

# **Developing a Search Engine Friendly Website Using Joomla**

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# **Abstract**

## **Problem**

Develop a usable, navigable and search engine friendly website using Joomla that can be easily replicated.

There was a previous attempt at developing a website to meet the needs of the client but had poor results. The main problem with the website was that the villages were not shown in the URL making them less search engine friendly. The impetus that is now being set by search engines is now on the localisation of the websites. The navigation was complicated and covered more real estate on the screen than the actual content. Users easily got lost in the site making it a very difficult website to navigate resulting in a non-user friendly experience.

The content of the website was not the main focus. It was lost within all the advertisements and navigation. When a user was looking for information it became a chore to find what they wanted. This would put people off returning to the website or even using it in the first instance.

The main areas of the website that required attentions were; the villages, eateries and accommodation ensuring they were easily navigable and search engine friendly.

As the company is working in the tourism industry, a highly competitive market place, they had to ensure that the search engine placement of their website was higher than their competitors. To ensure this the website was made informative, user friendly and navigable to encourage further visits to their website. The content was the main focus of the website and the content was search engine optimised and had search engine friendly URLs.

## **Objectives**

The objective was to tackle all three problem areas. Search engine optimisation, navigation and content. Ensuring that the content was the main focus for all pages within the website and that the majority of real estate was given to the content would contribute to one of the objectives. Doing this would ensure the users of the website not needing to scroll or search for the content on the page they were looking for but easily find the information they wanted.

The navigation of the website needed to be easily manageable by the users. They should be able to find what they want quickly and be able to navigate to and from various pages with ease, know where they are on the website and get back to the home page with just one click.

To ensure that the website was search engine friendly the village names had to be shown within the URL. This would help both the user in informing them where they are on the site but mainly for the search engines whose new focus for page rankings was on localisation.

## **Methodology**

To tackle the problems that were apparent within the previous website and to ensure that the client's needs and expectations were delivered to a full understanding of the problems was required along with the knowledge of how to avoid these problems and implement solutions to the problems.

To fully understand the issues with the previous website some basic tasks were undertaken to see how easy it was to find the information that users may have wanted to find noting my experience, as a user, of the website. Also noted were the URLs on all the various pages which, due to the framework of Joomla, were long and dynamic URLs that gave no indication as to what page was being viewed or where the user was on the website.

Even the simplest of tasks were found to be confusing and there was navigation links everywhere, to view the content the user would have had to scroll to at the bottom of the page and could easily have gotten lost within the website due to the large amount of links within every page.

The client specified that the website be programmed using Joomla. Joomla is a Content Management System programmed using PHP, utilises a MySQL database and is built upon a Model View Controller web application framework. To be able to understand and work within Joomla environment skills had to be learned on how to develop content, add it to the website and make it navigable. This was carried out by completing a training course on Joomla version 1.6 delivered by Jen Kramer through the Lynda.com online training library. More knowledge was gained by learning how to design and develop templates through the same media library. This allowed me to see how each element within the Joomla environment interacted with each other and how to best display the content.

My implementation of the solution changed many times during the programming process due to constraints of Joomla and also from consultations with the client and developing ideas that I felt would make for a better website experience.

First to be looked at was the building and developing of components and modules that could be added to Joomla to give the functionality that the website required but it was apparent from the previous website that this would not give the search engine friendly urls. It was then decided to program the entire site using standard PHP and MySQL enabling the site to have the search engine friendly urls and give me more control over how the content would be displayed, be a more dynamic website and deliver to the client's needs and expectations.

## Achievements

The tasks set out at the beginning of this project have been fully achieved. It meets all the needs and requirements of the client and is a fully usable, navigable and search engine friendly website.

The urls from the previous website looked like this –

[http://www.Destination-LochLomond/index.php?option=com\\_village&Itemid=266&view=village&vid=21](http://www.Destination-LochLomond/index.php?option=com_village&Itemid=266&view=village&vid=21)

As you can see there was no localisation of information within the urls it was complicated and gives the user no inclination as to where they are within the website.

The way the pages are viewed within the website have been completely changed and have now made it clear where the users are within the website and also added the village names so the search engines can rank these pages higher giving the client the opportunity to be seen before their competitors. The URL now looks like this –

<http://www.Destination-X/index.php/villages/doune>

The navigation is very easy to use. It stays on the left hand side of every page. There is a breadcrumb (explained further in section 3.5) that shows the user where they are within the website and the URL also gives them a good indication as to where they are also. From the above URL the user would know they are in the villages section of the website looking at the village of Doune. Figure 1 below is of the previous websites navigation. As it can be seen there is a whole page of navigation with no content visible to the user and links are duplicated.



Figure 1. Navigation on [www.destination-locklomond.co.uk](http://www.destination-locklomond.co.uk)



**Figure 2. Navigation on www.destination-argyll.co.uk**

As it can be seen from Figure 2 the navigation remains constant on the left hand side of the screen. The content is the main focus now for the website and the user can easily access all the information for each village by using the tabbed navigation at the top of the content. The breadcrumb also allows them to easily jump back to the villages' page or even to the home page. As the content is the focus for every page the user does not need to scroll down the page to actually see it.