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Executive Summary / Analysis

This document aims to illustrate the process of creating a charity website dedicated to providing access to training and upskilling courses for those unable to afford to study for any number of reasons. This document will highlight the importance of information architecture and relevant technologies during the development of a web project. The overall goal of this project is to develop and showcase a website that meets all user requirements for our charity hub as well as functions with modern web technologies that will stand the test of time.

This document will compare the popular M.E.R.N (MongoDB, ExpressJS, React and NodeJS) stack with the M.E.A.N (MongoDB, ExpressJS, Angular and NodeJS) stack to see which technologies provide the best fit for the charity.

This project alongside more information can be found at GitHub:
https://github.com/HamishDrogemuller/WEB701_Charity_Assessment.git

Contents

Introduction:

Designing the Website:

This document aims to define a step-by-step process to develop and compare modern technologies used in the creation of a functional website that meets the requirements for the Quill training charity.

This report will explore and analyse Information Architecture. This is a recommended best practice in Website design that helps to define and promote core values, visions and goals for Quill training Charity.

Website Brief:

The founders of the Quill training Charity wish to have a website developed to help bring their resources to those in need. They provided a series of statements for what they wish the website to entail.

Quill Training Charity is based in Nelson and is dedicated to providing training and upskilling opportunities to those who lack access to training resources.

The purpose of our new website will be to help those in need access our various resources as well as provide a hub for those that provide training for us to advertise what they provide to those users. The website will require a way for users to register and access these resources as well as providers to list those resources.

The website lets providers or donators provide tokens, further referred to as credits that our beneficiaries can spend on courses or training opportunities. To achieve this we would like to have an online credit function that lets our beneficiaries access a limited count of credits. This in turn means that the system will require a way to verify the member that is accessing a resource and verify and consume the credit for said resource. The website requires a homepage providing general information about Quill Training Charity along with a way to view products and services such as: types, characteristics, fields and benefits.

The website will require the following:

Charity providers and beneficiaries can register, login and administrate their own accounts.

Beneficiaries will use the system to receive and use credits, providers will use the system to register their services.

Interactive elements that engage users

An interface that allows providers to confirm tokens.

Site Goals:

Quill Training Charity wishes for the site to provide an easily accessible and marketable hub to allow them to provide their services to as many people as possible. By providing these services through this hub that is more easily accessible they will be able to connect more and more beneficiaries with services from all their providers.

Website Mission:

To provide training and upskilling opportunities provided by the community to beneficiaries using an online medium. Beneficiaries within the community can now visit Quill Training Charity online to view local opportunities. This expands the availability of Quill to reach as many people in need as possible.

The website should be minimal and straight to the point to allow for the key information to be displayed to all users.

Short and long-term goals:

The short- and long-term goals are to provide a website that can be easily interacted with by the local community and has the ability to be scaled to provide services to various cities across New Zealand.

Intended Audiences:

Quill Training Charity is aimed at people of all ages who require training and upskilling to find a job or new career. This charity is aimed at those who are generally unable to afford the money or time needed for training. This charity aims to also provide a way for local businesses to reach members of the community that could also become a benefit for their businesses in the future.

Why will people come to the website?

By analysing the correct target audience, goals, and objectives this will assist us in better reaching and informing the interested parties.

A minimal, engaging and simple website alongside a plethora of providers will create key hub for user interaction. This will mean that users can make a secure decision to use items from this platform. The result of this will be a growing reputation for the Quill Charity which will lead to returning and growing beneficiaries and providers.

User Experience:

Audience:

An engaging and easy to navigate web site that providers and beneficiaries can use to donate time, resources and obtain training.

The audience types will be explored in depth below.

Audience Type 1:

Providers. This type of audience will interact with the website in a way that allows them to register details for services and training the wish to provide.

Audience Type 2:

Beneficiaries interact with the website in a way that allows them to book and receive training and services from the providers.

Stories, Scenarios and Personas:

Persona 1:

Name: James Hunt

Gender: Male

Age: 48

Background: James is the owner of a local mechanical business. He has noticed a lot of people mentioning they would love to know more about cars but have never had the opportunity to learn. James would love to help teach people but doesn't know where to start. Due to his age and limited technology interaction, he would like the website to be as easy to understand and follow as possible.

Goals: To provide his time and expertise to help those in the community upskill and learn more about mechanics.

- James would like to register as a provider and list bookings.
- James needs to view and manage the bookings that he has provided.
- James needs the website to be intuitive and functional.

Persona 2:

Name: Megara Jamesdottir

Gender: Female

Age: 23

Background: Megara is currently between jobs and is unable to afford to study, she is hoping to be able to learn some new skills to help get a new career jumpstarted. Megara does not have access to a computer regularly but always has her phone.

Goals:

- Megara needs to use the website through her phone and be able to access everything the website can provide.
- Megara wishes to use the website as a beneficiary.
- Products must have adequate details for Megara to decide if its what she wishes to take.

