Requirements Analysis & Initial Design

PROJECT: FAMOX

T47

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1. Introduction (Business Problems / Issues)

Famox is a charity which raises money by selling products and accepting donations. Harry's process, although it works, is not straightforward and is set up in a way that may cause error and slowness in business.

When a customer signs up, they are required to fill out a form. This form is prone to accumulate errors as there is no validation or formatting. The address is not formatted in a way that allows for the client to know what format they must enter their address in. The mailing list field is not very specific in that it does not tell the client what type of input it requires. This could be a yes or no, tick box, or even get the client to enter the email or address they wish to receive mail form. The lined area for the interest of project is also non specific in that it is not populated with data for the client to easily show interest. They must know the exact names for the projects in order to show support. The client must also spend time noting these, when the average client would not spend copious amounts of time noting these.

There are a number of issues with the donations form, both from a client and management perspective. Firstly the receipt number field works on the basis that the manager knows the previous number and has to be manually written twice onto the form. The address is not formatted in a way that allows for the client to know what format they must enter their address in. The credit card type should have a set of predefined types instead of the client writing this to alleviate error. For the registered charity number, it is also assumed that the manager knows this number and has to manually look it up.

The product purchasing field is similar to the donations form, however it did not contain a receipt for the purchaser. The order number field works on the basis that the manager knows the previous number and has to be manually written onto the form. The address is not formatted in a way that allows for the client to know what format they must enter their address in. The credit card type should have a set of predefined types instead of the client writing this to alleviate error. For the list of products purchased it only allows for a total of 8 different products to be purchased. The client must know the correct name for the product otherwise this can cause error when purchasing and identifying the product. An ID should be used to correctly identify the product. The customer must also know the individual costs and calculate the totals without error.

2. Functionalities that will be implemented in the Proposed System

Famox is a website which ultimately plays host to accept donations and sell products to prospective clients. The following is a breakdown of full functionality for the website. Full details are included within the prototypes section of the report with detailed description.

- Shop Products / Make Donations

    - Visitors will be able to view a catalogue of products
    - Visitors will be able to browse and view projects that can be donated to
    - They will be able to access the company information page
    - Registered customers will be able to add products to the shopping cart
    - Registered customers will be able to make purchases donations to projects which receive payment
    - Automatic notification of receipt will be sent to customers at end of the transaction

- Inventory / Projects Management

    - Management have the ability to enter, modify and deactivate products and projects
    - They will be able to view reports on sales and stock for both projects and donations
    - The will be able to review orders and donations
    - The management will have the ability to implement existing projects and products into the website
    - Through the use of categories, products will be able to be sorted by type.

- Customer management

    - On cart access or donation made, customers should have the ability to sign up and create an account
    - Customers will be asked to join the optional mailing list and provide details including
    - Existing customers have the ability to login and see their account information, including previous order history, by accessing the account page
    - Once customers are signed up, Famox will be able to manage customer details (including purchases and donations) and advertising

3. Benefits from the Project

The website will benefit Harry and his business by streamlining business processes, providing better visuals and display of data, validating client input and automatically populating fields to reduce error. Primarily the main benefit for the website is that it redevelops the business flow from start to finish with satisfying results to both the customer and management. Administrative functions will mean management will be able to easily obtain, filter and sort information regarding donations, sales and clients. These statistics will be able to assist with business future planning.

The Customer/Client sign up process is now a four step process which combines all aspects of the original form, however extends on the address structure and reduces risk of data entry error through the use of validation, error checking and use of pre filled options. The interest expression section is now a checkbox option with selection by the customer. By doing this, the client no longer has to recall their interests as the data is showed on the page. Address structure has been separated into individual fields so to make sure the correct address is entered. The customer is also asked to enter a shipping address as there is no expectation that the customer is shipping to the billing address.

