Developing a WordPress and Divi-based framework for website projects

Miika Haaranen

2016 Laurea

Laurea University of Applied Sciences

Developing a WordPress and Divi-based framework for website
projects

Miika Haaranen
Degree Programme in Business
Information Technology
Bachelor's Thesis
December, 2016

Miika Haaranen

Developing a WordPress and Divi-based framework for website projects

Year	2016		Pages	xx

We live in an age where technology and internet are in a big role in both business and in life in general. Websites are used to present information and data about anything imaginable. Building a website is a common interest for both the client and the developer and involves many different things that must to be taken care of. This thesis project aims to deliver some key elements and aspects that need to be thought of when a website is being built. It doesn't provide too specific information about technical areas but gives a general look to both sides of the scenario.

This project was ordered by a new start-up company called Haara Tech Oy, which lacked a model for building their websites. They mainly deliver their websites on WordPress platform, using Divi as a framework. Haara Tech wanted to build a document which helps them to follow a specific pattern on their website projects, and also guides their clients with critical information about their websites.

During this project we built a kick-off survey form for starting new client projects, that gathers crucial information from the client about their needs and goals for the website. As an end product of this project a more visual and client friendly documentation was built, which was named Divi Standard 1.0.

Table of contents

1 Introduction

This project provides a detailed look inside of what a Divi website project includes and doesn't include. This document is used as helping material and as a backbone for Divi projects. At the end of this document, you will know the basics of how to approach a website project that is done with WordPress (WordPress 2016) and Divi.

2 Background

This project started when the new start-up company, Haara Tech Oy, was needing a general guideline for their website projects. They had previous experience in web development and were lacking a documentation, which they could provide for their clients, during website projects. Haara tech wanted to follow a guideline or a framework to save time and be more efficient as well as deliver better products for their clients. They wanted to get their clients more involved in website design and development, and by putting together a document that would be possible.

2.1 WordPress

WordPress is free and open-source content management system based on PHP and MySQL. It requires a web server which can be purchased from an internet service provider. WordPress can also be installed on a local web server in company's own server room.

WordPress uses themes for managing the look of the website, and plugins to extend website's features and functionality. WordPress requires at least one theme to be active at a time but doesn't limit its extensive possibilities inside that one active theme.

WordPress requires updating from time to time depending on the security breaches and unregulated updates the team behind its software is making. Typically, WordPress has three major updates per year. WordPress themes and plugins also require updating.

2.2 Divi

Divi is a smart and elegant WordPress theme developed by Elegant Themes (Elegant Themes, 2016). Divi theme includes the Divi builder, which transforms elements into visual building blocks, allowing anyone to understand and edit the structure of their page without touching a single line of code. There are no limitations as to how builder elements can be customized and arranged, making Divi one of the most flexible themes ever created for WordPress.

Divi theme comes with 18 pre-made layouts that allow you to quickly jumpstart website development. These layouts are completely customizable and can be used as a great starting point for creating new designs.

Divi theme has been designed to be fully responsive on all platform and devices no matter what screen size is being used.

3   Project overview

The purpose of this document is to provide a project backbone for WordPress and Divi projects. It's a project where the goal is to build a functional and professional looking website with the end-user experience in mind. Website project can take up to several years to complete, but can be finished within a couple of days.

Each and every Divi website project aims to give all the keys for its user to manage their website easily and customize it without the possibility of breaking the website. Divi is simple and elegant WordPress theme, which requires little to no coding knowledge to modify its look and functionalities. By learning how to add and modify Divi modules, the user can easily create a professional and good looking website.

The website project typically includes at least two parties: the client and the developer. The developer takes care of building the website and the client provides the assets for the whole project. Client has the option to decide some key elements that will be included for the website. By following this document's kick-off survey, we can weed out some basic needs that client wants.

Website project requires some background preparations before any work can be done. This applies for both the developer and the client. This document states some general guidelines for the overall project that should be thought off before, during and after the project.

3.1   Kick-off survey

To kick off a website projects it is recommended to go through a ten step survey where the client can choose some basic elements and functionalities for the website. By completing this survey, the developer has a better understanding of the client's needs, and the client gets a better understanding what a website is.

This document provides an example online survey which is located in Haara Tech Oy website (Haara Tech Oy 2016).

Figure 1: Introduction

3.1.1 Background

Second step of the survey maps the client's website background. By providing the address for the old website, the developer gets a better understanding off where the client is coming from and what has been the purpose of the previous website. If the client is going to be using the same text and image content as on the old website, the developer can easily use this content right away when a new website is being built.

Often times a new website can be completely renovated from the previous one. This step of the survey asks the client to tell the developer a little bit about the purpose of building a new website.

Figure 2: Background

3.1.2   Colour pallet

Third step of the survey maps the client's visual needs by choosing a colour pallet for their website. Developers are recommended to use maximum of five different colours per website since using more colours can be a little too much for eye to handle.

The colour pallets that are used for mapping the client's needs are generated by a third-party service provider Coolors (Coolors 2016) which generates very user friendly five-colour pallets. These colour pallets are great for both content design and web design.

Whichever colour pallet has been chosen by the client, it is then used to design and develop the actual product which is the website. Different colours can be used to create content around the website. For example, the header can be one colour from the colour pallet, content section can be one colour, sidebar can be one colour and so on.

If the client sees no fitting colour pallet for their website for any reason that might be, a custom colour pallet can be built. This is often very common as clients might have a different colour scenario for their image that they want and need to use.
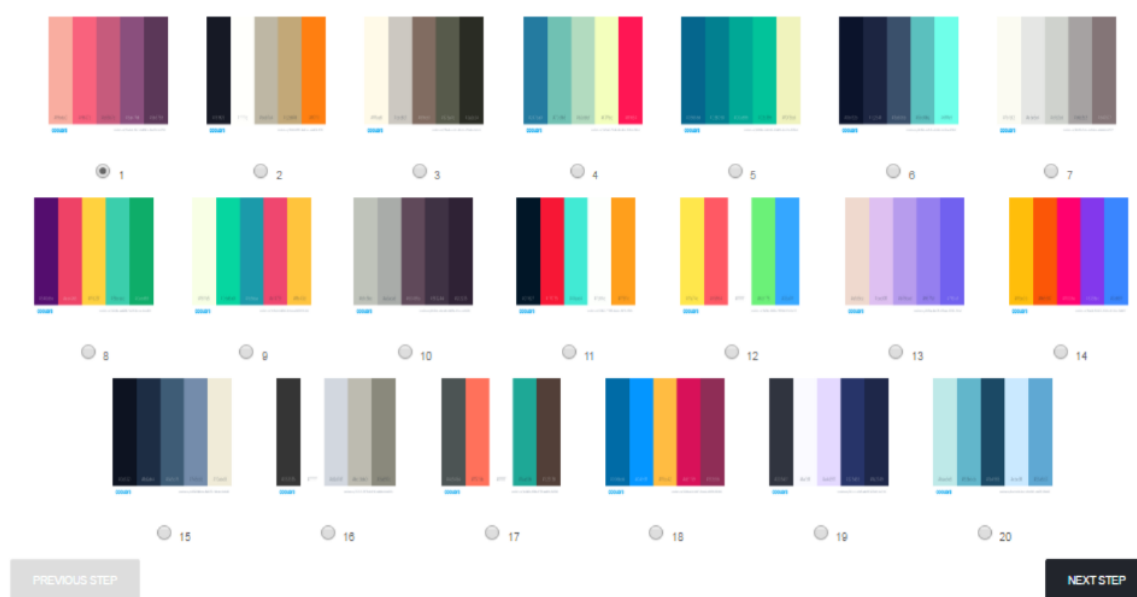
Figure 3: Colour pallet

3.1.3   Font

In the fourth step of our website survey the client is asked to choose one font family for their website. Choosing a font for the website is one of the major decisions that is impacting the visual style of the website.

