

# Major Project

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## Final Report

Junu Paneru  
University of Greenwich  
MA Web Design & Content Planning

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# 1. Concept

## Twitter description

Traditional Newari food influenced by Newari Culture.

## Inspiration

I was looking for an idea for my final project. During this time I got pregnant and I had a craving for certain Newari food. Being thousands of miles away from Nepal (my birthplace), I searched online for the recipes of the Newari food I had craving for. With no success, I ended up calling my mom back home. I started collecting these recipes and the idea was born to host them on a website so that it can help others in a similar situation.

To say the very least, Newari food is food perfected over the centuries by Newari people. Newari people also are known as “Newars” have been living in the capital of Nepal, Kathmandu for centuries. They have developed a sophisticated civilisation not seen anywhere in Nepal. They have old-aged traditions and culture they are very proud of and even practised today. Apart from the rich culture, they are renowned for art, literature, trade and agriculture. They speak a unique Newari language which does not resemble any other locally spoken languages in Nepal. The festivals and the feast are very important to their culture, hence have great food and flavours in their cuisine.

## Elevator pitch

Newari food recipes aren't found abundant online, moreover, a dedicated website for Newari food recipes is almost non-existence. Few recipes were found on Youtube in the form of videos. These videos did not have ingredients listed or cooking instructions listed in the form of text. I could not print out the recipes and had to play the video back and forth to follow the steps. It is very cumbersome if you are cooking or preparing a meal watching videos at the same time.

The Newari food has over two hundred varieties and it deserves a website of its own. The proposed website will include the most popular Newari food and popular food consumed during the Newari festivals to start with. So my proposed website will include the recipes with printing options. Recipes of food consumed during the Newari festivals are also rarely put together online. With the help of my mum and my relatives, I will put together popular and rare Newari food recipes influenced by Newari

culture.

## The problem

As previously pointed, the online resources for Newari food recipes are non-existence. Some websites have few recipes but no dedicated websites exist. Also, they do not cover all the food recipes influenced by the Newari culture. Few videos can be found on Youtube about Newari food recipes. However, these videos do not have ingredients listed or cooking instructions listed in the form of text. One cannot print out the recipes and they have to play the video back and forth to follow the cooking steps. It is very cumbersome if you are cooking or preparing a meal and watching the video at the same time. Most of these existing resources do not cover food prepared during the Newari cultural festivals.

## The value proposition

I will put together food recipes influenced by the Newari culture which are very different from generic food recipes which are rich in flavour and texture. The website will also include some unique Nepali meals which are also popular amongst the Newari people even though the food originally does not belong to a Newari culture.

Newari food is not known outside of Newari culture and the Nepalese worldwide. I hope gradually my audience will expand with the help of this recipes website. I am also hoping to introduce great Newari recipes to food enthusiastic worldwide who want to try new food. My strategies for phased development is as follow:

### Phase 1:

In the first phase, the website will include up to 20 most popular recipes. I will aim to host detailed information on utensils, alternative ingredients, cooking tips and “where to buy ingredients”. The user would be allowed to request the recipes they wish to learn and cook. Social media will be launched on Facebook, Twitter, Pinterest and Instagram to promote the website. Analytics and search engine optimisation will be implemented to fine-tune the interest and drive the traffic. The website will be accessible to desktop and handheld devices by being responsive. The users will be able to leave their feedback for the recipes.

### Phase 2:

The popular recipes requested via the website will be added in this phase. This will help with the growth of the content in the long run. The affiliate and referral scheme will be explored. Digital marketing based on analytics will be considered with further promotion. Further recipes that do not fall

under Newari food but popular Nepalese food amongst the Newari people will be added. Rating the recipes in terms of ease of cooking and taste will be added to help content improvements.

## Manifesto

It is quite clear from my research that the Newari food recipes are missing from most recipe websites. It is an opportunity to represent a Newari culture and the food with this website. Not only will it highlight the great food that has been prepared and perfected over the centuries, but it is also a great opportunity to promote new recipes for food enthusiasts to encourage new alternative food. It will hopefully present new ideas on the table for anyone to enjoy.

The Newari recipes will not just be a knowledge among the native but become accessible to anyone who wants to discover new food. At the same time, it will serve as a go-to website for Newari recipes for anyone who already knows about the Newari culture and the food.

Hence the ultimate goal will be to build a website with the following qualities:

- responsive website
- accessible to all by considering the disabilities
- plenty of pictures and materials to assist in cooking
- printing the recipe page option
- Appropriate typography, size and colour scheme to complement the overall minimalistic graphics

## Unique selling proposition (USP)

- The site will only include Newari food and become the first such website that hosts Newari recipes.
- The website will have unique recipes influenced by a Newari culture that is very different from generic food recipes hence have rich flavour and texture.
- The recipe will also cover the food popular during the Newari festivals.
- The other unique recipe includes easy to make Newari snacks.



## 2.Culture

### Who are Newari people, a history?

Before we go into the details of Newari food, it is essential to understand the history and culture of the Newari people. The Newari people are also known as “Newars” or “Newa”, are the native inhabitants of the Kathmandu valley, the capital city of Himalayan country Nepal. Nepal lies between two large countries, India on the south and China on the north.

Newari people form a community of primarily Indo-Aryan and Tibeto-Burman ethnicities. They follow Hinduism and Buddhism with a unique Newar language as their common language. Newari language is very unique and different to anything spoken in the region and the surrounding areas. Majority of Newari people can speak at least two languages, Nepali and Newari fluently.

The community within it consists of various strands of ethnic, racial, caste and religious heterogeneity. They are the descendants of the diverse group of people that have lived in Nepal Mandala since prehistoric times. Various tribes like the Licchavis, Kosala, and Mallas from respective Indian Mahajanapada that arrived at different periods eventually merged with the local population by adopting their language and customs. These tribes however retained their Vedic culture and languages, social structure and Hindu religion, which was absorbed into the local cultures and gave rise to the current Newar civilisation.

Apart from the rich culture, they are renowned for art, literature, trade and agriculture. The communities are made up of social groups associated with hereditary professions that provide ritual and economic services. Merchants, craftsmen, artists, potters, weavers, dyers, farmers and other castes. It played their part in creating a flourishing economy to support their daily life. Elaborate cultural traditions which required the use of varied objects and services also fueled the economy. Towns and villages in the Kathmandu valley mastered in producing particular products, and rich agriculture produced a surplus for export before the 18th century. Since then, they have spread out across Nepal and have established trading towns. Today, they are engaged in modern industry, business and service sectors and contribute a lot towards the economy.

## History of Newari food

Newari food is unique in its own way, it is intensely flavoured to entice one's taste buds. Although it shares some similarities with Indian or Nepali food, Newari cuisine is very different. Despite using similar spices to Nepali and Indian cuisines, the method of cooking produces a very different flavour and incredible aroma in the Newari food. Some ingredients used are very particular to Newari food.

The Newari community celebrates many festivals throughout the year and food is an important part of these festivals. The dishes served during festivals and feasts have symbolic significance. Each festival has its own unique food prepared to represent the celebration.

Newari feast like "Lapte bhoje" plays a significant importance in the festivals. Guests sat on the floor in a long line facing each other and served varieties of food on a leaf plate called 'lapte'. Foods like baji (beaten rice), geda gudi (a mix of different lentils and beans), saag (spinach), alu tama (bamboo shoot curry), achar (pickle), ranga ko masu (buffalo meat curry) are served for the feast. The elders in the group start the feast followed by younger guests. This is a very traditional way of serving the Newari food during the feast. More food will follow with selections of meats from various meat types called bhutan (fried liver, intestine etc).

Newari feast is incomplete without homemade liquor called "Aila". The liquor is served in a pala (handmade pottery in about 25 ml quantity). The much more lighter version of homemade alcohol "Chyang" is also served at the feast.

An adopted Newari version of the dumpling called "Momo" is also very popular all over Nepal. It has become so popular that every hospitality industry is expected to serve in their premises by customers. My website will have the most popular recipes of Newari food to start with like Choila, bara, samay baji and chatamari. I will cover the food eaten during different times of the day as much as possible.

## 3. Business

### Industry

I could not find any data on the Newari food industry. Neither did I see any data on the Nepalese food industry. The industry is probably seen as a complimentary cuisine to the existing Indian or Nepalese food industry. The Nepalese food industry seems to be not studied or researched by economists either. It could also be because of the population of the Newari

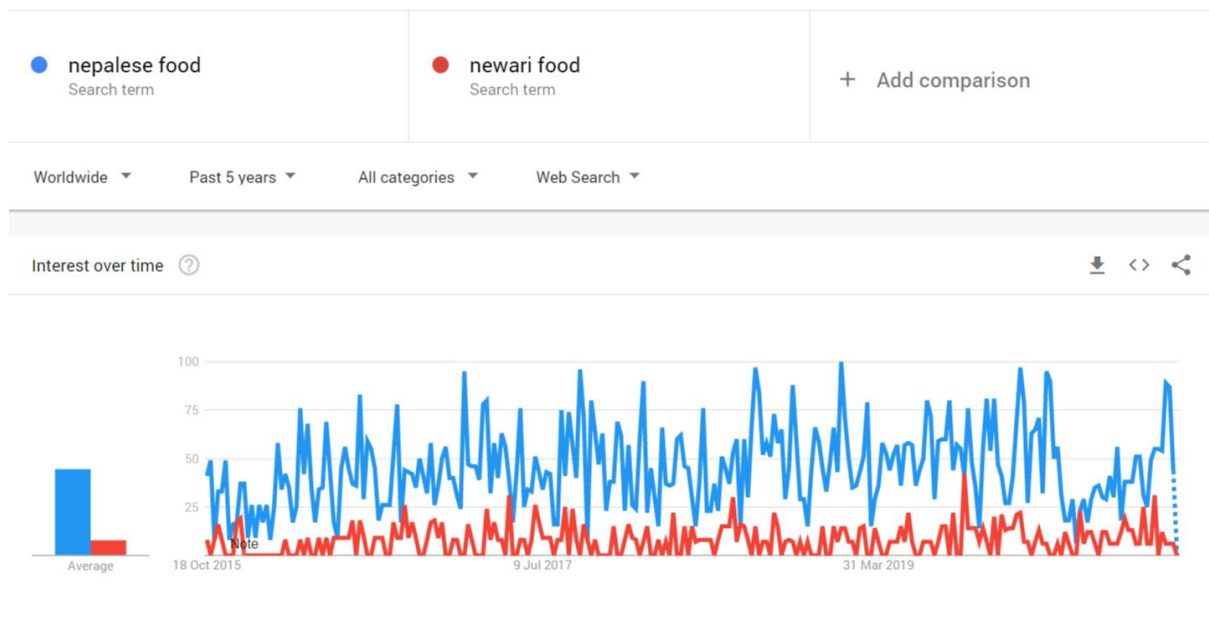
customer being low as compared to other cuisines. The Newari food industry is expanding in recent years worldwide as Nepalese restaurants are getting popular every day. The majority of the Nepalese restaurants are growing in the UK, US, Australia, Europe and south pacific countries. I hope sometime in the near future we can see some data relating to this industry in terms of business.

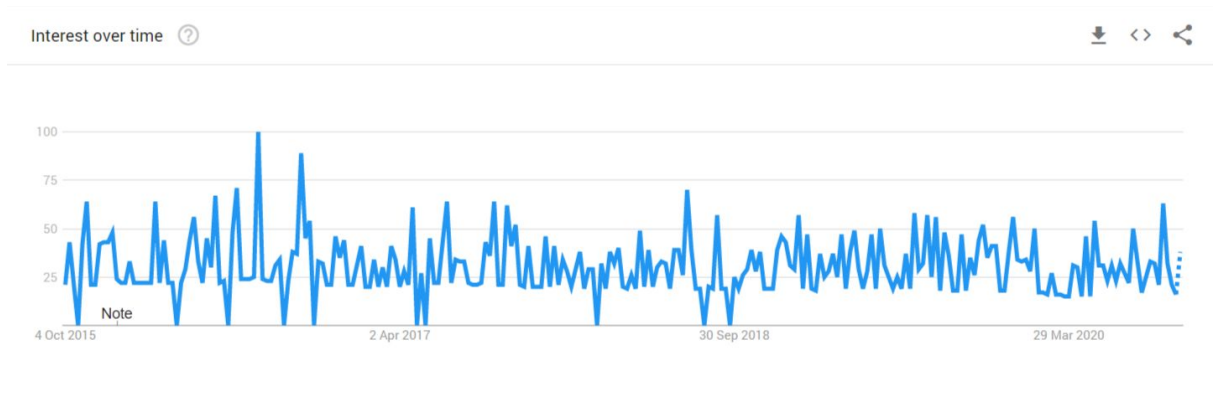
In terms of the population who could be consuming the food, Newari community according to recent figures is 1.3 million according to the census 2011 carried out by Nepal Government. This is 5% of the total population of Nepal in that census.

## Topic popularity

As I discovered the study on business and industry was non-existence, I had very little hope of finding a true picture of the topic's popularity. However, I have relied on Google trend graphs to compare the Newari food with Nepali food which sometimes can show the potential of topic popularity. It is also drawn across the worldwide data as the web content is accessible to worldwide audiences.

### *Newari food vs Nepalese food in the last five years*



*Newari food - worldwide in the last five years**Chatamari - worldwide in the last five years*

## Competitor Analysis

Most recipe websites are based on the type of food. These sites are catered for European and American food as compared to Newari cuisine which is a south-east Asian food. Other online recipes resources that fall under south-east Asian cuisines are limited and Newari food is barely represented. Among these sites, the food recipes are more generic and do not include unique food influenced by Newari culture to name one. However, Indian food searches and websites are widely published.

I have divided my potential competitors into the following categories:

**Cognate site:** websites with similar contents

**Cognate text:** books and services covering a similar topic

**Non-cognate site:** websites with generic contents

**Non-cognate text:** books covering generic contents

## Cognate site

www.weallnepali.com/recipe

Google rank: 2/10

Page load: 1.8s

Page score: 67/100



## Strength

- The site seems to include other categories like travel and tourism in Nepal which can bring in extra visitors.

## Weakness

- The site fails to focus on recipes and can deter potential visitors looking for recipes.
- The site does not categorise the recipes.
- The site lacks a picture which can speak thousands of words.
- The site also lacks a step-by-step guide on preparing the meal/food.

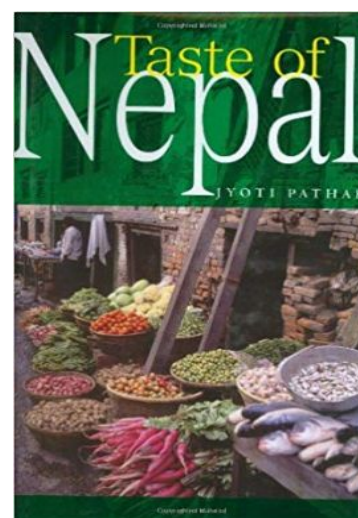
## Cognate text

**Taste Of Nepal** by *Jyoti Pathak*

Ratings:

Good Reads: 4.2/5

Amazon: 4/5



## Strength

- The book seems to be popular among the readers and has good ratings.

- Many positive reviews left by the readers can really speak a lot about its success.

## Weakness

- The book was published quite some ago and many readers have highlighted the lack of pictures of the dishes.
- Not being accessible online, it may not generate revenue as it would have if it was online.

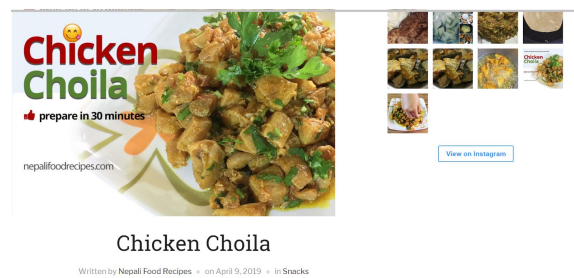
## Non-cognate site

www.nepalifoodrecipes.com

Google rank: 0/10

Page load : 2.9s

Page score: 81/100



## Strength

- The site promises to be modern looking and seems to be using social media for promotions and publicity.

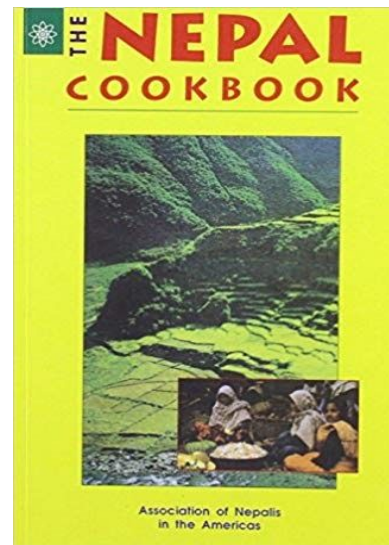
## Weakness

- The site, however, lacks the content, perhaps still in development. The site does not even cover the popular Newari recipes while it claims to be “Nepali Food Recipes”.

## Non-cognate text

**The Nepal Cookbook** by Choedak Oshoe Padden

Ratings:  
Good Reads: 4/5  
Amazon: 4.5/5



### Strength

- The book seems to be popular among the readers and has a good rating.
- Many positive reviews left by the readers can really speak a lot about its success.

### Weakness

- The book was published quite some ago and many readers have highlighted the lack of pictures of the dishes.
- Not being accessible online, it may not generate revenue as it would have if it was online.

## SWOT Analysis

### Strengths

Being one of the first websites on the Newari food recipe, it can have huge returning followers. The categorised recipe will benefit the visitors. Modern look and feel will allow users to experience better user experience. The responsive design will help mobile users browse accessible in any situation. The print option will be beneficial to those who want to print the recipe. The steps and instructions with the corresponding images will be a great help for users who want to compare their result with the website images each step. It will be a one-stop website for all other recipes in the same category.

## Weakness

The ingredients can be difficult to source in many parts of the world. I would have the alternative ingredients. It may however not allow appreciating the final meal in the lack of original ingredients. I may have a limited number of categorised recipes to start with. Users may find it tricky to use the screen while cooking and may find the use of books easier. The image on Newari culture and Newari people might be difficult to source as the royalty-free images are hard to find in this category.

## Opportunities

A business opportunity to source the ingredients used on the recipes. An affiliate business can be an option to source these ingredients. Even selling ingredients on eBay or Amazon can be an option to make money. We can allow guest chefs from restaurants to share their favourite recipe. This can help drive visitors. The recipe can be linked directly to users' local restaurant by charging affiliate fees. The website had no dedicated competitors. The competitors have generic contents and the Newari food is only covered by them in small quantities.

## Threats

Not having a video preparation guide can distract visitors to YouTube for some popular recipes. YouTube food vloggers can create professional-looking content from our recipes luring. Difficult to attract advertisers if the visitor numbers are low. Chances of online copycats propping up quite quickly.

## Revenue generation

Revenue will be generated through the advertisements. Recipe ingredients can be linked to Amazon pages who pay for a recommendation on affiliate schemes. Some ingredients will be unique which we can set up and sell on Amazon or eBay.

## Target Audience

My target audience will mainly be audiences from Newari culture. I can aim to attract Nepali people as well where they would be equally interested to learn the recipes. The other group in my audience could be someone who has travelled to the other countries where the Newari food is not available in nearby restaurants and they end up discovering the recipes online.