Persona 3:

Name: Barry Jones

Gender: Male

Age: 71

Background: Barry is a retired truck driver with 40+ years of experience who wants to help provide training to those in the community. Barry has reached out to his previous employer and they wish to sign up for the site as well.

Goals:

- Barry wishes to use the site for creating continuous reoccurring bookings.
- Due to Barry's advanced age he wishes for this to be as intuitive as possible.
- Barry requires a very simple way to accept credits.

Persona 4:

Name: Felicity Jones

Gender: Female

Age: 32

Background: Felicity is a single mother who wishes to use the website to upskill and learn a career in book keeping. Due to not having much free time she wishes the process of finding information to be as quick and painless as possible.

Goals:

- A simple site that provides fast and easy access to resources.
- The ability to sort training products based on category

Site Content

Content and Functional Experience:

Content List:

Home Page

- The home page will contain an attention capturing(hero) image and text that concisely explains what Quill Training Charity is about. A Nav Bar, header and footer will be present. More information will be provided in structured blocks of information or tiles. Buttons providing quick access to providers will allow quick navigation within the site.

Login/Signup Page

- Situated in the nav bar will be a login/signup button which provides users with an easy to access way to login and signup. If a user tries to book any of the provided items they will be prompted with a login page. This will also be prompted if a provider clicks on a "Provide Services" button. If an account is present for a user they will be prompted to create one.

Category Page

- This will be a simplified page that provides the types of services and training available using information cards. Clicking on one will take the user to a page dedicated to that type of product.

Product Page

- Like the Category page, the Product page will provide all service and training listings through the use of information cards. Clicking on one of these items will redirect the user to the listing of that service with more details.

Cart Page

- This page will contain a list of all the services the user has selected for them to browse before confirmation.

Functional Requirements:

- Website will require a homepage that has general information about the charity and what it offers.
- Login/Signup will allow users to sign into an existing account with their credentials, Username and Password. There will be two account types, one being a beneficiary and one being a provider. Beneficiaries can browse available services and providers will be able to list services they wish to provide. A user will be able to browse the services without being signed in.
- Providers will be able to use the website to register their services and courses, beneficiaries use the website to acquire and utilise credits.
- Some form of interactivity with the user
- The system contains an interface for the authentication of credits.

Site Structure:

Metaphors:

Organizational Metaphor:

Functional Metaphor:

Upskilling and training are about expanding your skillset and evolving yourself through the use of study and hands on training. To this end a sense of growth and a personal "blooming" should be introduced through the website.

Visual Metaphor:

Due to the use of study and training being essential to successful upskilling the colours and styling of the Quill Charity website will be tailored around evoking hands on experience as well as literary imagery.

Site Structure Listing:

- Home Page
  - Nav Bar
    - Home
    - Login/signup
    - Category
    - Product
    - Cart
  - Image
  - Call to action button
  - Description of service and web platform
  - Footer
- Login/signup Page
  - Nav Bar
    - Home
    - Login/signup
    - Category
    - Product
    - Cart
  - Register account
    - Username
    - Email
    - Password
    - Confirm Password
  - Login inputs
    - Username/Email
    - Passwords
  - Footer

- Category Page
  - o Nav Bar
    - ▪ Home
    - ▪ Login/signup
    - ▪ Category
    - ▪ Product
    - ▪ Cart
  - o Search bar
  - o Smaller grid like content cards with a name as description underneath.
    - ▪ Clicking one of these cards will take the user to that category's products
  - o Footer
- Product Page
  - o Nav Bar
    - ▪ Home
    - ▪ Login/signup
    - ▪ Category
    - ▪ Product
    - ▪ Cart
  - o Content cards set up as a gallery with images of training items
    - ▪ Click on one of the cards takes the user to that products page. Revealing more information
  - o Search bar
  - o Footer
- Cart Page
  - o Nav Bar
    - ▪ Home
    - ▪ Login/signup
    - ▪ Category
    - ▪ Product
    - ▪ Cart

o List of items in user cart

▪ Cart shows what items the user has selected to obtain.

o Quantity of items

▪ User can adjust the amount of each item they are wanting to obtain.

o Footer

Navigation:

Global Navigation:

Global navigation allows the user to navigate through the many different areas of the website within the global navigation area. It contains the following areas:

- Home
- Login/Signup
- Category
- Product
- Bookings

The global navigation needs to be simple and easy to follow so it does not overwhelm and confuse the websites users. This will need to match the design of the rest of the website. Mainly being minimalistic and straight forward.

Local Navigation:

This should be the specific information shown within the category and products pages. These links will re-direct users from the pages listing category/products to pages containing detailed information.