A good font family has a few different font weights and is clean and easy to read. Font weights are used to display text in different formats. For example, using bold font weight in-side a normal paragraph makes the bold text stand out from the rest of the text.

The Divi builder currently has 86 different font families integrated in its software. These are some of the most commonly used fonts around the web. While it is easy and highly recom-mended to use one of the Divi builder's font families, it is possible to install a third-party plugin to use web fonts and Google fonts.

Divi Theme Examples (Divi Theme Examples -Fonts 2016) provides a nice page which displays all the font families of the Divi builder in a single page.

Figure 4: Font

3.1.4 Icons

In the fifth step of the survey the client can pick some icons for their website. Icons are also a big factor in web design today. Using icons gives the end-user a visual aspect of the content and creates more interest for the text. Icons should be carefully used and implemented inside the website. Typically icons are placed next to the headings and subheadings as they act as sort of section dividers inside the website.

To use the icons provided by this document, we are using a plugin called Better Font Awesome (Better Font Awesome 2016) which has a huge collection of different icons and categories that can be easily integrated to the website with line of code.

The full list of Font Awesome's icons can be found from their website (Font Awesome 2016).

Figure 5: Icons

3.1.5 Pictures

The sixth step of the survey is for choosing pictures for the website. Pictures can be used as section background or header background to make some content stand out with beautiful pictures included. If the client doesn't have their own collection of pictures they want to add to their website, there are many third-party picture providers found from the internet. It needs to be noted that the pictures should be royalty free stock pictures, so there are no licencing problems. Royalty free pictures don't require any license agreements and can be used freely for personal and commercial use however needed.

Some popular sources to gather good looking pictures are Pexels (Pexels 2016), Pixabay (Pixabay 2016) and Unsplash (Unsplash 2016).
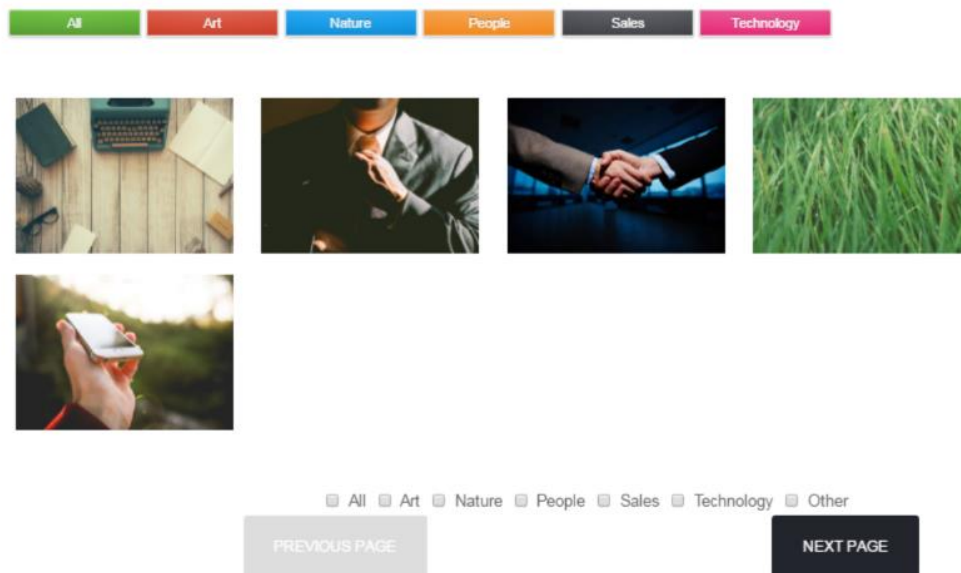

Figure 6: Pictures

3.1.6 Layout

Seventh step allows the client to decide whether they want to kick start their website project from a template we are providing. Divi theme (Divi, 2016) has a library functionality which allows its user to create and save layouts to be used in different installations. These layouts can be imported and exported within the Divi builder and makes it easy to start a new project.

