only the static data i.e. the data that has been uploaded by the user as it is visible to the other users.

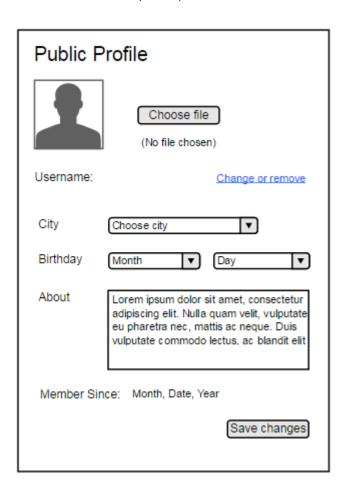


2. Followers:

The list of people who follow the user is given.

3. Edit profile:

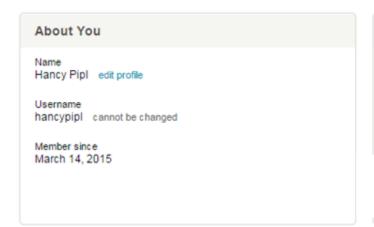
The user can edit his public profile

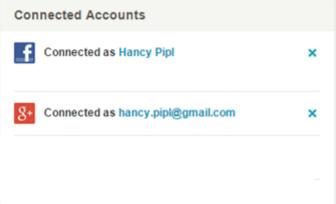


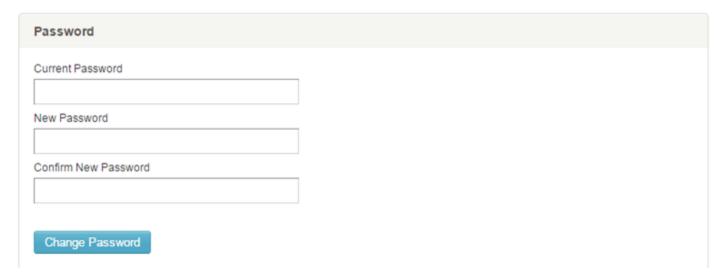
Account settings:

The user can make changes to his account in this section

- About you: Name, username and membership since is displayed here.
- Connected Accounts: The user's accounts from which he has registered/logged in the site are mentioned. The user can delete the connected accounts from here.
- Password: The user can change the password for his account. The user will have to enter his current password, enter new password and confirm it.
- Email:
 - The user can change the email. He has to enter his current email, enter and confirm his new email and enter the existing password.
 - The user then clicks on the change email button. A confirmation link is then sent to the old email id and only when the user confirms it will his email id get changed.
- Close the Account: The user can choose to close his account on the website. He can specify the reason for closing the account. Also a checkbox is provided by clicking which he allows the website to contact him on his mail id.







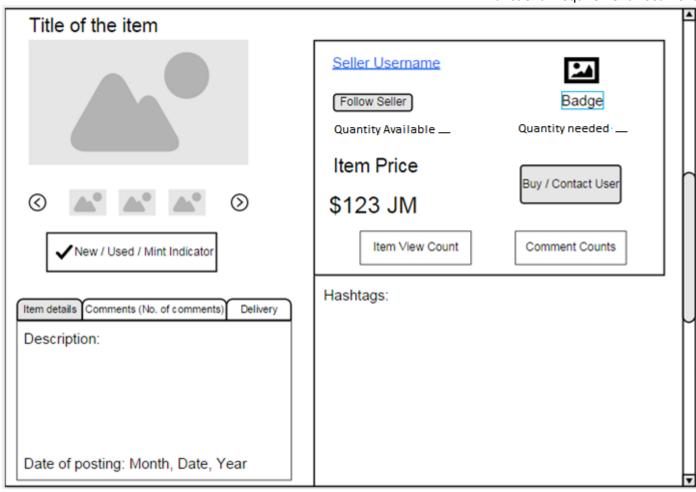
Email		
Current email hancy.pipl@gmail.com		
Change your email New Email		
Confirm New Email		
Your Password		
Change Email Your email address will not change	until you confirm it via email.	
Close Your Account		
Please help us improve by telling us why yo	u're leaving.	
can contact me at hancy.pipl@gmail.com with	questions or more information.	
Close Account		