Visual Design:

Wireframes:

Home Page
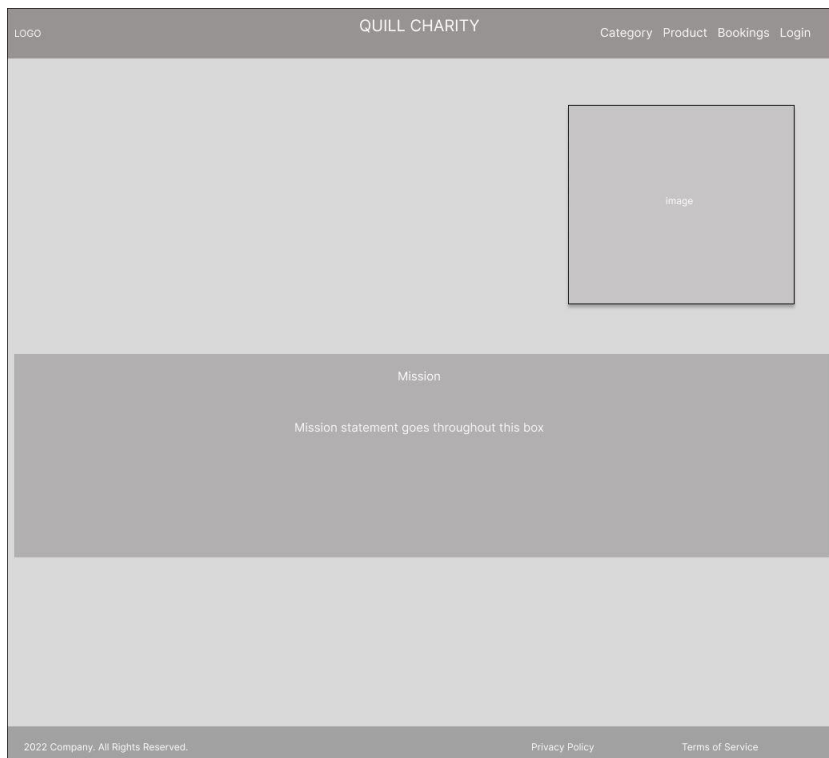
Login Page
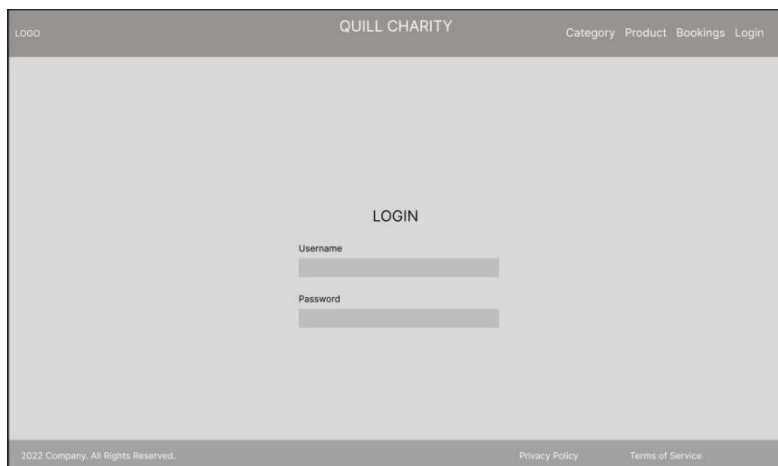
Categories

QUILL CHARITY

Category Product Bookings Login

Category

Label

Label

Label

Label

Label

Label

2022 Company. All Rights Reserved.

Privacy Policy   Terms of Service

Products

LOGO

QUILL CHARITY

Category Product Bookings Login

Products

Label

Label

Label

Label

Label

Label

2022 Company. All Rights Reserved.

Privacy Policy   Terms of Service

Bookings

QUILL CHARITY

Category Product Bookings Login

Bookings

Selected Bookings

Booking Name   Date

Booking Name   Date

Confirm

Privacy Policy   Terms of Service

CRUD Analysis:

CRUD for Quill Training Charity

	C = Insert	R = Select	U = Update	D = Delete
	Post	Get	Put	Delete

Process	User (User Email)	User Name	User Password	User Credits	Product (ID)	Name	Description	Image	Quantity	Bookings (User Email)	Product	Credits (ID)	User Email	Order ID	Order (ID)	Product ID	Category (ID)	Name
Add/ register a User	C	C	C	C						C	C							
Login User	R	R	R	R														
Logout User	R	R	R	R														
Edit User	R/U	U	R/U	U														
Delete User	D	D	D	D								R/D	D					
View Account	R	R	R	R														
Add a product					C	C	C	C	C									
Edit a product					R/U	U	U	U	U									
Delete a product					D	D	D	D	D									
View product					R	R	R	R	R									
Add to bookings										C	C							
Edit a bookings										R/U	U							
Remove from bookings										D	D							
View bookings										R	R							
Add Credit												C	C	C				
Edit Credit												R/U	U	U				
Remove Credit												D	D	D				
Create booking	R			R/U	R					R/U	R	R/D		C	C	C		
Edit booking															R/U	U		
Delete booking				R/U										D	D	D		
View booking														R	R	R		
Claim booking	R											R/D	R	R	R/U	R		
Create category																	C	C
Edit category																	R/U	U
Delete category																	D	D
View category																	R	R

Revisions: