

https://localharvesthub.com/

# MA Web Design And Content Planning

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# 1. Concept

### **Twitter Description**

A website that connects farmers to buyers in Nigeria

#### 1.1 Elevator Pitch

Nigeria is a nation with a proud population of over two hundred million people with a diverse and thriving landscape of business opportunities. Among the many ventures that people pursue for survival is farming, which stands out as profession that has always sustained entire communities.

In the past century, the face of Nigerian business has undergone a significant transformation. Many individuals in the rural communities have been enticed by the allure of urban life and have transitioned from traditional farming to various other professions. The belief that cities hold greater financial promise than farming has driven countless young people from rural areas to seek opportunities elsewhere.

Ironically, amidst this exodus, a fascinating trend has emerged. Some younger individuals and retiring adults are returning to farming, not as a fallback option but as a heartfelt calling. They are driven by a desire to cultivate a hobby that blossoms into a full-fledged business, one they can call their own, in contrast to the routine of a 9-to-5 job.

Yet, as with any business endeavor, farming presents its unique set of challenges. One of the most significant hurdles faced by those in the agricultural sector is the ability to market and sell their products effectively and promptly.

Recognizing this, I am embarking on building a website to bridge the gap between these passionate farmers and eager consumers. My vision is to create an online platform that will showcase the products of the farmers specifically those that engage in small-sized livestock like snails, fishes. This platform will connect producers with individuals who are not just seeking products but are also eager to support local, sustainable, and passionate farmers.

My target audience for this platform is broad and inclusive, spanning from age 18 and beyond. What matters most is the shared passion for promotion and the growth local agriculture and nurturing the growth of these remarkable businesses.

In essence, my journey is about leveraging technology to empower traditional farmers and emerging agricultural entrepreneurs. By creating a space where their dedication and exceptional products can shine, I hope to contribute to the farming and agricultural sector in Nigeria and foster a sense of community among those who appreciate the value of our rich agricultural heritage.

# 1.2 Description of the problem

In the world of livestock farming, a tremendous amount of hard work and dedication goes into tending to the animals. However, the challenges that farmers face when it comes to selling these products are equally significant.

For many livestock farmers, the process of selling their goods is full of obstacles. They often find themselves compelled to offload their hard-earned produce to middlemen, who then transport and resell these products in larger markets. This intermediate step not only erodes the profits earned by the farmers but also results in them receiving less-than-favorable prices for their goods.

Transportation is another difficult aspect of this process. Livestock products often need to be transported over long distances to reach consumers or larger markets. The responsibility of handling and moving these livestock's can be costly, time-consuming, casualties of livestock and physically strenuous for farmers who are already stretched thin with their daily farm tasks.

On the other side of the equation are the consumers, who also face challenges in obtaining the products they need. It's an irony that in some cases, consumers may reside in the same localities as the farmers, yet they struggle to access the goods directly. This disconnect arises from a lack of information and access to the products available within their vicinity.

It's an intriguing scenario where consumers and farmers, who are geographically close, remain separated by a veil of information. If consumers had the knowledge

and means to connect directly with local farmers, they could acquire the products they need without the need for long journeys or intermediaries.

# 1.3 Value Proposition

This situation highlights an opportunity to create a bridge, a platform or network that connects farmers directly with their local consumers. Such a system would not only empower farmers to get fair prices for their products but also make it convenient for consumers to access fresh, locally sourced livestock goods.

Ultimately, addressing these challenges involves leveraging technology and communication channels to connect and inform both farmers and consumers. By doing so, we can foster a more efficient and mutually beneficial relationship between those who produce our livestock products and those who rely on them.

# 2. Business and Cultural Context

#### 2.1 Business environment

Agriculture, a cornerstone of Nigeria's economy, holds immense potential yet remains significantly underutilized. While it continues to contribute to the nation's revenue, its true capacity remains untapped.

Agriculture in Nigeria is primarily driven by private individuals who see it as both a means of livelihood and a potential source of passive income. These resilient farmers, spanning the length and breadth of the country, play a vital role in sustaining the sector.

"The agricultural sector suffers from extremely low productivity, reflecting reliance on antiquated methods. Agriculture has failed to keep pace with Nigeria's rapid population growth, so the country, which once exported food, now imports a significant amount of food to sustain itself. However, efforts are being made towards making the country food sufficient again. Africa's most populous country has failed to grow more food for its fast-rising population who must be fed with staples ranging from rice, beans, maize etc.

Nigeria ranks sixth worldwide and first in Africa in farm output. The sector accounts for about 18% of GDP and almost one-third of employment. Though Nigeria is no longer a major exporter, due to local consumer boom, it is still a major producer of many agricultural products." (Ref: Wikipedia)

"It said the total annual fish demand in Nigeria is estimated at 3.4 million metric tons. While about 40 percent of this demand is met domestically, over N125 billion (\$625 million) is spent annually on fish importation ". (Ref: Premium times Nigeria)

It is crucial to highlight that Nigeria's agricultural sector encompasses four key sub-activities: Crop Production, Livestock, Forestry, and Fishing. However, this project primarily centers on the livestock sector, with a specific focus on small-scale livestock such as fish, snails, and poultry. These particular livestock options

demand relatively modest capital investment and space for initiation, with snail farming being an excellent example. Furthermore, they necessitate minimal effort, particularly when pursued on a small scale, making them well-suited for hobbies or subsistence farming, which serves the purpose of providing sustenance for the immediate family.

# 2.2 SWOT Analysis

### Strength

The central mission of this website is to alleviate the financial burdens and logistical complexities that livestock farmers and prospective buyers commonly encounter. By establishing an accessible online platform, I seek to streamline the process of connecting these two crucial stakeholders in the livestock agricultural sector, thereby diminishing their operational costs and transportation challenges.

My website is dedicated to enhancing local awareness of livestock products and practices. This increased awareness not only benefits livestock farmers and buyers but also contributes to the overall growth and sustainability of the local livestock sector.

Furthermore, I aim to help expedite the sale of livestock products once they reach maturity. Time is often of the essence in livestock farming, and my platform is designed as an option to display products thereby creating a bridge for both buyers and sellers to get in touch with each other. This means that farmers can turn their livestock products into revenue more promptly, reducing the financial strain associated with prolonged holding periods.

Additionally, one of the standout features of this project is its remarkable specificity and user-friendly approach. By "specific," I mean that it exclusively centred on the livestock sector, providing a streamlined experience unlike more expansive websites that encompass a wide array of products and activities. These broader platforms often necessitate navigating through numerous links and subcategories to locate the pertinent information or services you require.

In contrast, my project has a clear and direct focus on selling livestock with snail as the focus and starting point, ensuring that users can access the information

they need without unnecessary complexity or diversions. This simplicity enhances the overall user experience and facilitates efficient engagement with the livestock community.