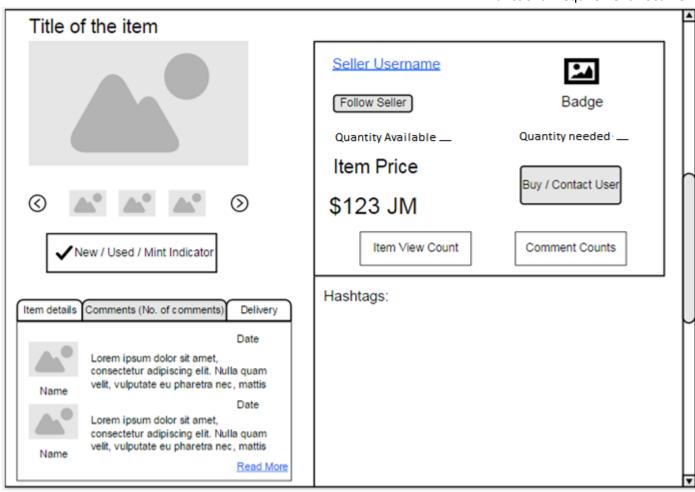
 $\circ\quad$ Log out: The user can log out from the website by using this functionality.

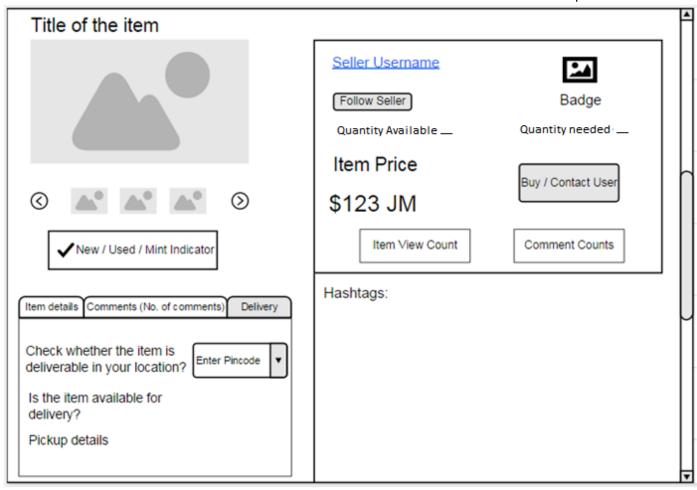
Buying a product:

- The user searches and finds for the product on the website by using the Search engine, browsing the categories, or viewing the product in the recent posts etc. and clicks on a particular product. He then is directed to the products page.
- The user then views all the details of the product specified over there.
- The user can click on the Seller's username and get directed to the storefront. Also there is a button to follow the seller.
- When the user clicks on the Buy/Contact User he is directed to the delivery details page (the same one shown in the tabbed menu bar). In case the options are selected in the tabbed menu already then this step is not repeated.
- The user is then directed towards the page wherein he can send a message to the seller regarding buying of the item. He can send a preloaded message in the message box or choose to write a new one about his requirements and specifies the date of delivery in the calendar. This message is then sent to the seller.
- Comments: When the user clicks on the 'Read More' link he is directed to all the comments for that particular product, he can read those comments and add his comment to the product as well.