The developer is recommended to have a collection of templates to show off their designs. Having templates gives the client the possibility to use one of these templates or pick certain elements from them. This makes it easy and fast to build a completely new website from a template by replacing its filler texts with client's text, replacing pictures with client's pictures, replacing colour pallets with client's colour pallets and adding more content to the content sections.

One way of showing off the portfolio of different templates, is installing finalized websites on web server sub domains and providing access to these addresses.
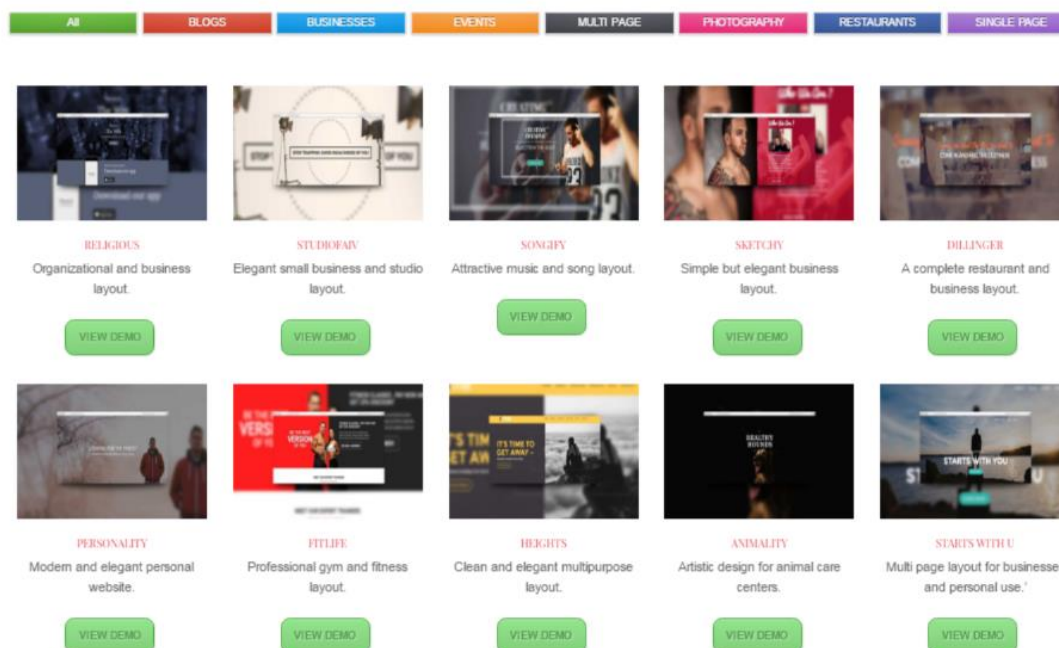

Figure 7: Layout

3.1.7   Modules

The eight step of the survey is to map what kind of content is needed for the client's website. The Divi theme provides a huge collection of modules to build content for different occasions. Modules make it easier to build certain functionalities for the website. If the client needs an online store for example, the Divi Builder offers a module called 'Shop module' for that particular purpose. A module is dragged and dropped to the Divi Builder and modified to fit the client's needs.

It is recommended to get familiar with Divi's modules to know what is possible to build with its builder. The complete documentation about Divi modules can be found from their documentation (Divi documentation 2016. Elegant Themes).
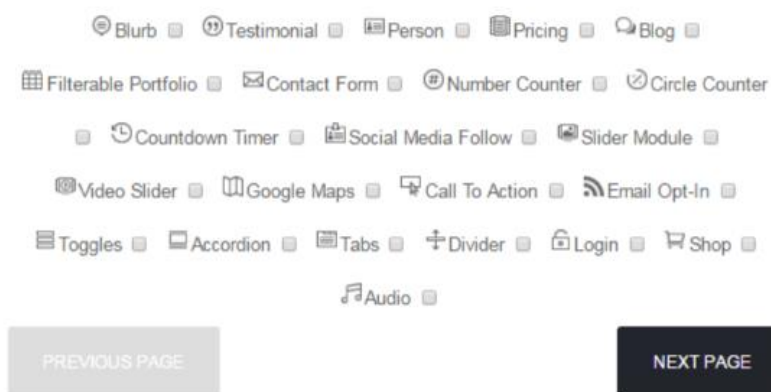

Figure 8: Modules

3.1.8   Extra

The ninth step of the survey is to map out what more is needed to build the client's website. Aside from building the website, it also needs some extra care to be managed correctly. Providing hosting and maintenance, search engine optimization, consulting for Divi and Word-Press and graphic design are some good extra services that the client might need.