Also, this platform is accessible to everyone in Lagos who wish to showcase their livestock-related products. What sets this project apart is the commitment to providing this service entirely free of charge. This inclusive approach not only encourages participation but also supports the local livestock industry by enabling individuals and businesses of all sizes to exhibit their offerings without financial barriers.

#### Weaknesses

Given that harvests in agriculture can often be seasonal, it's crucial to recognize that the number of registered users on the platform could affect the user experience. This means that even if there's a low seller base, potential buyers won't may encounter unavailability of products most of the time or farmers waiting a while before being contacted based on their advertised livestock on the website.

Furthermore, one of the challenges I could face is persuading individuals to embrace this modern platform, especially when they may be entrenched in traditional methods. Convincing people to shift from their established routines to adopt a contemporary approach can be a hurdle.

I have plans to transition this project into an open-source platform in the future, where individuals from anywhere can freely register, log in, and showcase their livestock-related products. However, for the time being, farmers with products will to get in touch with me directly to assist with the process of uploading images, setting up product displays, and ensuring that the contact details of various merchants are accurately represented.

Additionally, I'm initiating this project with a deliberate focus on a single livestock category, namely snails. This serves as my pilot test, a foundational step allowing us to refine and enhance the website's functionality and user experience before expanding to include other livestock animals. While this initial emphasis is on snails, the platform's future evolution will encompass a broader spectrum of

livestock offerings. For now, it may appear as if the platform exclusively caters to snail-related content, but my goal is to provide a comprehensive livestock marketplace in due course. Feedback and participation in this early stage are invaluable while I work towards building a robust and inclusive livestock community.

## **Opportunities**

The platform is dedicated to providing seamless access for both buyers and sellers, making it exceptionally user-friendly. But it's more than just an online marketplace; it's a hub for fostering community-driven business groups. These groups serve as valuable networks where like-minded individuals within the community can come together to share knowledge, experiences, and ideas.

A vital key objectives is to tap into the large youth population, providing them with opportunities to escape redundancy and embark on legitimate business ventures. Many young people are seeking ways to kick start their entrepreneurial journeys, and this platform can encourage this aspirations. By connecting with others in these business groups, they can gain valuable insights, receive tips, and access advice from those who have successfully navigated similar entrepreneurial paths.

In essence, my platform goes beyond being a simple marketplace; it can be an avenue which empowers individuals to not only conduct business but also to form meaningful connections, gain mentorship, and embark on fulfilling entrepreneurial ventures. It's a place where the community comes together to support and uplift one another.

On a personal level, this website serves as a tangible representation of the knowledge and expertise I've gained during my Master's program. Moreover, it acts as a motivating force, driving me to continually acquire new skills and knowledge in order to enhance and expand the website's capabilities. This ongoing commitment to improvement is driven by a desire to meet the evolving needs of our users and to showcase my proficiency, ultimately paving the way for potential career opportunities in web development and related fields in the future.

#### **Threats**

Rather than placing blame solely on external competition, I must acknowledge that I have the potential to impact the success of the website as well. My initial focus should be on demonstrating unwavering dedication and commitment to the website, particularly in terms of how I respond to constructive feedback. I should also be open and willing to learn, as this is essential for meeting the necessary upgrades and improvements that will ensure the website's continued growth and competitiveness.

Since it's not an open-source website allowing users to update their details independently, this limitation could potentially lead to delays in response times and the display of content.

# 3. Research

I will conduct a comparative analysis with other websites that share similar content to identify areas where their website may be lacking and where it might have complexities in features or information. This assessment aims to provide a comprehensive understanding of how I can improve my website or justify its simplicity in functionality and content presentation by learning from successful practices and avoiding potential downsides observed in competitors' platforms.

# https://lekkifarms.com/

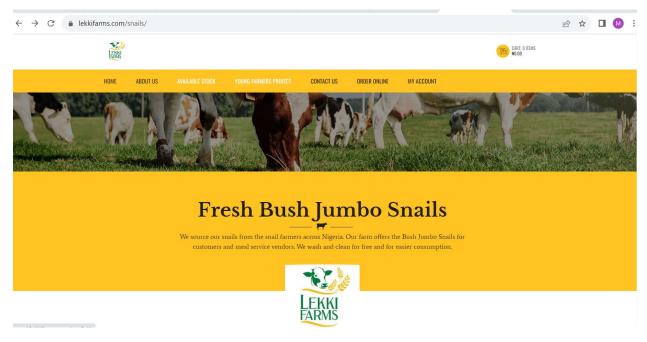


Fig 1 cognate website

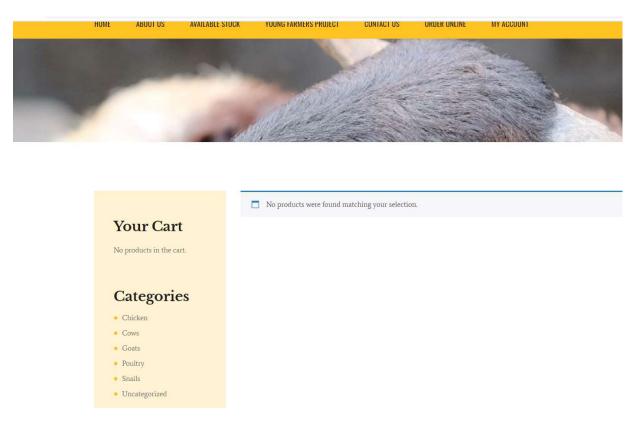


Fig 2 cognate website error

They operate as intermediaries by sourcing products for resale on their website. In essence, they act as middlemen, facilitating the availability of various products by actively searching for and curating an inventory themselves, which is then prominently displayed on their online platform. Notably, the pricing structure on their website adheres to a fixed model, just like a typical online store, where prices are set and consistent for the convenience of customers.

An intriguing observation is that when you attempt to place an order for snails and poultry, the search function consistently returns results indicating that no products are available. This issue has persisted over an extended period, suggesting that the platform might prioritize larger livestock such as cows and goats, as these are the only categories yielding search results. This selective focus on specific livestock categories might explain the lack of snails and poultry offerings.

My website incorporates a dynamic pricing model that encourages healthy competition among sellers. This pricing flexibility is driven by various factors, including the farmer's discretion in determining prices, which can be influenced by factors such as product size or quantity. Unlike a fixed pricing system, this approach allows for a range of price points, fostering a market environment where buyers can choose from a variety of offerings based on their preferences and needs.

Moreover, a crucial aspect of this project is transparency. If a particular product becomes unavailable, it is promptly and explicitly indicated on the website. Furthermore, if a product remains unavailable for an extended period, it is then delisted from the website. This ensures that the platform maintains an accurate and up-to-date inventory, enhancing the overall user experience for both buyers and sellers.

# https://www.nairaland.com/



Fig 3 cognate website 2 landing page

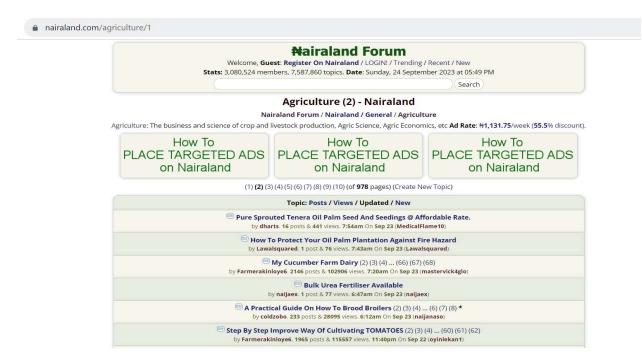


Fig 4 cognate website 2 Agriculture section

This website operates as an open-source platform, welcoming individuals to log in and share diverse content spanning categories such as news, sports, entertainment, agriculture, and more. With its broad spectrum of topics, finding specific information often requires diligent searching, occasionally relying on chance to stumble upon valuable content.

It is good to note farmers have the opportunity to showcase their products on this platform. However, the challenge lies in visibility. On a single page, one can encounter a wide array of unrelated items, sometimes up to 50 listings per page. As new postings continually populate the platform, older content can swiftly get pushed into subsequent pages. The website's page structure is primarily dictated by the chronology of recent, unrelated postings, which can make it challenging for users to locate specific agricultural products or other content of interest.

# 4. Commodity

When assessing the website content and the adopted strategy, it becomes evident that the primary mediums used are text and images, with an emphasis on achieving a balance between the two. During my evaluation, I made a deliberate effort to pair suitable images with textual content and integrated relevant links for enhanced user experience.

The intended audience for this website primarily comprises individuals aged 18 years and above. This demographic represents individuals who have typically completed their high school education and are at an age where they are capable of establishing businesses or pursuing ventures. Many of them might also hold full-time jobs while harboring a passion for side projects or endeavors that they are passionate about and aspire to nurture into future businesses.

Considering the socio-economic backgrounds of the target audience, it is imperative that I maintain simplicity in my website design and navigation. My goal is to create a user-friendly platform where individuals can easily submit their products and have them showcased in the product catalog. This approach is not dictated solely by socio-economic factors, but rather by the practicality of catering to individuals with 9 to 5 jobs who seek a streamlined experience.

In line with this user-centric approach, the goal is to ensure that products submitted are promptly featured in the recent listings on the product page. My aim is to minimize the need for extensive navigation from the homepage to access these products. This simplicity and efficiency in design is aimed at meeting the needs of the audience, regardless of their socio-economic backgrounds or employment status, ensuring a hassle-free and enjoyable browsing experience for all users.

To further fortify my content strategy approach, I will analyze individual personas and their unique journeys. This analysis will provide greater clarity and insight into my strategy implementation for this project.

#### **User Personas**

#### Persona 1

Victor 25 is a fresh accounting graduate waiting to secure his first white collar job. He has a catfish farm that he started off as a hobby during his holidays when he was still in his 3rd year at the university.

#### **Pain points**

- There is no market that sells catfish in a 30km radius of his location.
- No livestock website he can upload his catfish to.

#### Goal

- Possibility of selling to make a passive income
- Could invest more time and to turn it into a commercial business



#### Fig 5 persona victor

#### Persona 2

Ada 64 is a retired teacher and a widow. She has a big house with enough space to start a snail farm

#### Pain points

- Is not ready to run around to places to sell the snails
- Her children are living far off and stays alone

#### Goal

- Waking up in the morning and having something to keep her busy.
- The inflation has affected her pension and needs to augment her earnings from another source.



#### Fig 6 persona Ada

#### Persona 3

Andrew 48 year old. He is a restaurant and bar manager.

### Pain points

- Challenges with sourcing catfish, snails
- The staff that handled procurements has relocated.

#### Goals

- Make his restaurant and bar the best in the community.
- Render premium service with no excuses



Fig 7 persona Andrew

The interview process yielded valuable insights that served as the foundation for the development of personas. These personas, in turn, gave rise to two distinct narrative categories, each providing a unique perspective: one from the vantage point of farmers and the other from the perspective of buyers. These narratives not only encapsulate the essence of the interviews but also offer a rich and comprehensive understanding of the experiences and viewpoints of both farmers and buyers.

In summary, for the farmers, when we consider the sellers or farmers, a common thread emerges—a shared challenge in the process of selling, which revolves around the need to travel extensively or search for suitable markets to sell their livestock products. What initially began as a humble pet project has evolved into a promising business opportunity that they are eager to harness and leverage to its full potential.

While from the buyers' perspective, their primary concern lies in the precise identification of the spot or location where they can procure specific livestock products, including particular breeds and desired quantities. The acquisition of this crucial information becomes crucial for them prior to embarking on their journey, as it ensures that their efforts are not wasted in futile searches. This emphasizes the significance of accurate and accessible information for buyers, enabling them to make informed decisions and streamline their purchasing process effectively.

# 4.1 Content Strategy

As previously mentioned, the contents of the website, encompassing both images and text, along with the overall design, will adopt a semi-formal aesthetic. This approach strikes a balance, avoiding excessive seriousness that might alienate some users, particularly those who may not consider themselves highly educated, while also steering clear of informality that could give the impression that neither the users nor the administrators take the platform seriously.

In particular, the text on the website will be crafted to be highly legible and employ typography that appeals to a wide range of individuals, irrespective of their background or level of education.

The "Home Page" will serve as a brief introduction, clearly articulating the website's purpose, ensuring that users quickly grasp its core mission. For more comprehensive insights into the website's objectives and mission, users can refer to the "About Page."

Furthermore, the use of images throughout the website will play a crucial role in reinforcing its livestock-centric focus, aiding individuals who may have difficulty with reading to discern the platform's primary theme and purpose.

To facilitate communication and engagement, the website will feature a dedicated "Contact Page." This page will serve as a point of interaction for both buyers and sellers, enabling them to convey their intentions, inquiries, or any other relevant information to the website's administrators, fostering a user-friendly and responsive platform.

# 4.2 User Journey Map

# Farmer's Seller's Journey Map:

- **Awareness:** At this initial stage, the farmer becomes aware of the opportunity to sell their livestock product, often prompted by their surplus or a newfound business potential.
- **Research and Preparation:** The farmer embarks on a journey of research and preparation, seeking information on marketplaces and the logistics of selling their product.
- **Negotiation and Sale:** The process of negotiating with interested buyers and finalizing the sale occurs in this phase.
- **Delivery and Fulfillment:** Post-sale, the farmer ensures the product is delivered to the buyer according to the agreed terms.
- **Feedback and Improvement:** Valuable feedback from the transaction is gathered, aiding in potential future improvements.