Travellers who visited Nepal and those who have tried Newari food in their journey. The other audiences can be some food enthusiasts eager to try and learn new recipes. Such audiences will be targeted using the more generic keywords such as “quick lunch recipes”, “easy chicken snacks” etc.

The age group of my target audience will be between 18 - 50 years. Gender will be both men and women. These groups can be from any background with little cooking knowledge or no knowledge. I will be publishing the difficulty level for each recipe to help visitors make their choice.

## 4. Commodity

### User research

User research was conducted early on to understand what a typical user is looking for and what they prefer in terms of recipes and its content. What weaknesses they think exists on recipes sites. What would bring them back to the site again and again. Following are the findings which helped me plan ahead my website.

#### Homepage:

It was very clear that they want fast loading pages when landing on the pages including the homepage. Clear navigation with category of food. The images of the final result of the recipes where applicable. Search function to quickly check based on keywords. Some introduction on the food and culture as the concept can be quite new for some.

#### Recipe page:

The images of the final result of the recipes are very important. Printing option to print out the recipe. Alternative ingredients as they can be tricky to buy in their local shops. Cooking time and level of difficulty are other helpful tips expected by visitors.

#### Other features:

The search feature to quickly find the recipe. The search box on the

navigation bar so the visitor can quickly find the alternate recipe if they wish. Plenty of images and videos to help with cooking. Printing option for the recipe. Easy breakdown of the recipe from the navigation.

## User personas

The website will be used by users from different backgrounds with some or no cooking experience. The users level of understanding of technology varies and they are located in different parts of the world.

### CEO & Dad of three kids

#### Mark Simpson (42 years old)



- An enthusiastic Nepalese food lover based in London (UK).
- He has some experience in cooking English and Italian food.
- He is busy and browses the recipe website on a mobile device.
- Knowledge of some South-Asian food is good and regular Thai restaurant visitors.
- Looking to try different cooking in the south-east Asia region.
- He wants information on cooking simple recipes due to the minimum cooking knowledge.
- Need full details on ingredients used and where to buy them.

## CFO and Nepalese by birth

### Dev Sharma (38 years old)



- An enthusiastic foodie based in London (UK).
- He is originally from Nepal who has tried Nepali food before.
- He is busy and browses the recipe website on a mobile device.
- He has better than average cooking skills.
- Looking for a traditional Nepali recipe to try served during the festival.
- He wants to try the only recipe that requires an intermediate cooking skill.
- He is looking for detailed quantities of ingredients used.

## Office Manager & Global Traveller

### Wendy Writer (24 years old)

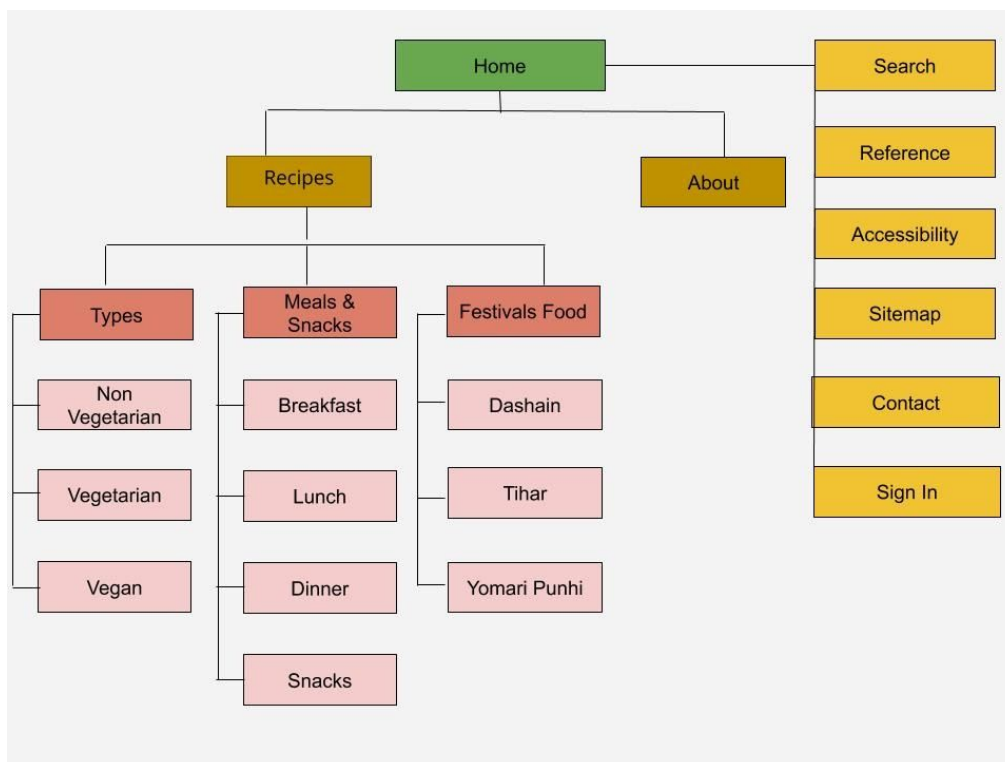


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- An enthusiastic traveller based in London (UK).
- She is an experienced cook who loves travelling and learning about the culture and local recipe.
- She is busy and browses the adventure website on a mobile device and reads the books while travelling.
- She likes to keep fit and likes to try healthy alternatives.
- She will be travelling to Nepal soon and wants to know about the food and try a simple recipe herself.
- She usually prints off the recipe from a website before trying to cook and buy ingredients.
- She likes the picture of the food that she will be cooking and also loves video guides.

## Information architecture

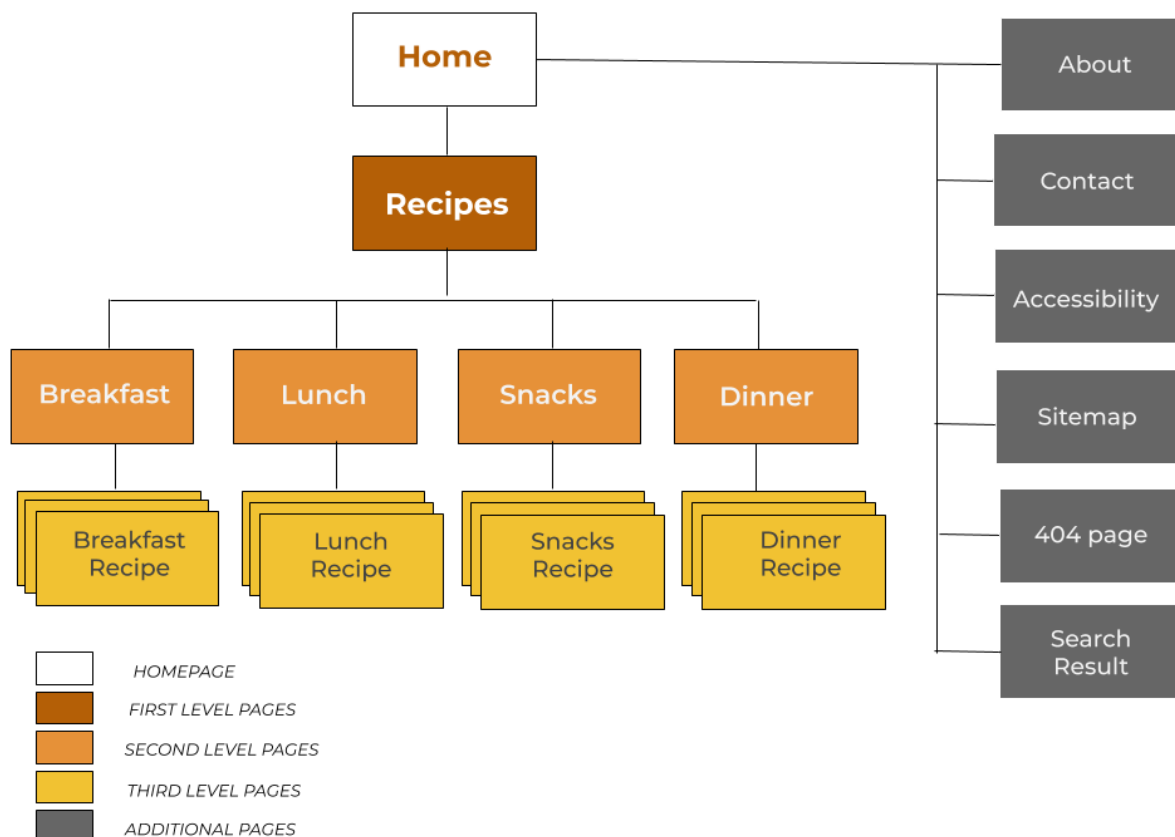
### Initial sitemap

Initial sitemap seemed a bit more confusing as it was divided into groups based on meal type and festivals. However, user research pointed out that complex navigation can deter potential visitors. Hence much simpler navigation was adopted by simplifying the category into meal-type only.



## Final Site plan

The final site plan is much more clear in terms of categorization of the recipes and simple to navigate.



## Content

Based on the final site plan, the website will be divided into different levels. The homepage will contain navigation on the top with the link to different recipes categorised by meal type. The navigation will also include the about page to introduce about the site in terms of Newari culture and food. The search box is also available in the navigation bar that allows searching by keywords. The footer will have additional links and links for social media. The footer will also include the most popular recipes of all time.

In the first level, the recipe category is placed to simplify the navigation. This will help users browse the recipe by meal type. The number of recipes available under this meal type is also displayed to help users.

In the second level, meal-type category recipes are listed in the form of a card that has an excerpt of recipe description and the final image of the meal they will be preparing. The pagination is also added to help keep the page load faster.

In the third level, the recipe page displayed the recipe details in clearly marked sections. The carousel will host the images related to the steps while preparing the meal. The tags and meal type are also added in the bottom of the page to help users navigate to the desired categorised page with a list of related recipes.