For the projects, these are now more visible and all information is displayed to the client. The form allows the client to make a purchase without having to repeat all client details each time. Once they create an account, they just log in and all pre filled data. All that is needed is the amount. The registered charity number is also pre populated matching the correct record. The receipt number and date fields are automatically populated in the order. All fields are validated for error or input issues. Card payments are now predefined for selection. Receipts are automatically generated with populated data prefilled. Donation is filled and stored in the database in archive. Another benefit is that automatic notification that a donation has been made is also sent to the management. Again, the order number and date fields are automatically populated in the order. All fields are validated for error or input issues. Card payments are now predefined for selection and only options are visa and mastercard. Receipts are automatically generated with populated data pre filled and automatically issued to both management and customers.

The sales of products has been vastly improved in that customers will now be able to view the entire range with full details and specifications of each item. Each product is now uniquely identified with a product number which allows for correct matching of product to invoice, there is no room for not correctly identifying the item. Customers have greater control over social networking, which offers greater public relationships with the company at no extra effort through the client of share and communication tools on the product pages. In the cart, as it is dynamic, the cart is not limited to a maximum of 8 different items, it can expand. When a customer goes to pay for their order, they must be logged in, in doing so this will automatically log the client's
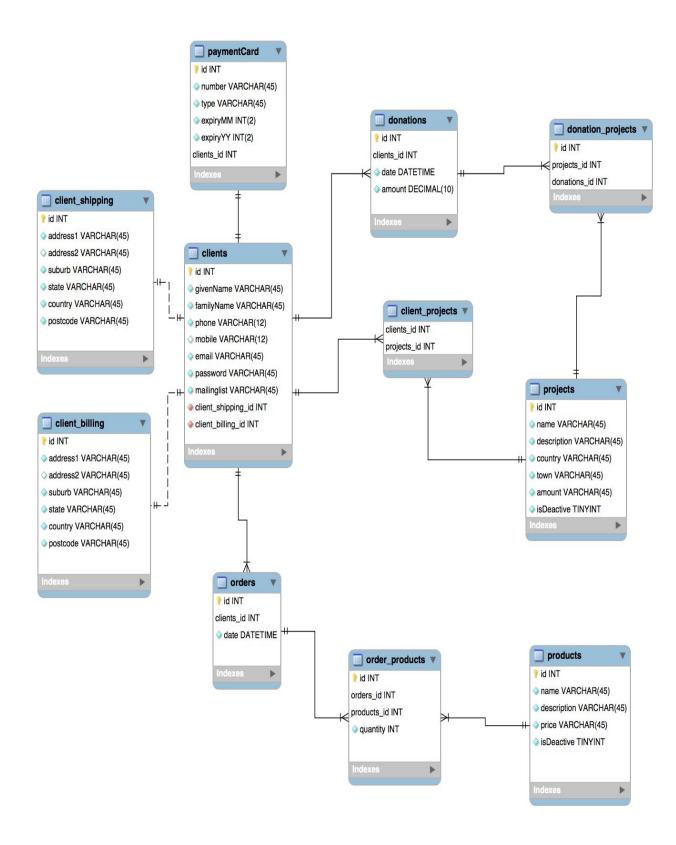
payment, shipping, billing and contact details from the client account. They have the option to confirm these details or edit them.
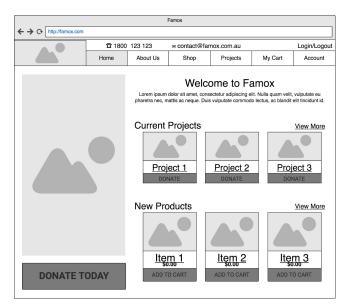
From a management perspective, the website now offers greater visibility and control over all functionality. Data is logged in the correct format and stored in a database so data is not at risk of being lost. There is greater control over the products and projects within the site through the admin panel. Management are able to easily create products and projects in which are automatically given IDs which uniquely identify the items. They are able to review customer orders with ease and review the individual order and receipt details for both product orders and donations.

4. Data Model

5. Prototypes
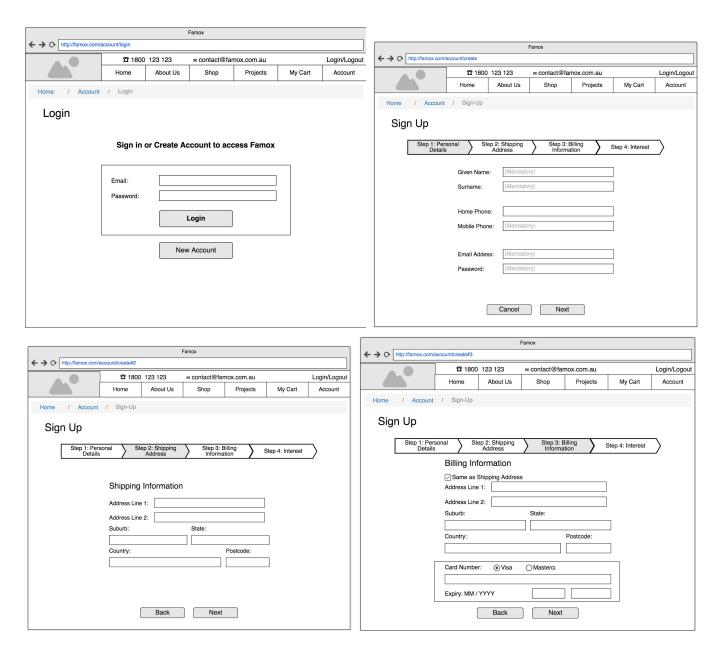
(1)   Homepage / About Us

The main page is displayed when clients visit to the website. The main page shows the newly current projects and products. clients can find more out about the company from 'About Us' page and clients can make donations by clicking 'DONATE TODAY' button.
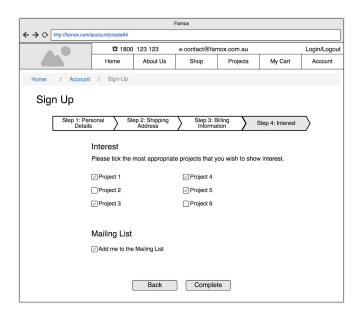
(2)   Projects Page

The main projects page will display all projects currently need funds. The client will be able to find brief information at this page and find details by clicking "Tell me more" button. Then individual project page displays details about selected project and clients can make donations by clicking "DONATE TODAY" button.
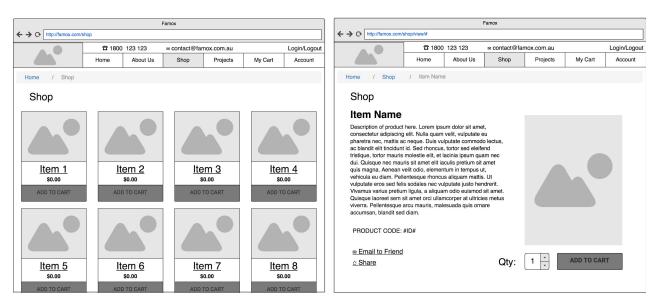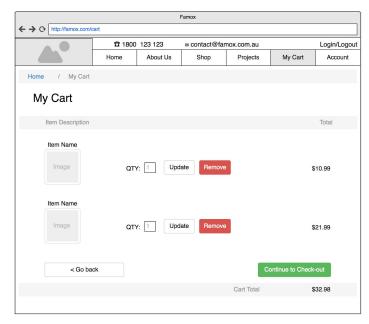
(3)   Log-In / Creating an account

Existing clients can log-in by entering email address (as client ID) and password. However, new clients can make an account through the following steps.

A progress bar is provided to make clients feel signup process is under their control. Also clients can always go back to previous pages by clicking 'Back' button. This will reduce and prevent errors.
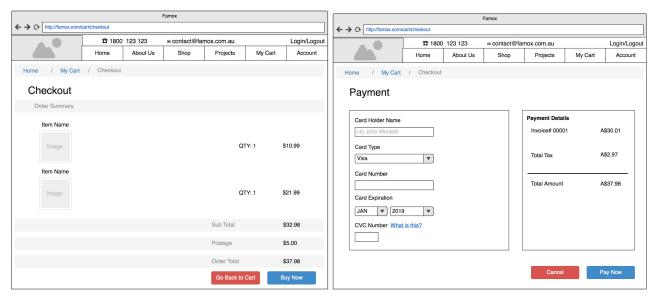
(4)   Shop products