Functional Requirement Document



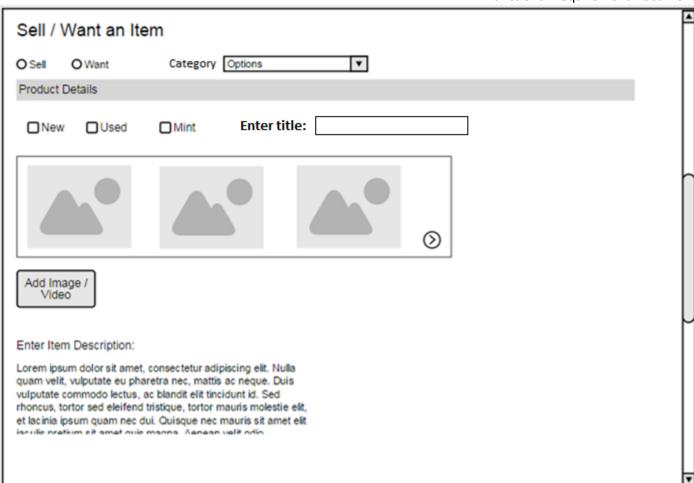


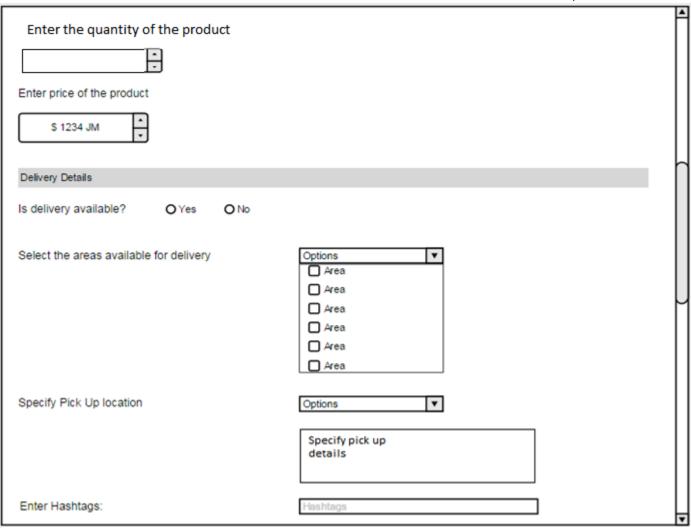


Buy/Contact Seller Hello! I am interested in buying your product! Kindly revert so that we can discuss more. When do you need it? (Optional) April 22, 2012 ▶ Su Mo Tu We Th Fr Sa 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 Send Message

Selling a Product:

- The user can post the product for Sale or Want by clicking on the 'Post an Item for Sale or Want' button. The user can post an item on the site only if he has set up his storefront, if he hasn't, he will be directed to set up a storefront form.
- He then selects if he Wants and item or wishes to sell one.
- Select whether the product is New, Used or Mint condition.
- Add images, videos of the product
- Describe the category
- Enter the item description details
- Enter the date of posting Date is automatic & irreversible
- Specify the price of the product. (The currency in the website is the Jamaican Dollar)
- Select whether the item is available for delivery or not.
- If yes; select the areas in which the delivery is available. The user can click on the ZIP codes/PIN codes available for delivery. If not; the seller will have to specify the location details for pickups.
- The user then enters the hashtags for his listing.
- Any user can post a listing on the website for free. The members who list the products on the website for free will by default be awarded the Free Membership. The user can set up his storefront and can manage his free listings from there.
- In case the user wants to take advantage of the added benefits of the website he can upgrade his membership to Prime or Gold from the storefront.
- Each item for sale should have a dropdown quantity button where user can indicate the quantity of an item they have for sale and change the quantity as they sell.
- The seller should also have a**Sold** button. After the button is clicked, the seller can decide to remove the post to make room for new items or just leave the post deactivated from categories and search/categories but not from storefront.



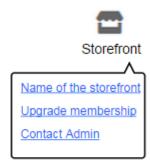


Wanted Product:

- The user can post a product on the website that he wants. The listed product is showcased and becomes discoverable on the website. The user will then be contacted in case there is some seller who can provide him with the required product. The fields to be entered for posting a product to wantare
 - Want radio icon
 - Category
 - o Title
 - Product details (New/Used/Mint)
 - Add Image/Video (Optional)
 - Enter description
 - Enter price range
 - Enter hashtags

Storefront:

- A storefront is a place where all products listed by the seller are displayed.
- The seller can manage his inventory from here like he can specify the quantity in which an item is available. If the item is over, he can press on the sold button.
- The storefront is the online shop of the seller on the website.



Set up a storefront:

The user will have to fill in the following form if he wants to set up his storefront.

- Enter title
- Upload background image/banner
- Upload image
- Store details
- Contact
- Select Membership (Free, Prime or Gold)

Storefront management by the seller:

- After setting up the storefront, the user can access the storefront and can manage his posts from there.
- All the above fields the user fills in while setting up the storefront will be displayed, they can also be edited.
- All the items the user lists for Sell and Want will be displayed here. The user can manage these posts.
- All the Listed Products will have an **Inventory Management** button. The seller can manage the quantity available for sale from here. He can also select the Option of OUT OF STOCK!
- Also each listing will have a REFRESH button. (Each listing only allowed a certain amount of refresh to recentposts section)
- The seller can contact the Admin in case if the wants to showcase his storefront thumbnail on the homepage.