Under the additional pages, the rest of the pages like contact, about, sitemap, 404, accessibility pages are implemented. These pages have a common consistent layout and theme to serve the purpose of the website.

### Textual Contents

The site content will be written by myself for all the recipes including steps, tips etc. The recipes are not my original idea but learnt through my family members who are Newars by birth. The introduction of Newari culture and food will be used from other reliable online resources.

### Images

The images of all the recipes will be sourced by myself again with the help of my husband. These images are taken when I prepared the meal while putting together the steps for the website. Hence they are all authentic and real-life images of the recipes. The only image in the whole website is featured under the Newari culture introduction, which is sourced from the royalty-free website.

### Voice of tone

The simple and informative tone of voice will be adopted. Content will be carefully catered based on various cooking practices which will help the user to follow the instructions. The clear and precise steps will help keep the visitors' learning experience useful.

## Accessibility

I will develop the site considering all the visitors. It will be responsive on desktop and handheld devices. Some users could have difficulty due to the disability, I will try to follow WCAG guidelines to improve the accessibility. In phase 1, I may not be able to strictly adhere to the guidelines. Anything that is short falling will be completed in phase 2. I have used the WAVE tool to follow the guideline. ARIA can be found throughout my website.

On top of this, the images will be optimized for fast loading. Clearly, reusable HTML structure will be used and improved throughout the lifetime of the project.

## 5. Firmness

### Site requirements

There are no such requirements in terms of technology used for the project. However, I have decided to challenge myself in using WordPress by building the theme from the scratch. This will be a great learning experience where I can enhance my coding skill. I have considered using Kirby at the beginning but I realised it doesn't use any database like MySQL. It is a file-based CMS system. WordPress being MySQL driven CMS, it would give an ample opportunity to learn databases that are quite popular in the industry. WordPress skill is also something that can help employment.

### Front-end technologies

I am building my own WordPress theme from scratch using SASS and Bootstrap 4.5. SASS will help customise the Bootstrap framework. This allows me to learn SASS which has been my goal from the very beginning. The HTML template will be built along with the SASS. The front page would be the unique page with a structure very different from other pages. The contact and about page would be a standard template with reusable structured HTML for other pages like sitemap and accessibility page. All the CSS and Javascript are minified for faster page loading.



## Bootstrap

I have used this popular CSS framework by Twitter. I wanted to learn this framework so that I can learn a lot about structuring my code. It also helped me speed up my development time. The Bootstrap also allowed me to use SASS to customize my final CSS as it was very easy to test various colour themes and fonts and text size without changing much code. I have definitely learnt a lot on how to write your CSS code from scratch that is easy to reuse on various projects. One of the main advantages I saw was that Bootstrap allowed me to build responsive websites with less effort. The grid-based structure was ready out of the box.

One of the challenges I faced was when creating navigation menus with child pages. It proved tricky to list the child pages normally. So, I used an external PHP class to display the navigation class that works with bootstrap styled CSS elements.

## SASS

When I decided to use Bootstrap, I started exploring the SASS and its benefits. I noticed SASS is used to help customise the Bootstrap. I took this opportunity to learn SASS that would speed up my development time and new technical knowledge under my belt. I am glad I used SASS, it will become a standard tool for all my future projects and recommend anyone who wants to learn and use it.

## JavaScript/Animation Effect

I have used some JavaScript libraries to enhance the intuitive browsing experience. I have tried to keep this at minimum. Some zooming effects are applied to the cards using AOS (Animate on Scroll) library. ScrollReveal is another Javascript used for the effect. CSS is also used for zoom effects in the card images. Some dependency libraries for Bootstraps are also used like jQuery. I have added the sticky navigation to appear when a user scrolls towards the bottom of the page with the help of vanilla jQuery.

The animation effects are only for a better experience. The site still works without them. I have made sure these external libraries are tiny in size for faster loading.

## Responsive Design

My goal was to build a responsive website and with the help of Bootstrap CSS framework, the site responsive on all devices. The Carousel images to host the recipe steps and all the images used are responsive in nature. The hamburger menu is also responsive and comes built-in with the Bootstrap framework.

## Backend Technologies

### WordPress

WordPress has been the choice of my CMS from the very beginning mainly because I wanted to learn this CMS and also learn the theme development from scratch. With my prior knowledge of the PHP script, I really have learnt a lot in creating the theme from scratch. Again the use of MySQL database choice of database helped me develop some features like top recipes of all time without using external plugins. Building the theme from scratch has allowed me to understand the structure of WordPress theme and gained knowledge on how to build future projects that can expand without much issue.

### Plugins

One of the huge advantages of using WordPress is the number of great plugins that are available. However, I have been very careful not to use too many as it would bloat the CMS and slow the page loading speed and sometimes it can compromise the security.

Some plugins I have used are as follows:

### Custom Post Types UI

This plugin allows you to add the custom post type as WordPress out of the box comes with only one post type called "Posts". I needed to define my own post type called recipes to ease the development process. Custom post type can be created using the functions.php file in the theme, I only realised this at the later stage. I will transfer this to the functions.php file in phase 2. This will help remove the dependency on this plugin.

The only disadvantage was able to display the custom meta-tags and meal type in the recipe page. I had to scour online tutorials to achieve this

otherwise a simple feature. But I took this challenge and was quite happy with the result.

### Advanced Custom Fields (ACF)

Advanced Custom Fields plugin helps creating the content easier. This plugin comes in the pro version as well. However, I have managed to work with a free version and it works well with my content strategy. The use of this plugin allows me to add my custom content like description, utensils, cooking steps, tips, images, carousel images and the labels etc. It actually powers WordPress to another level.

I also realise the disadvantages of using this plugin as it can make your life difficult on extracting information for search pages and for SEO purposes. As a result, I had to spend a lot of time looking for solutions to make my search work as it would not pull the information added in these custom fields.

### SEO Press

SEO press eased the search engine optimisation. It was quite helpful in understanding the optimisation required to help stand out in Google search. Some other popular plugins like Yoast and RankMath were considered before this but due to the server compatibility issue, I could not use them. But I am quite happy with SEOPress which I find an equally good plugin for SEO.

### Cookie Notice

This plugin helps notify users about the cookies that are used in the site. This is to comply with GDPR. It can be modified to include links like privacy, this will be done in phase 2 of my development. For now, I will inform the users about the use of cookies.

### Antispam Bee

This plugin helps to combat the spam message submitted through the comment box.

### Force Regenerate Thumbnails

It is a very handy plugin to regenerate the images on various sizes. I have used some custom image size and I had to regenerate the images that already existed on the website.

## Google Analytics Dashboard for WP (GADWP)

The plugin helps to connect Google analytic accounts to your WordPress and add tracking code to track the traffic.

## Loginizer

This security plugin is used to combat brute force attacks when bots/hackers try to attack your site.

## reSmush.it Image Optimizer

The plugin helps to optimise the images used on the website. It optimises an image soon as an image is added to the site.

## WP Super Cache

It helps speed up the page load by caching the pages.

## Domain Names

1. Nepalirecipeshut.com
2. Tasytnewarirecipes.com
3. Newahut.com
4. Newarirecipeshut.com

I considered a few suitable domains to use according to my project. Then I chose newarirecipeshut.com. The main reason behind this particular domain is for SEO purposes. The domain itself is my target keyword.

## Hosting

I chose the Clook to host and buy the domain as I have found them reliable and very helpful when I needed technical support. The hosting comes with free SSL as well.

## Analytics

The site is monitored using Google Analytics. It integrates well with the available WordPress plugins. The plugin called Google Analytics Dashboard for WP (GADWP) is used for analytics. Google analytics provides daily visitors with data, traffic sources, keywords used for organic searches and visitors demographics. Google Analytics is free to use and

helps drive the traffic to the site if utilised properly. This tool also helps create an XML sitemap and help resolve any issue crawling in the site.

## 6. Design

Design is one of the most useful parts of a project. It can make or break your idea of reaching out to visitors. I had a good idea on what my content would look like but I was not sure about the design layout but I wanted something clean, minimalistic and modern look and feel.

I also researched my competitors to see what is working and what is not on their websites. I started a list of things I wanted my design to incorporate. I wanted my logo to represent the recipe I would be hosting on my website. I drafted many logo ideas before making the final draft.

### Design concept

During my research, I found most cognate websites had a very poor design. They had the wrong font face. The font sizes were not used to complement the reading. The design was cluttered with many distracting elements and images. Hence I decided to have a clutter-free design. Careful use of font sizes and typeface to clearly enhance the content. I wanted a friendly look and feel with content that is precise but informative and concise at the same time.

### Colour palette

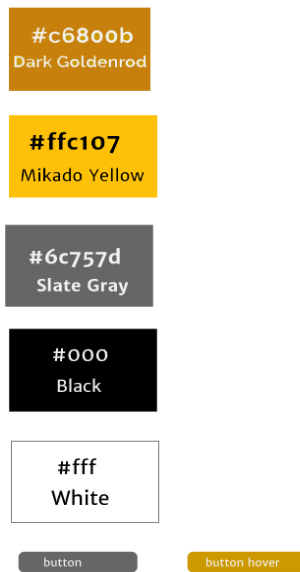
Initially, I wanted my website to have colours from the spices I will be using in my recipes. The warm colours of chillies along with the colour of cumin and turmeric spices. I started experimenting with the following colour palette.

## Version 1- colour palette



After adding the text on this colour palette, the text seems unreadable as I would have preferred. Also, the red colour of the chilli was a bit too much. I then explored different shades of the colour but I still wanted the shades to have the colour of spices.