client can put items into the cart by clicking 'ADD TO CART' button. The product details can be found by clicking item's image or name.
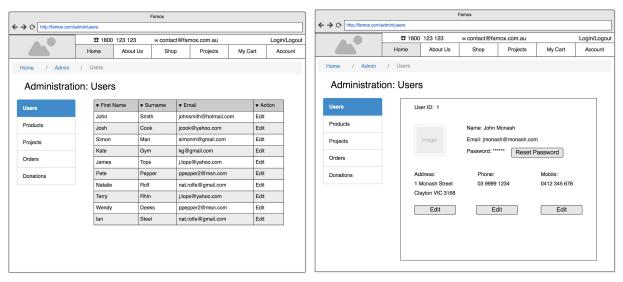
clients are able to check their carts. They can change the quantity or remove items from the cart page.
Once the client has finished selecting products, they can proceed to the 'Checkout' Page.
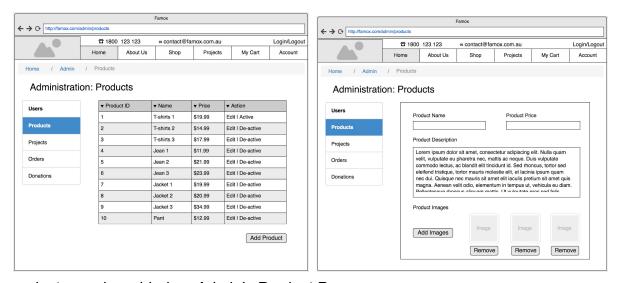However, clients can always go back to the previous page.

The payment page will confirm with clients the payment details, products to be purchased as well as card details, on confirmation they will be able to process the order.
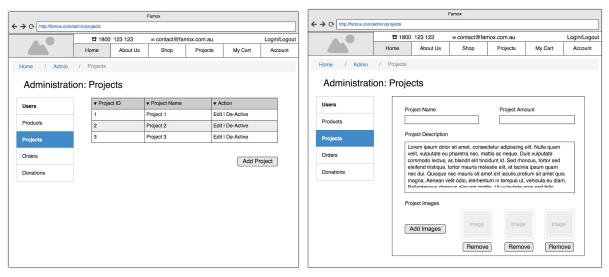
(5)   Administrative Functionality

Once the Admin user logged-in, page will be redirected to the Admin - clients page (as default). Admin user can modify simple client details and reset the password if client requested.

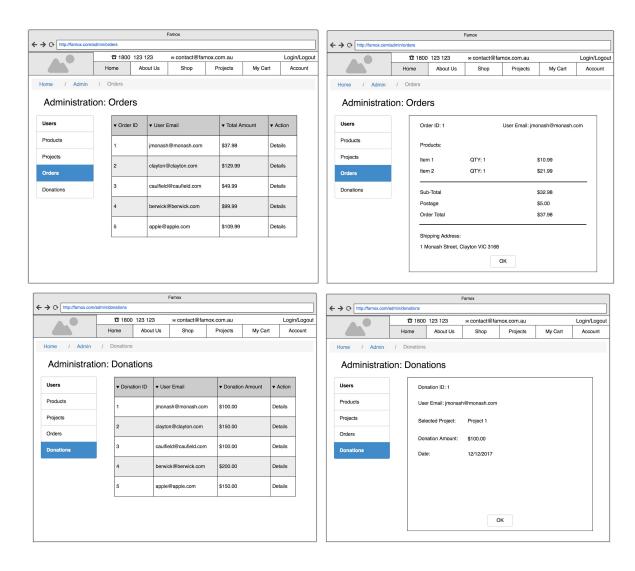More products can be added on Admin's Product Page

More projects can be added on Admin - Projects Page. Also admin client can make a specific project active or deactive

The admin client is also able to check details of each order and donation

6. Work breakdown

	Joshua Olds	Jamie Shin
Datamodel	50%	50%
Prototypes	50%	50%
Report	50%	50%
Presentation	50%	50%

Note: The entirety of this project was developed by both Joshua Olds and Jamie Shin meeting up and working on the assignment together, all components were spread equally and worked on equally together.