# **Buyer's Journey Map:**

- **Recognition of Need:** The buyer recognizes the need for a specific livestock product or breed.
- Research and Information Gathering: Search is conducted to identify sources, prices, and product details, which involves visiting websites or potential sell points.
- **Decision-Making:** The buyer evaluates options, considers factors such as quality, pricing, and seller reputation, and ultimately makes a purchase decision.
- Purchase: The actual transaction, payment, and confirmation of the purchase take place.
- **Product Receipt and Evaluation:** After receiving the product, the buyer assesses it against their expectations.

 Feedback and Future Intentions: Feedback regarding the purchase may be provided, and future buying intentions are considered.

Building upon the preceding discussion, I will now delve into the details of the User Journey Maps in the context of my website, presenting a comprehensive overview of the user experience from two distinct perspectives: that of a farmer looking to sell a product and that of a buyer seeking to make a purchase.

These User Journey Maps have been thoughtfully divided into two distinct phases, each providing unique insights into the respective user's journey:



Fig 8 journey for farmers



Fig 9 journey for buyers

In order to enhance the overall user experience of my website, it is imperative to actively solicit feedback from users regarding their journey on the platform. This invaluable feedback will help identify any pain points they may encounter while navigating the website and provide insights into how we can optimize their experiences. It is crucial to remember that the website is not solely for the developer but primarily for the users, and our primary goal is to ensure they have the most exceptional experience possible while using it. By engaging in a continuous feedback loop with our users, I can refine and enhance the website to meet their needs and expectations, ultimately creating a more user-centric and satisfying online environment.

# 5. Firmness

This encompasses the comprehensive technical components or technology, and resources essential to bring the website from concept to reality. To transform a vision into a fully functional website, it entails carefully selecting and implementing the appropriate programming languages, content management systems, and hosting infrastructure.

# **5.1 Front-end Technology**

#### **HTML**

The use of HTML as the foundational building block for the website structure was inevitable, I applied the knowledge and skills I've acquired in creating clean and effective code during this Master's course. Throughout this process, I placed a strong emphasis on adhering to best practices and principles of semantic HTML. This approach allowed me to create a well-structured and organized framework that not only facilitates effective styling and scripting but also prioritizes user experience.

In particular, I took special care to include semantic elements where appropriate, ensuring that the content's meaning and structure are conveyed accurately to both browsers and assistive technologies such as screen readers. This commitment to semantic coding is a testament to my dedication to web accessibility, making certain that the website is inclusive and usable by a diverse range of individuals, including those with disabilities.

#### **CSS**

In the realm of styling, I opted for pure CSS without relying on frameworks, driven by my desire to gain a solid foundational understanding of CSS as I progressed through my learning journey. It was truly enlightening to witness the evolution of CSS and embrace the novel techniques it now offers. For instance, I embraced the concept of CSS variables, which allowed me to assign meaningful names to colors, simplifying their application throughout the website. Furthermore, it was intriguing to discover that certain functionalities typically achieved with JavaScript, such as creating dynamic dropdown navigations, could be accomplished elegantly with CSS alone. This revelation significantly influenced my project, leading to a minimal, if not entirely absent, utilization of JavaScript.

# **5.2 Content Management System (CMS)**

Content management systems (CMS) play an indispensable role in efficiently managing websites, particularly when dealing with dynamic content that requires regular updates, such as adding new information or removing obsolete data, like images associated with products that have been sold. Prior to embarking on this project, I was largely unaware of the significant impact that CMS platforms could have on web development and maintenance.

The realization of the importance of a CMS gradually unfolded during the course of this project. It became evident that a CMS simplifies the content creation and editing process. I made the decision to utilize WordPress as my content management system primarily because of its widespread popularity and my prior awareness of its existence. Although I had not previously used WordPress or undergone any formal training in it, it stood out as a familiar name in the realm of CMS platforms. However I have learned that there are alternative CMS options available, one of which is Drupal.

Apart from being a good recommendation by experts WordPress was driven by its reputation for user-friendliness and an extensive community that offers a wealth of resources and support, I also established that there are future opportunities the knowledge of WordPress can offer.

One of the ambitious challenges I willingly embraced when adopting a content management system (CMS) was to delve into the world of theme development. Instead of opting for readily available open-source themes on WordPress, I was determined to create a custom, bespoke theme from scratch. This approach allowed me to craft a unique visual identity for my website, where the color schemes, layout, and overall design would be tailor-made to align precisely with my project. It presented a steep learning curve but also an opportunity for creativity and personalization. Through this endeavor, I not only expanded my

skill set but also gained a profound appreciation for the power and flexibility that comes with crafting a bespoke theme within a CMS.

# **5.3 Plugins**

I consciously refrained from resorting to plugins unnecessarily throughout the project, reserving their utilization for the contact form where it seemed like the most practical solution. In this specific instance, I opted for a plugin out of necessity, as it appeared to be the most viable way to implement the contact form functionality. Simultaneously, I considered this as an opportunity to gain firsthand experience in working with plugins.

Looking ahead, I am contemplating a potential revision of the contact page's design, aiming to prominently display my contact details, because I am yet to delve into the backend processes related to form submissions, such as information handling and storage. These aspects remain on my development agenda, and I plan to address them in due course to ensure a seamless and efficient system for managing user inquiries.

Other areas I Used a plugin was installing WPvivid for creating backups and MonsterInsights for implementing Google Analytics.

# 5.4 Domain name and Hosting

I acquired my domain name through Namecheap, while the management of my website's hosting is entrusted to Clook. Clook is well-regarded for its swift responses and responsive customer support, although it does come with certain limitations in terms of bandwidth and storage capacity. In light of these considerations, I made a deliberate choice to prioritize service quality over quantity, recognizing that the exceptional support provided by Clook outweighed the constraints on resources.

# 6. Delight

This phase of the project is dedicated to the visual aesthetics of the website, including crucial elements such as the choice of typefaces, color palettes, images, and the creation of a distinctive logo. Essentially, this stage revolves around crafting the website's unique identity and personality, which will leave a lasting impression on its visitors.

Interestingly, up until this point, I haven't yet divulged the website's name. This isn't due to oversight but rather a deliberate decision. It wasn't until this phase that the name for the website emerged or was conceptualized. The reason for this timing is that I wanted the aesthetics and design elements to organically influence and inspire the website's name.

The journey commenced with defining and presenting a unique identity upon my brand. It's contemplating how I would want my website to be perceived if it were a person. This process involved exploring deep into the essence of what my brand represents and the impression I aim to convey to its audience



Fig 10 website Identity

This is a business platform that will be an option enabling farmers starting with snails showcase and sell their products. Into the future, other small scale home grown livestock will be added building upon the success and valuable insights gained from this initial experience.

Choosing a name proved to be a time-consuming task, as I encountered difficulty in finding a name even when I sought feedback from others.

Some of them included: Fleshygrown, Rearconnect, Rearconexn, Reareazy, Rearsell

I embarked on a thorough analysis of the fundamental essence of my website's purpose, which is rooted in the concept of facilitating local accessibility. My primary objective was to create a platform that would empower individuals to procure livestock products from nearby or local sources, eliminating the need for travel. Simultaneously, I aimed to provide a valuable service to local farmers by connecting them with local buyers, reducing the necessity for difficult journeys to sell their products.

This deep dive into the core principles of accessibility and locality stressed the significance of the project and thus created the first name which was "LOCAL".

At the heart of agriculture and farming lies the aspiration for a fruitful harvest, whether in the form of livestock or crops. The essence of this endeavor is to sow and nurture, with the anticipation that what is planted will not only grow but multiply, yielding a bountiful return. I therefore selected the word "HARVEST"

In the digital realm, when you want to describe a central point or a communal space where people can gather and network, it's quite common to use the term "hub." It conveys the idea of a central, organized place for various activities and interactions. No other word came readily to mind, "Hub" seemed a fitting choice to express this concept in the digital context.

That's the story behind the name "Local Harvest Hub," which was finalized just before the prototype presentation. At that point, I conducted a thorough search

to check the name's availability, and I was delighted to find that it was indeed available for use.

#### 6.1 Colour

In some cases agricultural representation and all things related, the color green is virtually present. It serves as a symbol of vitality, health, and happiness. From the onset, I was certain that green would play a significant role in the visual identity of my project. However, what caught me by surprise was the meticulous consideration that needed to be given to the specific shade of green.

Choosing the perfect shade of green became a tough decision in the design process. It was essential to strike the right balance between a shade that conveyed the vibrancy of agriculture and the tranquility of nature while aligning with the overall brand identity.

Green was just one of the colors I had to deliberate on for the project's visual representation. To make an informed decision, I embarked on the process of curating a collage of colors inspired by various image representations. This approach allowed me to explore a diverse palette and consider how different colors interacted with one another, aiding the selection of a harmonious and visually appealing color scheme for the project.

# **Mood Images**







Fig 11 mood images

# **Colour Palette**



Fig 12 colour palette 1



Fig 13 colour palette 2

My initial prototype was constructed with these colors in mind, but I quickly realized that the chosen palette rendered the website rather dull and lifeless in appearance. The feedback I received suggested that the mood images I had employed might not have been vibrant and well-optimized, which could have contributed to the lackluster appearance of the website.

I proceeded with my project, keeping in mind that I would seek professional guidance from individuals with more experience in color and design. This guidance ultimately materialized in the form of expert advice when I was working on the design of my project's logo.

# 6.2 Logo







Fig 15 logo sketch 2



Fig 16 logo choice 1



Fig 17 logo choice 2

The green logo the snail worked perfectly as it gave life to what I had before as prototype. I got the two Primary colors of my website here. "The yellow shade, with its vibrant and sunny hue, connotes a multitude of meanings, evoking images of sunlight gently kissing the Earth's surface, symbolizing the birth of new life, and radiating a refreshing warmth that envelops everything it touches."

Overall below are the new collection of colours that was used to build the website.



Fig 18 website final colour palette

# 6.3 Typography

For the website, I opted for the elegant and readable Google font called Lora, specifically using the serif typeface version exclusively for headings. This choice was deliberate, as I intended it for shorter pieces of text to maintain both readability and aesthetic appeal.

# Google font LORA Used for Headings only

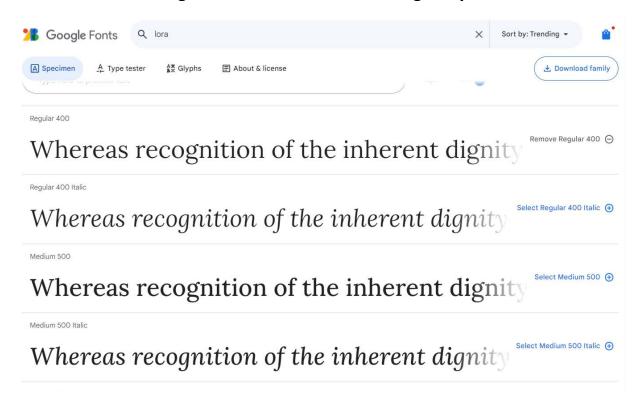


Fig 19 Lora typeface

The written content within the body of the website has been created using the Google Open Sans typeface. Open Sans, known for its clean and minimalist design, was chosen deliberately to serve the diverse demographic of visitors I anticipate on the website. Its unadorned simplicity ensures that the textual information remains highly legible and accessible to all, regardless of their background or age.

This strategic choice of Open Sans represents the commitment to providing an inclusive and user-friendly online experience. By maintaining a straightforward and design-neutral typography for the main content. The aim is to prioritize readability and comprehension, ensuring that every visitor can access and absorb

the valuable information we offer on our website. This way, I can cater to a broad spectrum of users.

# Google font Open Sans Light 300 Whereas recognition of the inherent dignity Light 300 Italic Whereas recognition of the inherent dignity Regular 400 Whereas recognition of the inherent dignity Select Light 3 Whereas recognition of the inherent dignity Select Regular 400 Whereas recognition of the inherent dignity Select Regular 4

Fig 20 open sans typeface

However the fallback for both typefaces (serif and sans-serif) were also made available.

# 6.4 Images

The captivating images adorning my website were thoughtfully curated from two renowned sources, Unsplash.com and Pexels.com. Initially, I had my own set of images; however, recognizing the importance of maintaining a visually stimulating and motivational atmosphere during the website development process, I opted for these exceptional resources. The original images I possessed didn't meet the desired standards in terms of quality and aesthetics, which prompted me to seek out superior alternatives.

### 7. Prototype

The initial phase of developing the prototype began with the creation of a wireframe. This approach was chosen as a starting point to immerse myself in the project and set the foundation for building the website. However, I soon realized that my skills in wire framing were still evolving, and I wanted to ensure that the project would progress efficiently.

With this in mind, I made a strategic shift towards hard-coding using HTML and CSS. This transition allowed me to work directly on the website's structure and design, providing greater flexibility and control over the development process.

Below, you'll find the mobile design made using HTML and CSS, also you will find I still have the unappealing colours and images.





Fig 21 Desktop Wireframe

Fig 22 Mobile Wireframe

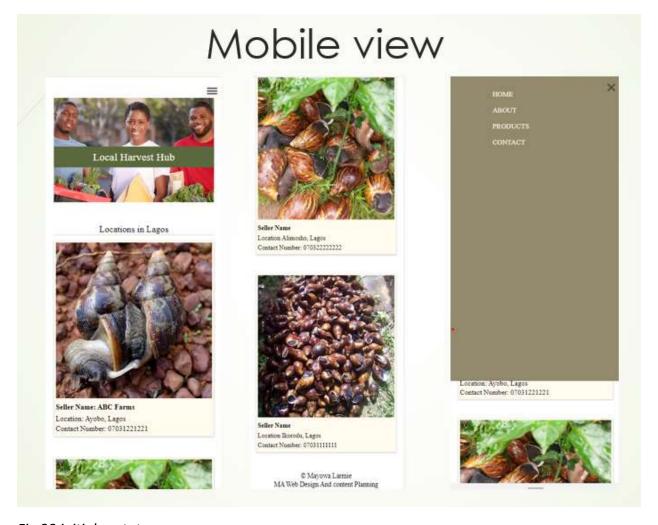


Fig 23 initial prototype

I embraced a mobile-first approach in the development of the website, prioritizing the creation of a mobile-friendly user experience as the initial stage of the project. At this juncture, the focus remained squarely on designing visually pleasing mobile interface. As a result, I had yet to implement the necessary media queries that would enable the seamless transition of the interface to its desktop version.

# 8. Implementation

The construct of the website seemed like a continuation of something already started, and I realised it was a good advice by my tutors. After receiving feedback from a prototype session, I was prompted to revisit various aspects of the project, with a particular focus on the color scheme. It became evident that adjustments were necessary not only in terms of colors but also in response to other constructive feedback provided. It was during this phase that the significance of a Content Management System (CMS) truly sank within me. It became clear that having a CMS in place would facilitate the seamless implementation of changes and updates to the website's content and design.

#### **8.1 HTML & CSS**

While adhering to the mobile-first approach, I began with the mobile version which allowed me to prioritize the user experience for smaller screens, ensuring that it was both responsive and visually appealing.

Once the mobile design was completed, I transitioned to the next crucial phase: implementing media queries. These queries were strategically set for specific breakpoints, namely 600px, 768px, and 960px, aligning with the common screen sizes of popular devices. This step allowed me to fine-tune the website's styling and layout, optimizing it for a range of screen dimensions.

Some design in functionalities are similar like the navigation menu across mobile devices up to 768px in width. Beyond this breakpoint, the website displayed the full navigation menu, offering users a seamless transition to a more expansive interface.

Another key consideration was image optimization. I carefully sized all images to meet my precise specifications, ensuring they remained visually appealing and properly scaled across various screens, this was achieved with the aid of Photoshop. This attention to detail allowed me to maintain image quality and proportions, regardless of the device used.

After completing my HTML and CSS work, a very important take away from David which is a valuable advice was done and that is to ensure the validity of my code.

I'm pleased to report that, upon inspection, my code was found to be entirely valid.

### **Link to Prototype:**

https://larmiedsg.co.uk/majorproject/mpprototype/index.html

# **8.2 WordPress Custom Theme Development**

The most challenging aspect of this project for me was undoubtedly the implementation of a Content Management System (CMS). During my final meeting with my supervisors, I humbly acknowledged the difficulties I had encountered while attempting to integrate the CMS. Despite repeated efforts on my part, I faced significant challenges and setbacks in my endeavors to make it work seamlessly.

I expressed my sincere apologies to my supervisors for not achieving the desired outcome in this particular aspect of the project. Prisca's response was straight her words exactly were "considering the nature of my project, I will need the CMS" and I asked if I could still pull it off in the time left and she warmly said "Yes". That was all I needed to find the courage to give it one more shot.

I went back and gathered all the mental strength left and did what I should have done earlier, that is, seeking guidance and support from my wonderful tutors and colleagues.

This experience served as a valuable learning opportunity, highlighting the complexities of CMS implementation and the importance of seeking guidance and support when facing such challenges.

Glad to say it was a success

#### SEO and Social media

The website currently maintains a presence on social media platforms.

Regrettably, my initial efforts were concentrated on addressing technical challenges in other areas, diverting my attention away from optimizing its social

media presence. Nevertheless, I plan to enhance and utilize these social media channels strategically as inbound links to our website in the future.

The website content received a positive response when shared via WhatsApp statuses, which contributed to the influx of traffic. However, to further amplify its online presence and reach a broader audience, I will apply a more formal approach, actively driving traffic from various other social media platforms to the website's social media account. This strategic shift will ensure a more comprehensive and effective engagement with our target audience.

## **SEO**

I decided to adopt a traditional SEO approach in order to decrease reliance on plugins and gauge its impact on the website's performance. While I might still consider using plugins in the future, I am committed to maintaining the speed and overall performance of the website as a top priority.

In pursuit of optimizing our website's search engine visibility, I implemented several key strategies. I ensured that the primary keywords were strategically placed within the meta tag descriptions and featured prominently in the initial paragraphs of the website's content. Additionally, I made sure that all images were equipped with descriptive alt texts, contributing to improved accessibility and search engine recognition. To further enhance search engine indexing, I meticulously adhered to semantic HTML practices, ensuring that our website's structure and content were organized in a search engine-friendly manner.

Moreover, I have also implemented a sitemap for our website. This sitemap serves as a valuable tool for web crawlers, facilitating rapid access to the site's contents. As a result, the website is more effectively crawled and indexed by search engines, ultimately enhancing its discoverability and search engine ranking.

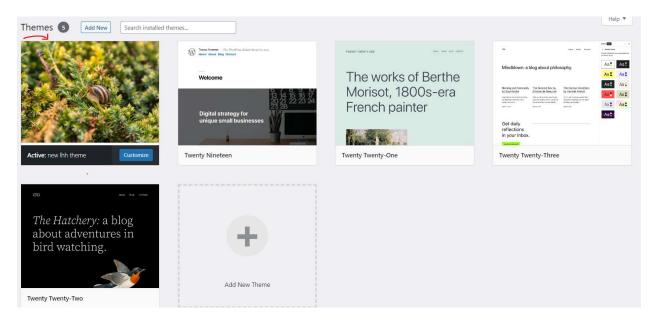


Fig 24 wordpress theme display

I gained a wealth of knowledge from the theme development process, and this experience was particularly enlightening since it marked my first into using a Content Management System (CMS). Through this journey, I not only expanded my understanding of CMS systems but also honed my proficiency in utilizing Google DevTools, specifically the 'inspect' feature accessible through a right-click.

The 'inspect' tool became an invaluable asset, allowing me to delve into the website's elements, trace their structure, and make real-time adjustments. I would experiment, fine-tune elements, and then transfer these improvements back to my code then I move the updated file to the server.

# 9. Website Analysis

#### 9.1 Site Performance

There are various tools available for assessing and analyzing our website's performance. I utilized several of these tools to run tests on my website, and I would like to share some of the key findings and results obtained from these diverse analyses

# GTMetrix- <a href="https://gtmetrix.com/">https://gtmetrix.com/</a>

The results from it were good. I remembered the first time I used it for an earlier project during the course work the result of that for "structure" was at 66%. On analyzing mine was pleased to see it rated well compared to the earlier project.

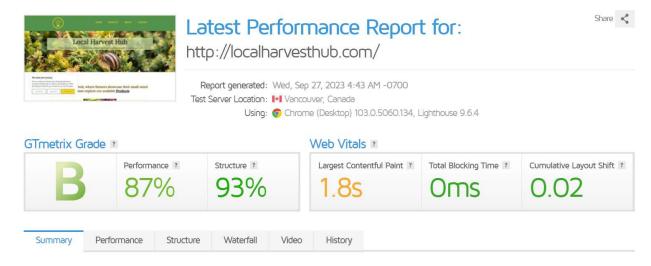


Fig 25 gtmetrix report

# Page Speed - <a href="https://pagespeed.web.dev/">https://pagespeed.web.dev/</a>

I conducted an additional assessment using the website page speed analyser. The report generated yielded positive results for the desktop version; however, it pointed out certain areas for improvement when it came to mobile performance. In the overall assessment, the website still received a passing grade

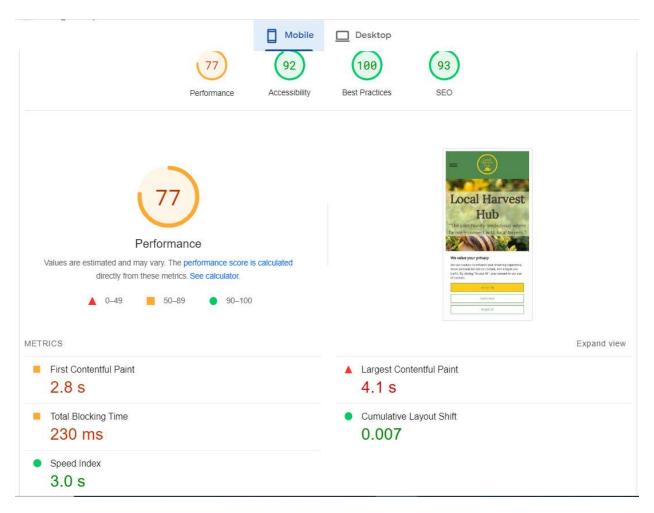
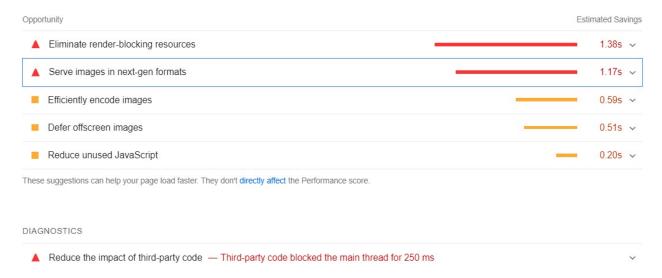


Fig 26 Mobile report pagespeed

# Below is the feedback analysis for the mobile



# Fig 26 Issues identified on Mobile. Page speed

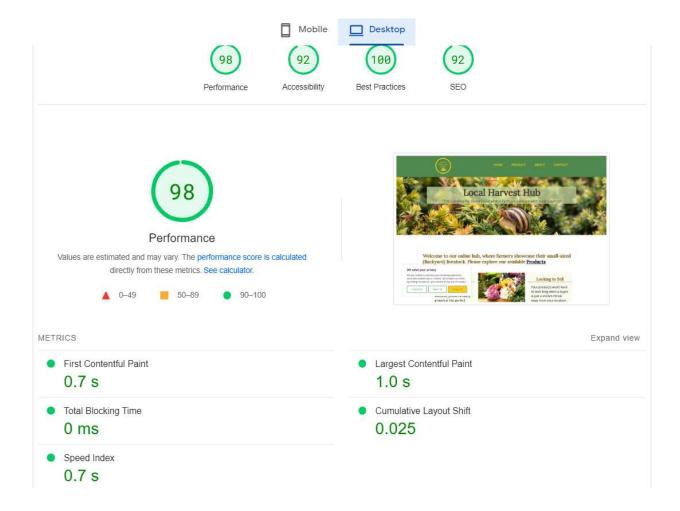


Fig 27 Issues identified on Desktop. Page speed

Desktop report from page speed.

# **SEO Analysis**

I analysed using the online tool <a href="https://seositecheckup.com/analysis">https://seositecheckup.com/analysis</a> to conduct a comprehensive analysis of my website, focusing on SEO checks. This invaluable resource provided me with valuable insights into areas where I could enhance and optimize my website's search engine optimization. I guess I was on the brink, however I will look at this issues identified and have them sorted to see how to improve the SEO performance of my website

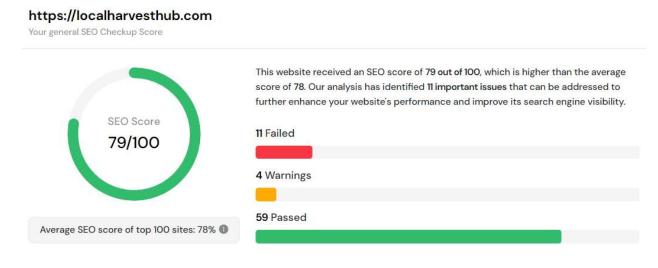


Fig 28 Seositecheckup report

#### HIGH

To provide a good user experience, <u>Google recommends</u> that sites should aim for a Largest Contentful Paint duration of 2.5 seconds or less.

#### HIGH

To ensure that Search Engines can accurately identify the topic of this webpage, it is important to include the most common keywords in the title tag, meta description, and heading tags.

## HIGH

To improve the website experience for your visitors, it is recommended to eliminate any render-blocking resources on this webpage.

## HIGH

Using images in a modern format can significantly reduce the file size and improve the loading speed of a webpage, providing a better user experience and potentially increasing engagement.

#### HIGH

Users may abandon pages that take longer than 5 seconds to load, resulting in a potential loss of up to 50% of visitors. Faster loading pages can lead to increased traffic, better conversions, and higher sales.

#### **MEDIUM**

To provide a good user experience, <u>Google recommends</u> that sites should aim for a Time To First Byte value of 0.8 seconds or less.

#### **MEDIUM**

To provide a good user experience, <u>Google recommends</u> that sites should aim for a First Contentful Paint value of 1.8 seconds or less.

#### **MEDIUM**

Avoid performance and security issues by adding "rel=noopener" or "rel=noreferrer" to your "target=\_blank" links.

#### **LOW**

Consider adding the Strict-Transport-Security header to your webpage to ensure that web traffic is encrypted over HTTPS, mitigating the risk of man-in-the-middle attacks and other security threats.