## Version 2 - colour palette



I finally chose this colour palette that fitted my criteria. The colour blended quite nicely even with the text in the background of various colours like white black or grey. I then decided to have Dark Golden Red as my primary colour. This is defined in my Bootstrap variables as the primary colour for the website. The combination of this colour with yellow, grey and black represented the spices I used in the Newari food.

I think this colour energises our cooking and showcases the earthy tone in the recipes. The look and feel pop up in the website in both subtle and vibrant ways.

## Typography

For typesetting, I have used Google fonts for most of the typeface. I have decided to use Montserrat a sans-serif on Google font. Logo text and the main headings use Raleway and some other headings (h6) uses the Nunito. I have simplified the fallback by using sans-serif.

The reason I picked these fonts are that they are very clear and crisp on various reading devices. The printed versions are also nice and crisp.



## Newari Recieps Hut

### TYPEFACE

Montserrat Arial Helvetica

use for all copy and all navigation

### Ralway

use for all heading and logo

licences

Google Fonts

<https://fonts.googleapis.com/css?family=Montserrat|Ralway>

## Logo

A logo is another crucial part of any brand, whether it is online or offline. I wanted my logo to represent the Newari culture and Newari food and also reflect the colour of the spices. After many experiments, I decided to have a hut with cooking utensils. I used my primary colour to create this logo so my design blends nicely with the overall theme.

I debated a lot with myself whether to include the text next to the logo. Finally, I decided to not include any text within the logo as the mobile devices have less screen space to display them. However, I do not want to lose the brand name "Newari Recipe Hut" to be not seen as a brand. I then used the combination of logo and brand name together so that logo stays as an image and brand name stays as text with Ralway font. This way I believe I will have consistent design throughout my website.

## Design - Logo Development



Newari  
Recipes  
Hut

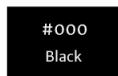






## Style tile

My style tiles summarise the main elements and give an insight into my final look and feel of the design.



## Heading

Ralway bold

## Sub Heading

Ralway 500

Lorem Ipsum is simply a dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s when an unknown printer took a galley of type and scrambled it to make a type specimen book.

link

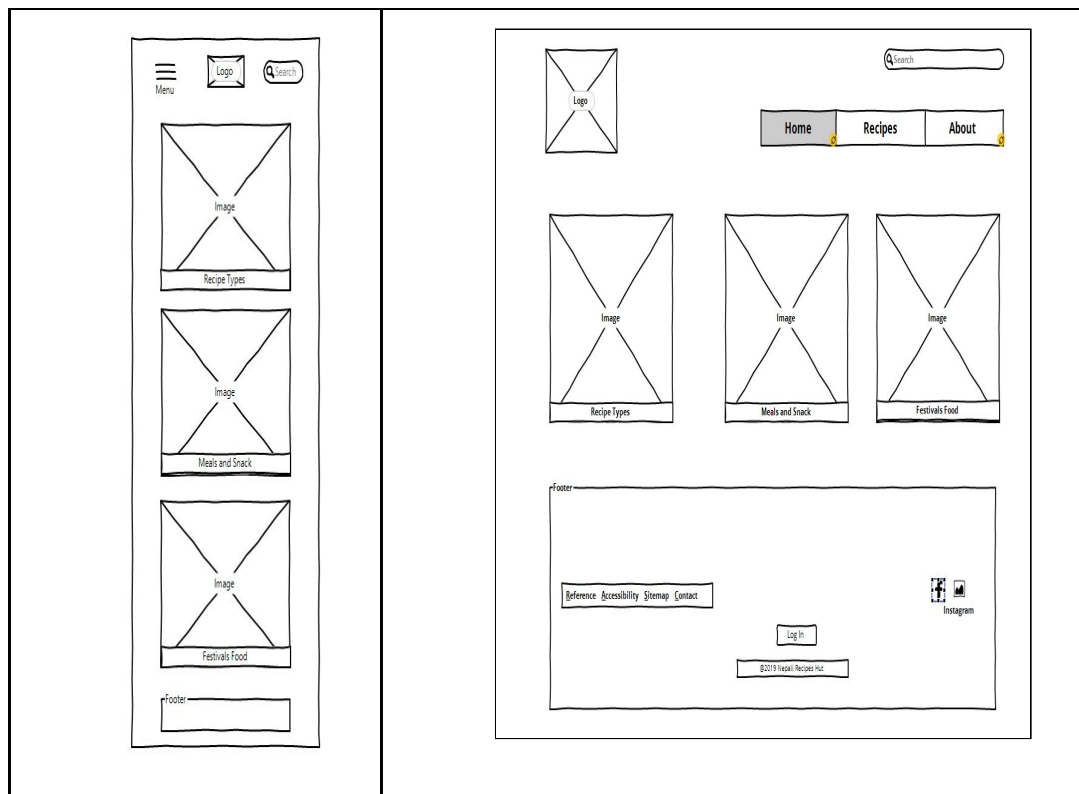
## Images

Just like any other cognate and noncognate content, images play a vital role. Images on my website are very important to give an idea to the visitors of what they are creating at the end of the process. The recipes cannot be complete if these images do not appeal to the visitors.

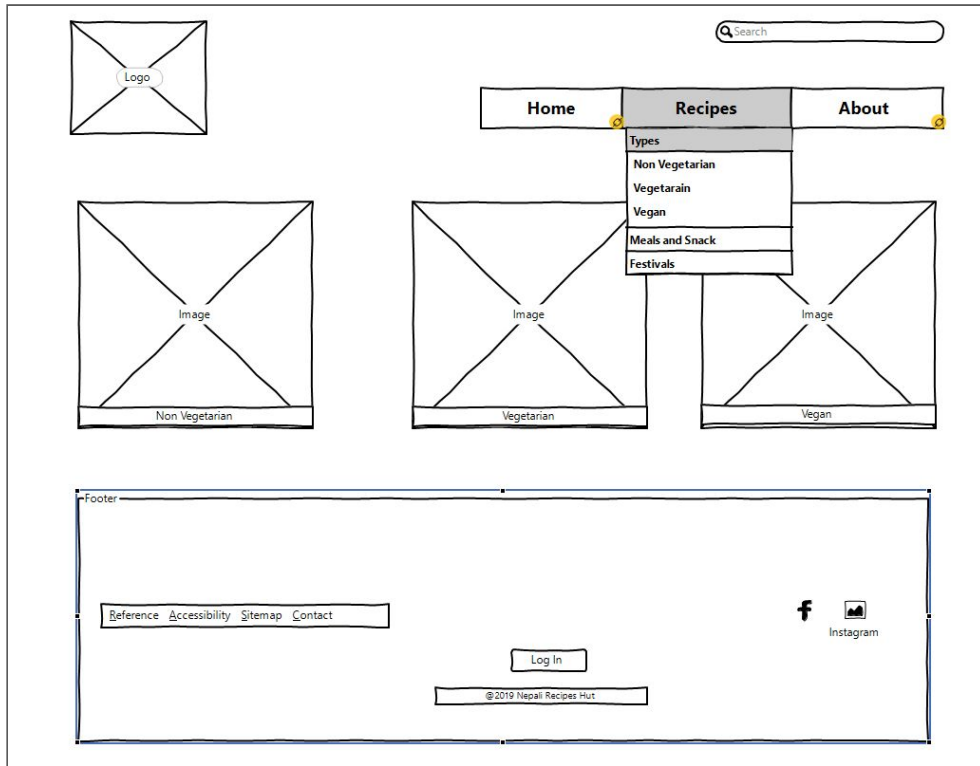
I have tried to capture the different steps of the cooking process so that the user knows what to look for in what stages of cooking. The picture I have managed to take speaks a lot and almost makes one's mouth water. This is the feedback I got after publishing my recipes.

## Wireframes

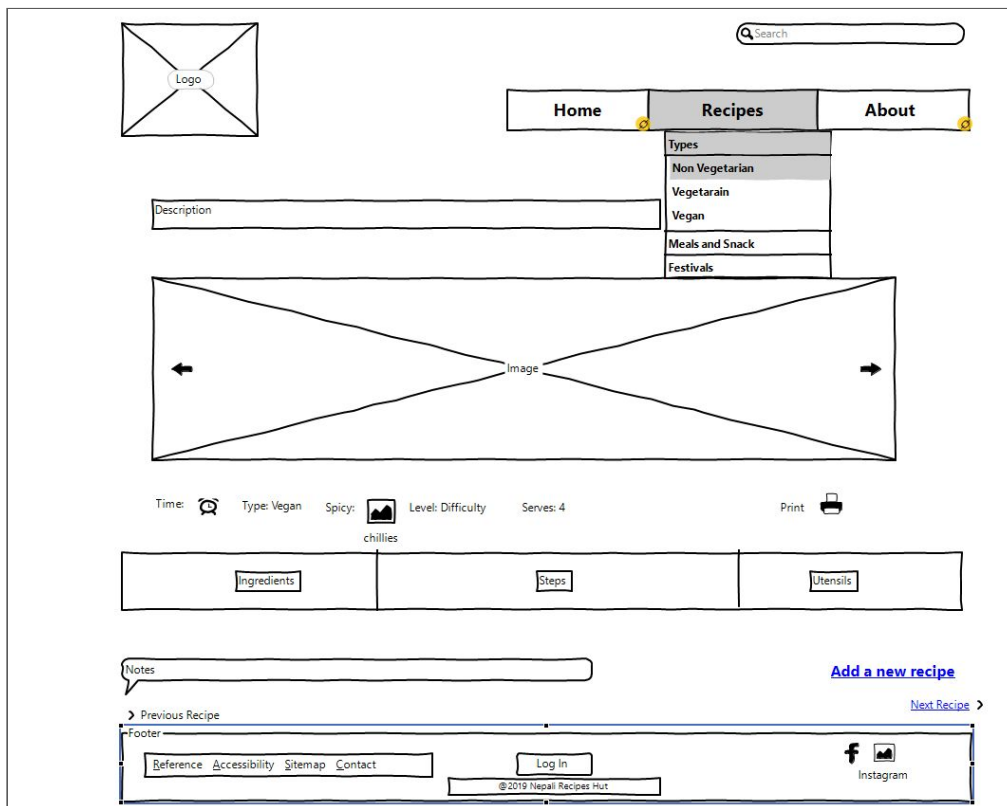
I have this wireframe designed at the very beginning of the project. However, I have made some changes as I progressed through the different stages of the project. However, the final design incorporates a lot of early decisions I made about the navigation menus, the content area, footer and logo area.



Below is the structure of the desktop version of the recipes categories page.



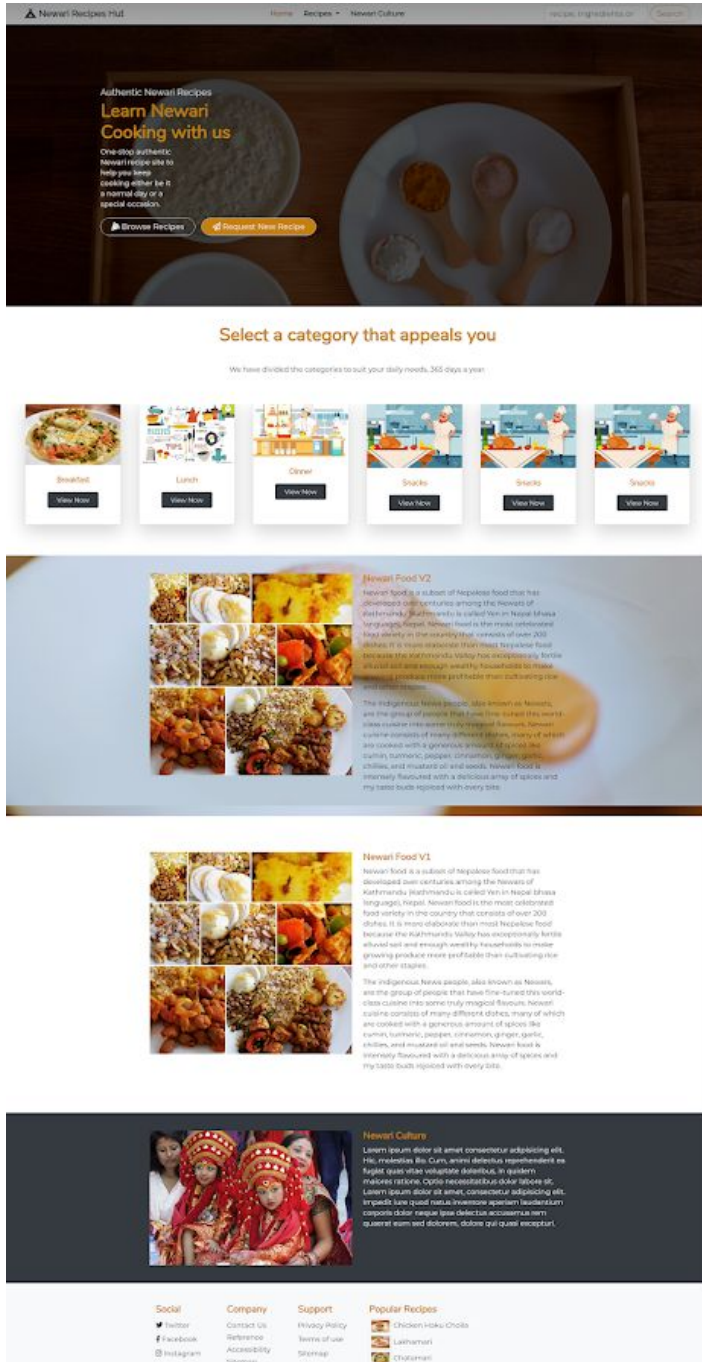
Below is the structure of the desktop version of the recipe page.



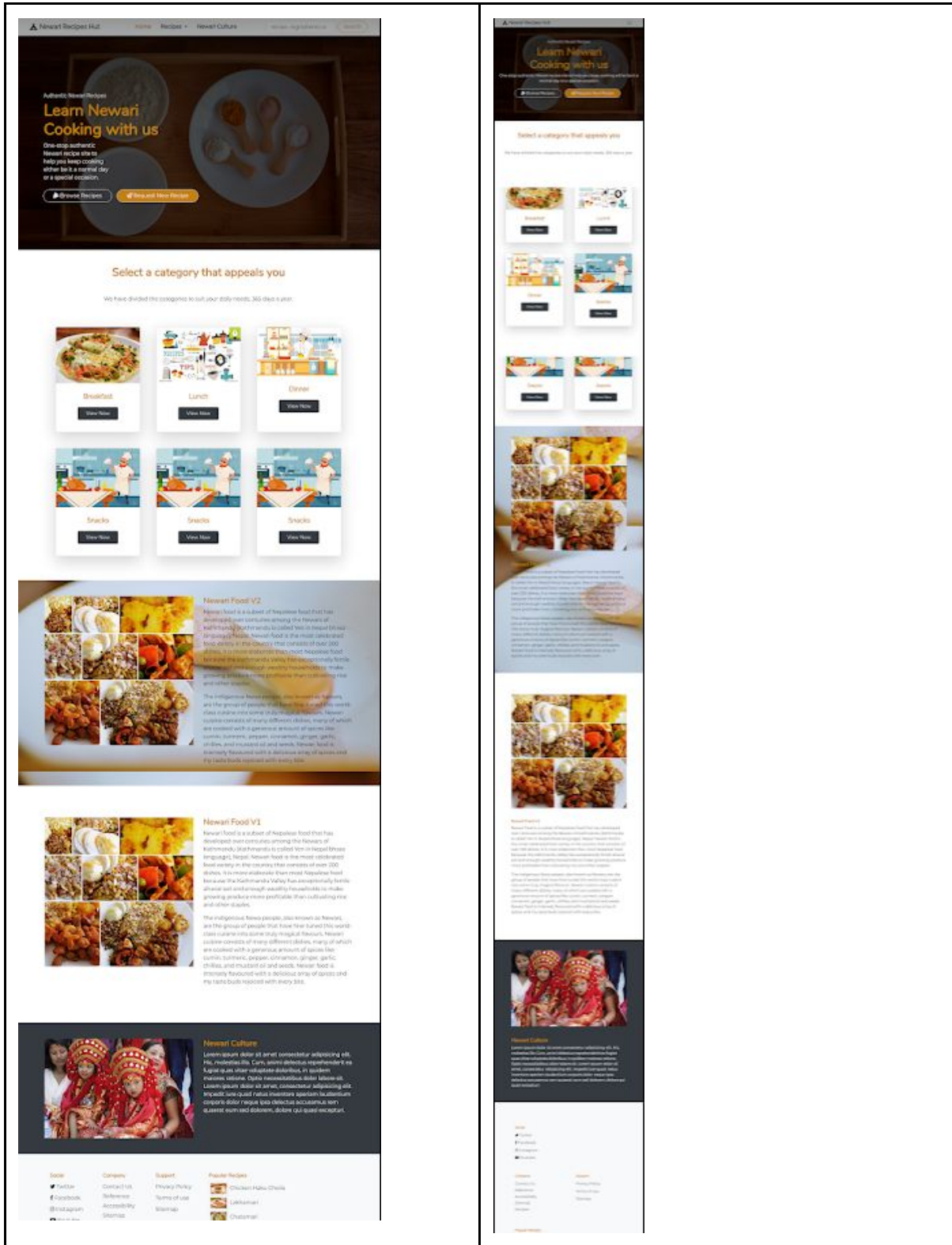
## Prototype

My prototype design includes both the mobile and desktop version of my website.

### Desktop Prototype



## Medium-sized (tablet) and mobile version prototypes



## 7. Implementation

### Stages of Implementation

After the planning stage, I started creating prototypes. This included the skeleton structure of my homepage, a recipe page and contact page. The contact page template has been used for other pages like about, sitemaps etc.

### Theme development

After the prototypes were drafted, I started putting together the content, in my case, recipes. The recipes were easy to put together but had to cook it myself for further refinement of the content and to capture the photographs needed for the site. I wanted to use my own images for about twenty recipes I was planning to host in my phase 1.

Once I had a few recipes ready along with the photographs, I turned to develop WordPress CMS. The theme was then created from scratch. There were lots of hiccups and challenges during this period of development. I installed and reinstalled WordPress multiple times when things didn't work according to my plan.

### Customisation of CMS

I also experimented using custom post types for the recipes and ended up learning advanced WordPress theme development. It was the most time-consuming stage of development. I had lots of experiments done to properly host my categories. The custom post type and custom fields added complexity and made it more difficult to find the exact resources to tackle my problems. The forums and Youtube video guide were helpful but I had to skim through a lot of them. The taxonomy in WordPress was really confusing at the beginning.

The features and functionality I wanted to incorporate into my website were very clear to me. But they were difficult to implement and I am glad after spending days I manage to put this together.

## SEO

The next step of development for me was to complete the content and start optimising for search engines.

## User testing

I then had a soft launch to get the feedback from my friends and relatives. It was really helpful to streamline the development. The feedback was really encouraging from everyone including my lecturers. The suggestion to redesign the logo was something that took some time for me.

## Challenges

Every step of the way was challenging but I enjoyed the whole process as I learnt a lot from it. Selecting a project to find the right colour theme, writing content, custom theme development, every step along the development process was challenging. However, the most challenging part has to be WordPress theme development. Some of these issues are highlighted below.