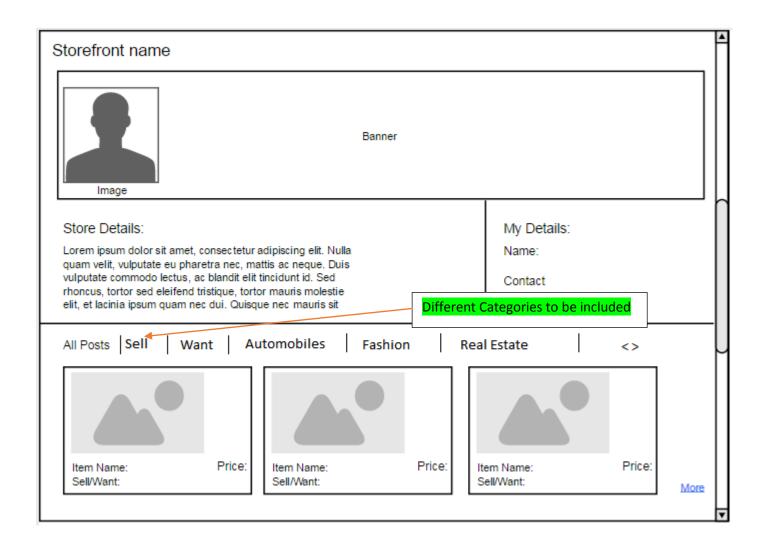
Question: In case of Wanted Items do you want a functionality where the Seller can deactivate the wanted item if he no longer needs it listed?

Answer:Yes .Also, the seller should be able to deactivate any listing to make space available for new listings (seeing that most members will have limited amount of post that can be on the site at a time)

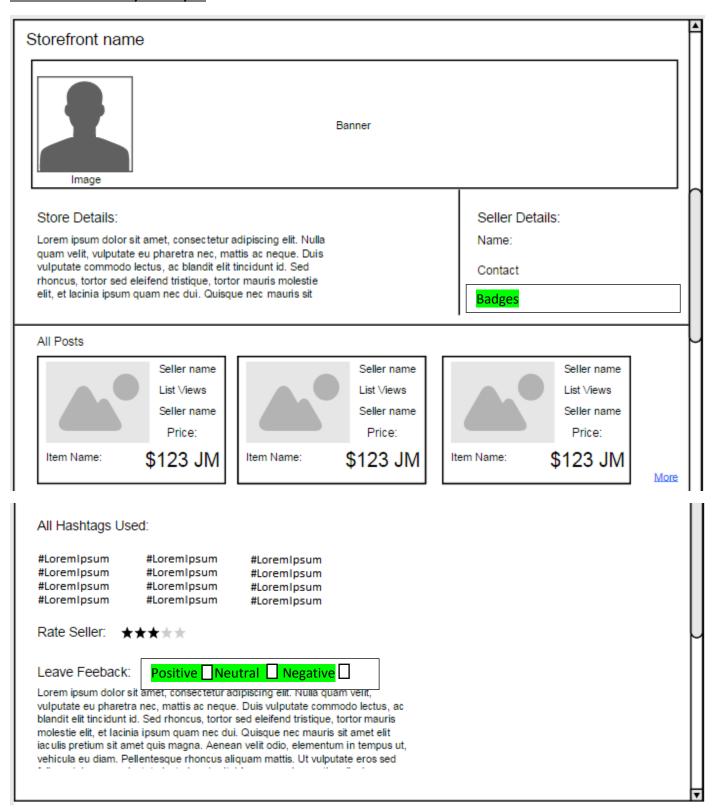
Question:Do you want the seller to have different categories of Products listed to Sell and Products Listed to Want? This could prove easier for the website user in terms of usability.

Answer:Yes

Seller's Storefront:



Storefront as seen by the buyer:



When the user clicks on the Sellers name, the Public Profile of the Seller will be displayed to him.

Other functionalities:

- Affiliate Members:

 The users those who will provide their valid contact details like a Photo ID, address proof, cell phone number etc., to the admin, the admin can provide them with an affiliate Badge, which would make the user an official Seller/Buyer on the website. Such users can be more trusted on the website.

- Recent Posts& Refresh Button:

- A seller with Prime or Gold membership will have a REFRESH button on each of their listing.
- o When the seller hits on that button, that specific post shall reappear in the Recent Posts section.
- The Refresh button works only once in every 24 hours. (Free members will get only 3 refresh per listing)
- **Featured Section:** (Pay to have item featured for specific timeframe on Homepage. No deal structure as before. User will just pay to get items featured for a specific duration. Payment is required.
- Deals Section
 - Products with discounts or lower prices are advertised here.
 - The price has to be discussed and agreed on by discussing it with the admin.

- Sold Button:

- When the seller hits that button, the product will go to archive, which should only be visible by admin.
- When sold button is hit, the item pic is replaced with a sold image. The user can either decide to delete the item or reactivate for sale once more.

Memberships:

The listing of the products will be free on the website and all the members will be awarded Free Membership by default. The members can upgrade their memberships to Prime or Gold. Following are the benefits of the Prime and Gold members:

- o Free member can post up to 10 listings at a time and a Prime member can post up to 100
- Post unlimited listing (Only for Highest member Gold Member)
- Ability to post a service that they are offering (Prime or Gold Member)
- Ability to post in the featured section (once approved by admin) (Prime or Gold Member)
- A Free member can post only 1 hashtag per listing, a Prime member can post up to 3 hashtags prelisting and the Gold member can post over 3 hashtags per listing.
- More than 3 pic + video (Prime or Gold Member)
- o Prime and Gold Memberships are free for the first 6 months
- Refresh button (Prime and Gold member)

Badges:Users can earn badges based on:

TYPE 1:

Badges based on number of positive ratings

- Star Badge A number of positive rating (2 conditions: Have over 10 Positive Ratings. Also should have 90% positive rating)
- **2 Star Badge** A number of positive rating (2 conditions: Have over 50 Positive Ratings. Also should have 90% positive rating)
- 3 Star Badge A number of positive rating (2 conditions: Have over 100 Positive Ratings. Also should have 90% positive rating)

TYPE 2

Affiliate member

TYPE 3:

100+ Badge - Number of Posts (have made atleast 100 posts)

TYPE 4:

Badges based on length of time registered to the site

- Newbie badge (regisitered during 1st day to 3months)
- Normal User badge (After 3months to 3 yrs)
- Veteran Badge (after 3 years registered)

Note: The Admin can assign more than one badge to the User. It should also be noted that a badge of the same kind cannot be assigned but that

Advertisements:

- Google Ads:
 - o The ad banner is provided on the homepage for ads from Google.
- Advertisements by users:
 - The users can sell their ads on the website by contacting the admin and paying him outside the site. The ad can remain on the site for 7 days, 2 weeks or 4 weeks.
 - The advert screen is a slider.

Question: On what all pages do you need the advertisements and what will be the relative positions for the same?

(Google ads will be on Homepage)

(Add banners by users can be shown on home page and the different category pages at the top)

Payment Flow:

- The website earns its money from:
 - Google Ads
 - Ads by the Users(The users can sell their ads on the website by contacting the admin and paying him outside the site. The ad can remain on the site for 7 days, 2 weeks or 4 weeks)
 - Memberships
 - Fee to show the Storefront thumbnail on the homepage section (The user will contact the Admin to get his storefront featured on the Homepage. The Storefront will be listed for a specified number of days i.e. 1day, 7days, 2 weeks or 4 weeks)

Search Module:

- The user can search for a product using:
 - Search Engine [Search by a specific category (filter)]
 - o Browse categories
 - Recent posts
 - Deals section
 - Storefronts section (Featured Storefronts)
 - Also, in each category, there is a filter for **New**, **Used** or **Mint** product. In addition as Recommended Practice we would give a **Sort By** Filter as well. The two parameters in this filter will be Price: High to Low and Low to High