**LOW** 

Using more than 20 HTTP requests on a webpage can negatively impact the loading time.

**LOW** 

Consider moving inline CSS styles to an external stylesheet to improve site performance and maintain separation of content and design.

This one in particular stood out for me and I will try to have them corrected before turning my report in.

Meta Description Test97% of top 100 sites passed

This webpage is using a Meta description tag with a length of 68 characters.
 We recommend using well-written and inviting Meta descriptions with a length between 150 and 220 characters (spaces included).

**Text:** Nigerian Local homegrown healthy livestock products by local farmers

Length: 68 characters

#### 9.2 Traffic

For effective website analytics, I employed the MonsterInsights plugin, which seamlessly integrates with Google Analytics to provide in-depth insights into the traffic visiting my website. Following a successful website launch, I was eager to gain a better understanding of my audience and their geographic distribution.

One notable observation was that the majority of the website's visitors hailed from Nigeria, a significant and relevant insight. This finding aligns with the primary focus of the website, as it is intended to be primarily utilized within Nigeria. Knowing that the majority of the initial traffic originates from the target audience reaffirmed the website's relevance and served as a validation of its purpose.

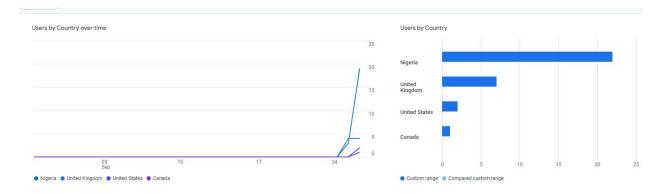


Fig 29 Google analytics report

	Country → +  \$ show all rows							compart, our Ex. day Ex, Even		
		↓ Users	New users	Engaged sessions	Engagement rate	Engaged sessions per user	Average engagement time	Event count All events •	Conversions All events ▼	Total revenue
		32	32	29	60.42%	0.91	1m 38s	337	0.00	\$0.00
		vs. 0	vs. 0	vs. 0	vs. 0%	vs. 0.00	vs. 0.00	vs. 0	vs. 0.00	vs. \$0.00
1	Nigeria									
	Aug 28 - Sep 26, 2023	22	22	16	57.14%	0.73	1m 12s	179	0.00	\$0.00
	Jul 29 - Aug 27, 2023	0	0	0	0%	0.00	0m 00s	0	0.00	\$0.00
	% change	0%	0%	0%	0%	0%	0%	0%	0%	0%
2	United Kingdom									
	Aug 28 - Sep 26, 2023	7	7	12	70.59%	1.71	3m 35s	146	0.00	\$0.00
	Jul 29 - Aug 27, 2023	0	0	0	0%	0.00	0m 00s	0	0.00	\$0.00
	% change	0%	0%	0%	0%	0%	0%	0%	0%	0%
3	United States									
	Aug 28 - Sep 26, 2023	2	2	0	0%	0.00	0m 00s	6	0.00	\$0.00
	Jul 29 - Aug 27, 2023	0	0	0	0%	0.00	0m 00s	0	0.00	\$0.00
	% change	0%	0%	0%	0%	0%	0%	0%	0%	.0%
4	Canada									
	Aug 28 - Sep 26, 2023	1	1	1	100%	1.00	0m 42s	6	0.00	\$0.00
	Jul 29 - Aug 27, 2023	0	0	0	0%	0.00	0m 00s	0	0.00	\$0.00
	% change	0%	0%	0%	0%	0%	0%	0%	0%	0%

Fig 30 Google analytics report 2

It's not surprising to note that the majority of my website users access my platform through mobile devices. In today's digital landscape, mobile usage has become the predominant mode of accessing online content for a wide range of activities.

The substantial mobile traffic I observe displays the importance of prioritizing mobile optimization in web design and development. It highlights the need to ensure that my website's layout, functionality, and user interface are all finely tuned to offer a seamless and enjoyable experience for mobile users.

This is newly launched, I believe with time the gap between mobile and desktop in the analysis will become wider

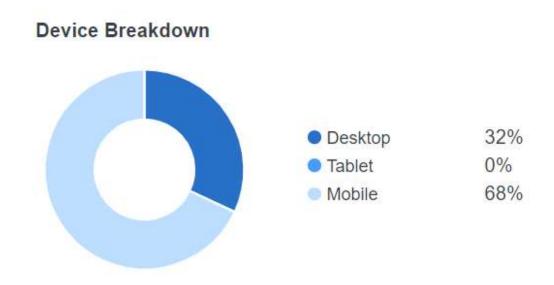


Fig 31 Google analytics device use report

# 10 Evaluation and future plans



Welcome to our online hub, where farmers showcase their small-sized (Backyard) livestock. Please explore our available  $\underline{Products}$ 



Fig 32 localharvesthub.com desktop view



Fig 33 localharvesthub.com mobile view

## 10.1 Validation of Code

I dedicated considerable effort to maintain the validity of my website throughout its development, ensuring that it adhered to the same high standards set during the prototype phase. However, the CMS served as a valuable tool for content management and offered many advantages but also had some drawbacks. Notably, it introduced some obsolete coding practices, such as the inclusion of trailing slashes in tags.

One of the additional features I would have liked to incorporate on my website is the ability for the entire product card to be clickable. I made several attempts to achieve this functionality but encountered challenges, which were relatively easier to address during the prototype phase.

In the future, I plan to implement search bar feature within the website, allowing users to easily search for specific content within the platform to make it convenient for users to locate what they need with ease either by name or location.

I also intend to improve the presence of the website on other social media platforms

I will continue to improve my understanding of word press and theme creation as most websites on the web have their contents being managed through a content management system. It also is a plus in terms of employability.

After the implementation of these subtle enhancements, the subsequent step involves making the website accessible to everyone, while refraining from direct involvement in product listings. My primary focus will shift towards ensuring compliance with regulatory standards and providing administrative support to maintain a seamless user experience.

## Conclusion

My experience in this Master's program has been enormously rewarding, surpassing my initial expectations. While I acknowledge that the website may not be flawless, it holds a special place in my heart, representing a significant achievement. As I reflect on the knowledge and skills I've acquired throughout this journey, I am determined to conduct a comprehensive review of everything I've learned and explore ways to elevate the quality and functionality of our website.

While working with WordPress presented its challenges, I remained curious and intrigued by the intricacies of PHP and MySQL. These technologies, though distinct, also serve a common purpose in web development.

I would like to take this opportunity to extend my heartfelt gratitude to David, Prisca, and Fabiana for their invaluable contributions to my academic journey. Their simple yet effective teaching approach, combined with their unwavering support, has been instrumental in my success throughout the entire academic year. Without their guidance and dedication, acquiring this skill would have been impossible. Their mentorship and commitment to my education have made a profound impact on my learning experience, and for that, I am truly thankful.

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