Built-in features of WordPress didn't allow the easy integration of the bootstrap style navigation menu. So I ended up using an external class "NavWalker Menu" to support the navigation menu with child pages. Advanced Custom Field complicated some WordPress features on implementation, such as displaying the popular recipes. It also impacted the featured images used on the archive page and category page. Use of Custom Post Types also contributed a bit of complexity to listing meal types as categories and meal tags.

I could not start the search engine optimisation until very late due to time constraint. Even though the target keywords for my site has been achieved, I would have done much better content optimisation had I done this earlier.

The other problem I had to resolve was the search feature which did not work out of the box as my contents were stored in the using Advanced Custom Fields plugin. It meant, my keyword search was not displaying the recipes that had the matching keyword. I had to implement an external function to customise the search feature.

## Changes from the initial plan

I changed the logo towards the end of the project based on the feedback received from my lecturer. It was a very small tweak. The theme layout was changed to adapt the content that I had for better organisation. The theme colour was slightly changed to improve visual contrast. The comment box and comment section were changed to work nicely with WordPress default CSS classes.

## Promotion

### Search Engine Optimisation (SEO) Strategy

Content optimisation has been at the forefront of my content planning. For visibility, it is one of the most important parts of website development. I was in this aspect as WordPress does a lot of groundwork and makes it really easy to implement various SEO strategies. I have used the plugin called SEOPress to optimise the website. The description to meta tags used and keyword strength to content strength was all calculated as a guideline for the users. The help of Google Analytics also plays an equal part in the SEO strategy. Initially, I wanted to use the Yoast or RankMath plugin for the SEO, however, the host was not compatible for their latest version of the plugin.

### Keywords

My main focus of the SEO strategy is to aim for the keywords “Newari Food” and “Newari Recipes”. The site is improving day by day to achieve my SEO goal. The site currently ranks on the first page for my target keyword “Newari Recipe” in October 2020. Similarly, the other keyword is ranking on page 4 of the Google search result. Lately, I have also started promoting the brand name as a keyword strategy after seeing the popularity of social media sites. This is work in progress but it is also improving. More is planned for phase 2 of the project by increasing keyword density on new contents.

### Social media

Apart from word of mouth promotion. I have also used social media platforms to promote my site. All the businesses small and big, promote their brand and product on social media these days. It can be very effective if planned ahead with the right strategy. From the very beginning, I started

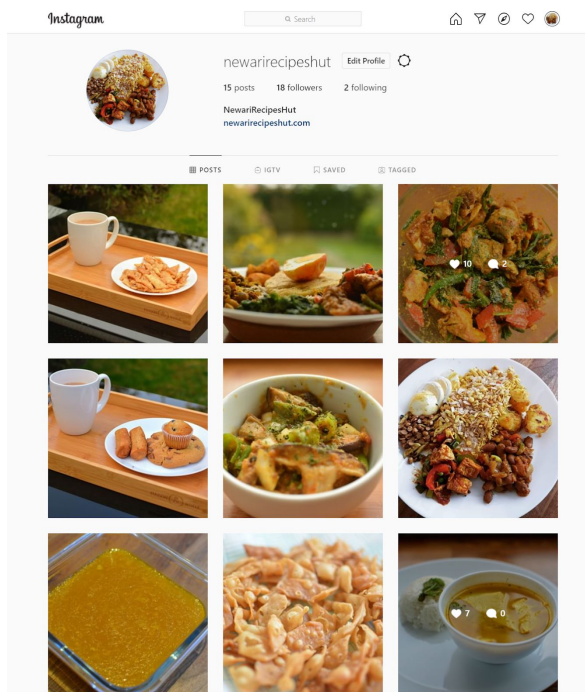


following some recipes sites and food-related brands on social media and noticed a growing trend on sharing the food they prepare on Instagram and Pinterest. Facebook and Twitter were other platforms where once could share using keywords and product using the social circle.

Just before the launch of my website, I created social media accounts on Instagram, Facebook, Twitter and Pinterest. I started posting the recipes and images from my website. I saw very positive feedback and visitors traffic from these sites.

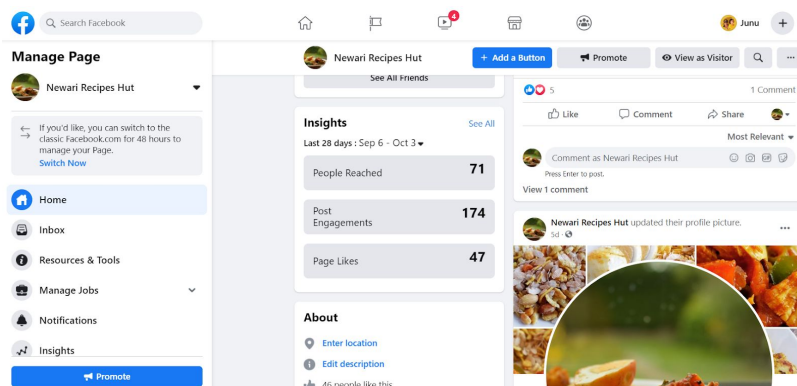
### Instagram profile:

<https://www.instagram.com/newarirecipeshut/>



### Facebook Profile:

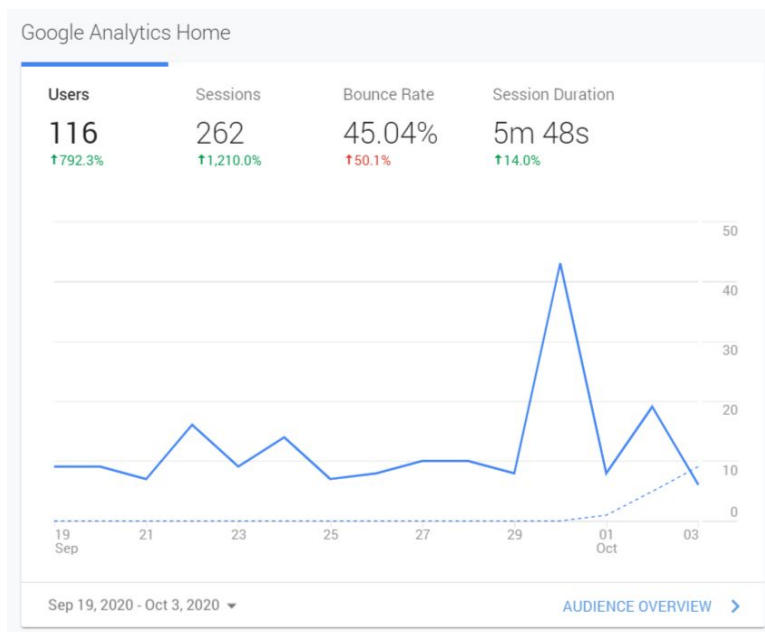
<https://www.facebook.com/newarirecipeshut>



## 8. Analysis

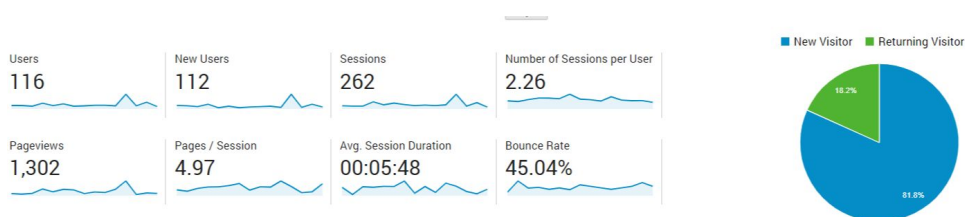
As soon as my website was live, I wanted to track the visitors' engagement on my website. When I was confident enough to go live, I posted on various social media and I could see the visitors from these platforms. To better understand the engagement I had to let it run for a week or so to capture the clear picture.

I have listed the trends on visitor traffic below:



The early traffic on the site after going live. It peaked up to 40 a day and about 10 on a quiet day.

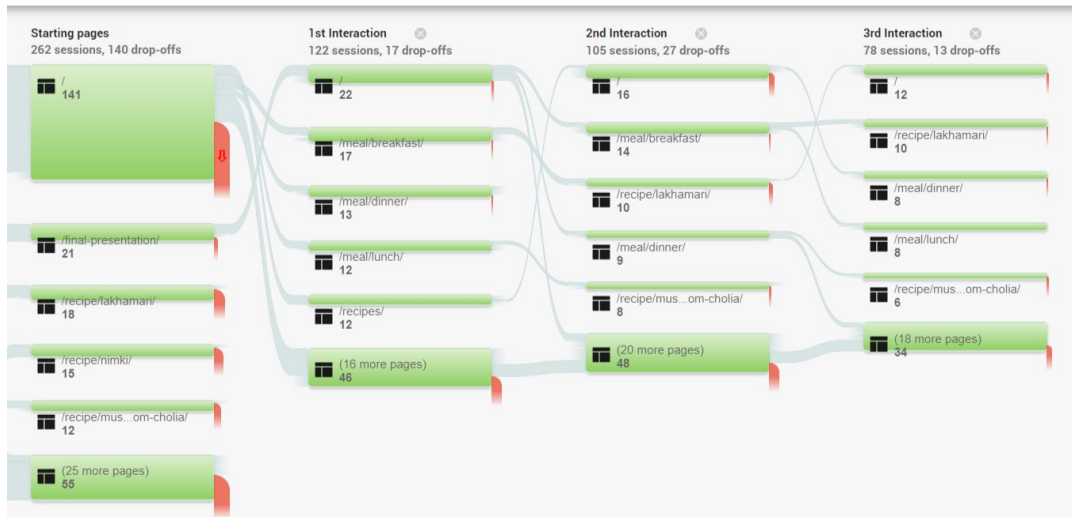
### User traffic



The early traffic indicated I had 116 users among which 112 were new. Average session duration was 5 mins and 48 secs. This was very useful to plan the steps ahead.