Admin module:

- Global settings

- o Website details- website name, title and URL
- Company logo- Logo change facility.
- o Contact and support Email Address, phone number and address
- o Providing web feeds
- Social Networking Links:
 - Facebook
 - Google Plus
 - Twitter
 - Instagram

The information can be edited by clicking on the **Edit** button

- Sub-Admin management

- o Admin can create sub admin, assigning them particular roles, responsibilities.
- Admin can delete the sub Admin and manage their roles and responsibilities.
- o Admin can assign the sub admin to CMS (article management) etc

Manage User:

- Manage, keep record and sort the users.
- Manage Directory
 - Sort the users by city or locality
- Admin can sort the users by mentioning the date registered between from (date picker) till (date picker).
- Admin can search by name, email address and sort by the city also.
- Using this section, Admin can add, delete and even edit the users on site.
- o Admin can also see the active user and suspended users on website.
- o The admin can manage the storefronts on the homepage after receiving payments from the user.
- The admin can award the member as affiliate member and give him a badge.
- o The admin awards the various memberships to the users
- o Management of the items in the deals section
- The admin posts the user's ads on the website

Advertisement management:

- o The admin provides space on the website for advertisements for Google Ads
- o The admin provides space on the website for advertisements from the users and manages the ads.

Category management:

- The admin can manage the categories on the website.
- The admin can Add/Edit the categories and the subcategories.

CMS management

- o Admin can update the CMS pages like
 - Terms of service
 - Privacy policy
 - FAQ
 - About us

- Contact us
- Information regarding how to use the site
- Information regarding how to advertise on the site.
- The admin has to mange the various categories as well.

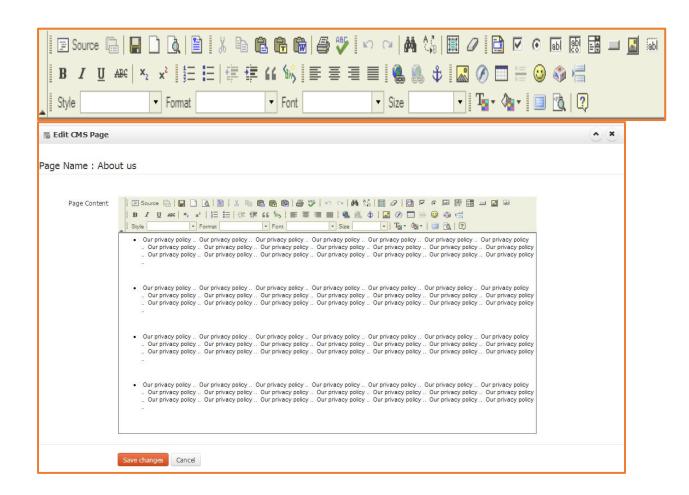
Following is an example of how the admin can manage CMS content:

Product Management:

- The Admin can view a list of all the products listed in his website. He can view
 - Product listed
 - Date of posting
 - Name of the user who has posted the product
- Admin can view the products listed as per the categories.
- Admin can Hide a listed product

Assigning Badges:

- The Admin can assign badges to the members depending on the various conditions specified. The
 Admin has the functionality to upload the badge image from the backend and assign to the suer. The
 admin can assign multiple badges to the user, i.e. badges of different types can be assigned.
- In case the requirements for a user to gain a badge is met e.g. 100+ listings etc. then the admin will be notified and he will have to upload and assign the badge from the backend.
- The admin can edit a badge and update it with another badge for a user. The admin can also edit and cancel the assigned badges.
- Editor:



The admin can edit the CMS content as shown in the above image. The content will be saved once the admin clicks on the **Save changes** button

The same template will follow for all the other CMS pages

- Email template management

- o In this section, the admin will manage the email templates for user's requests and other activities on the website.
- Paid Services: Managing the activation of services like showcasing User ads, Featured products and Storefronts on the Homepage. The Admin should have a CMS feature for that management i.e. set the number of days the service will remain active.

Answers to the Questions of the team:

Does the Seller get multiple or a single notification is case the buyer wants to buy more than one product from the same storefront?

Ans- The Seller will receive multiple notifications. There will be a Notification associated with each product.