## User flow

The user flow diagram clearly shows how the users are navigating through the pages. It also indicates how people are browsing the site and what is the most popular route. The drop-offs at a particular point and number of drops-off are interesting and help understand why it may be. The strategy can be adopted to avoid this drops-off or at least keep the users for a longer period of time.




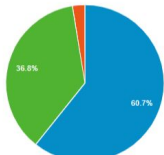


## Geolocation

The table below shows the most visitors are from the United States and the United Kingdom.

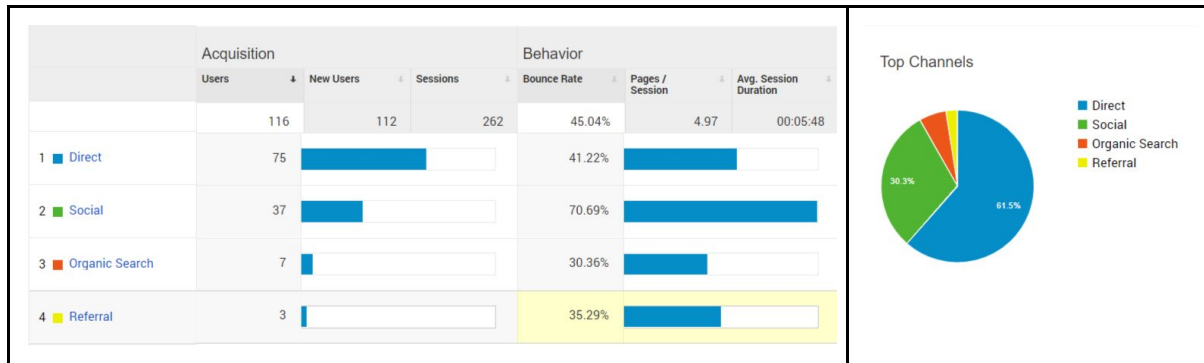
Country ?	Acquisition	
	Users ? ↓	New Users ?
	<b>116</b> % of Total: 100.00% (116)	<b>114</b> % of Total: 101.79% (112)
1.  United States	<b>48</b> (41.38%)	<b>48</b> (42.11%)
2.  United Kingdom	<b>46</b> (39.66%)	<b>44</b> (38.60%)
3.  India	<b>4</b> (3.45%)	<b>4</b> (3.51%)
4.  Nepal	<b>4</b> (3.45%)	<b>4</b> (3.51%)
5.  Bulgaria	<b>2</b> (1.72%)	<b>2</b> (1.75%)
6.  Portugal	<b>2</b> (1.72%)	<b>2</b> (1.75%)
7.  Australia	<b>1</b> (0.86%)	<b>1</b> (0.88%)
8.  Brazil	<b>1</b> (0.86%)	<b>1</b> (0.88%)
9.  Canada	<b>1</b> (0.86%)	<b>1</b> (0.88%)
10.  China	<b>1</b> (0.86%)	<b>1</b> (0.88%)

## Technology

As expected, the majority of the visitors used mobile devices compared to desktop and tablets. This is clearly a reason the responsive design is essential in the current market.

Device Category	Users	Users	Contribution to total: Users
	<b>116</b> % of Total: 100.00% (116)	<b>116</b> % of Total: 100.00% (116)	
<input type="checkbox"/> 1.  mobile	<b>71</b>	<b>60.68%</b>	
<input type="checkbox"/> 2.  desktop	<b>43</b>	<b>36.75%</b>	
<input type="checkbox"/> 3.  tablet	<b>3</b>	<b>2.56%</b>	

## Acquisition



As my early promotion was based on word of mouth the traffic all came directly. This is gradually changing and more and more traffic is from social media and search engines. My aim at this point will be to target more organic search and social media. After that I am sure, returning traffic will increase as well.

## Site performance

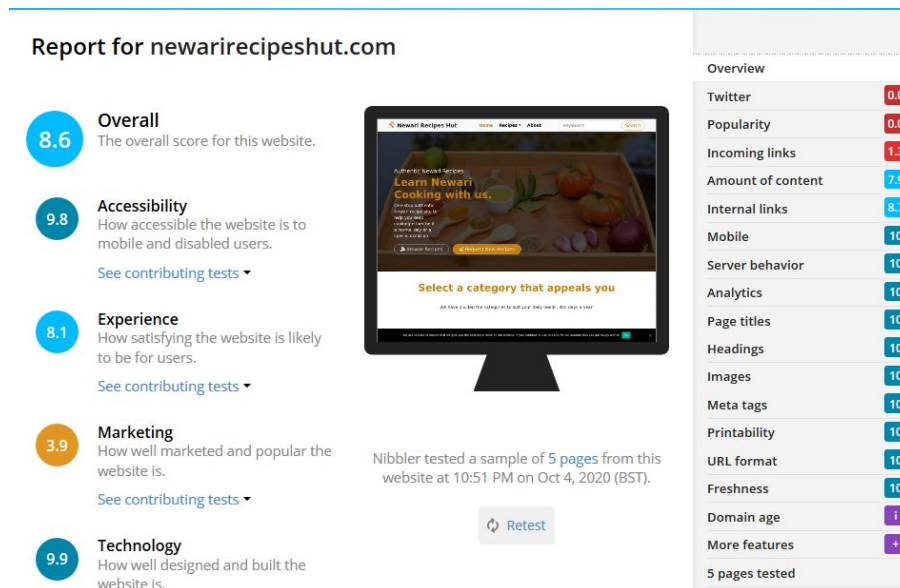
### GTmetrix

I am utilising the GTMatrix tool to analyse my performance. Performance of the site is very important if we want to be a successful web business. After a lot of tweaking and changing things around, the page speed is rated "A". The number of requests per page is about 34, I am aiming to reduce it to a lower number in the coming days and look into improving the overall score.



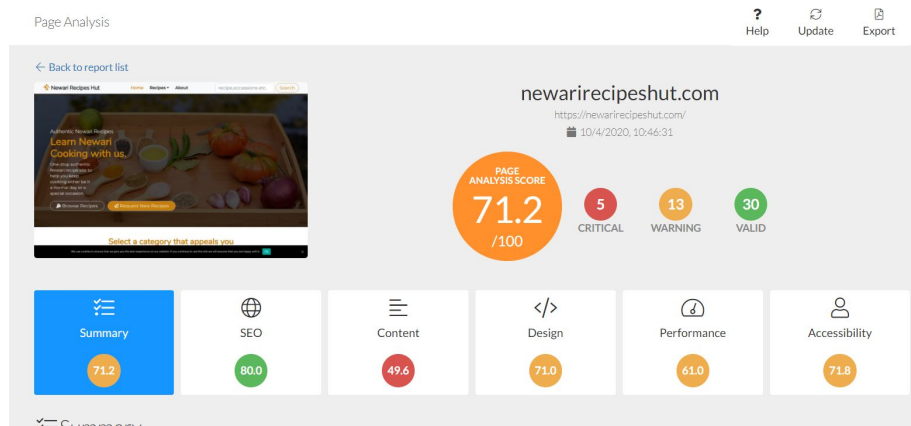
## Nibbler tool

Nibbler is a great tool to get a performance report on the website. Here, a 9.8 score for accessibility is quite a good indicator. The scores of 10 on numerous elements are quite encouraging.



## Site Analyzer

It is another great tool to view the report on the website.



Some other tools I used to analyse performance is Pingdom to test the page speed. I then implemented a caching plugin to help with the speed.

Some other improvements with minification of CSS and Javascript files. It is working progress and CSS files have been minified. The Javascript is a very small file with only 20 - 30 lines of code, I am not too worried at this point.

One more improvement I am planning is the content compression by enabling GZIP compression.

## 9. Conclusions

### Feedback

Feedback is a great way to understand the perspective of a second person on your work. I had great feedback from my friends and family members and some suggestions and criticism as well. Some of the suggested improvements were understandable as my website was still work in progress. However, it is a reconfirmation what is important to the visitors. I implemented a lot of their suggestions in contents and images.

### Improvement suggestions

The most important feedback and improvement suggestions came from my tutors which were mostly positive. I have implemented the suggestions as follows:

- The numbering of the carousel images as it can confuse which images come first. This is now also referenced in the cooking instruction in the body.
- The navigation looked a little bit cramped compared to the spaced-out body content. The navigation has been given extra spaces in the top and bottom.
- Aligning the hut with base and using a lighter line for the hut. This has been incorporated in the logo.
- To include site logo and site name on the printed recipe page. This is a good promotion on its own, no doubt, this has been implemented now.

### Success

I have learnt a lot from this project and I hope in the process I have contributed to the Newari community a great gift of a dedicated website with a Newari recipe site.

Bootstrap and SASS helped me to speed up the theme development time. It is now my standard way of working with SASS on any future projects. WordPress CMS helped me put together and manage the recipe content and images easily. I have also learnt a lot about WordPress CMS. It has boosted my confidence in using WordPress for future projects. On top of this, I have learnt great plugins like “Advance Custom Field” and “Custom Post Types UI”. This has helped easy customisation my recipes site.

## Lesson Learned

Some of the lesson learned is as follows:

- Plan the stages of the project at the beginning, it helps if you are on track or ahead of the project.
- Try to write content at the early stage of the project.
- Play with the CMS of your choice from early on. You could be spending a lot of time.
- Once the initial website is ready, promote on social media and get the feedback from your friends and family early on.
- Make sure to test the site on all kinds of devices and browsers soon as you can.
- Get the analytics running from the very beginning as it takes time to build up a meaningful report.

## Future Plan

I have planned various implementations for phase 2

- To add popular requested recipes via the website.
- To explore affiliate and referral schemes.
- Build a marketing strategy based on analytics.
- Add a popular Nepali recipe that is also popular amongst the Newari community and feature to rate each recipe.
- Add a video guide to complement the existing recipe.
- Improve accessibility and usability.



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