In this step we'd also like to know what is the client's budget for building their website.

Figure 9: Extra

3.1.9 Finish

The final step of the survey is to ask client's contact information and any additional information about their website needs.

This process maps out what the client is looking for from their website and gives the developer a good ground to start from to begin building the actual website.

Figure 10: Finish

4   General guidelines

Building a custom website with WordPress and Divi can be very simple or a complex project. WordPress itself offers a huge collection of plugins to work with. Divi however is such a complete theme for WordPress that often times no third-party plugins are needed to build a simple yet elegant website. Clients should be aware of what they want and need from their website and therefore the developer should encourage them to get familiar with some possibilities that we can do.

4.1   Before the project

The client is recommended to get familiar with what a website project includes and what is required from them in the project. By learning all the necessary components of a website projects the developer can be sure that them as a service provider and the client as a customer stay on the same page and speak the same language when building the website.

Before starting a project and approaching the developer team with a proposal, the client should have certain preparations done before hand. This makes it easier and saves a lot of time in the actual process of building the website.

4.1.1   Your story

When a client wants to build a website, it is good to have their story prepared at least to some level. It is not necessary to be totally comfortable with all the moving aspects of business or idea to start a website project since there is typically a new learning curve while building a website where both parties come up with new ideas, proposals and solutions. Having a starting point helps designers and developers to start idealizing the big picture and what suits the client's needs the best.

4.1.2   Vision

Developer should provide the client a portfolio of layout designs to help getting stared on the visualization side of the project. This comes in very handy if the client is new to websites or doesn't really have an idea of what they want their website to look like. All layout designs can be implemented into any new project to kick off the building process. These layouts can then be modified to the client's needs and customized in functional bases.

Find an example portfolio from Haara Tech Oy website (Haara Tech Oy Portfolio 2016.).

4.1.3 Mission

Having a strategy for the website is always recommended as technology keeps growing as a market. Website serves as a complete business card like solution to tell it's visitors and customers everything or anything what the owner of that website is doing.

Divi websites are using some of the most advanced technology so having an impossible idea might not be that impossible after all.

It is recommend to prepare a short-term mission as well as long-term mission for both business and the website. An example could be growing traffic in the short-term and commercialize in the long-term.

4.1.4 Goal

The ultimate goal for both business and the website helps the developer to prepare for any future changes and updates. The goal doesn't necessary play any role in the look and the feel of the website or the business right now, but is an extension of today's idea. Thinking big is never bad when doing business and creating something new and unique.

4.1.5 Template

The Divi builder itself includes around 20 pre-made layouts which are accessible and can be used by the developer of the website who is using the Divi builder. These layouts do not include any styling or functional extensions but can be easily implemented into the website to get an idea of what is possible with little modifications. All these layouts are saved and loaded from the Divi library, where all the design and development work can be managed.

As the Divi builder keeps growing as a framework, its potential as a website builder has also been acknowledged. Right now the market behind the Divi builder in is a state where more and more companies start providing templates as a free or premium solution for other users and companies. The developer should provide sources for template markets and encourage clients to look for a template from other companies as well. Since all the templates require professional knowledge to be modified for the client's, it is possible to purchase a layout or a child theme for the client. Divi Builder follows certain fundamentals and can be modified by anyone who is familiar with it. Some of the most popular Divi layout providers are Monterey Premier (Monterey Premier 2016) and Elegant Market Place (Elegant Market Place 2016).

4.1.6 Content

Before starting a website project it is recommend to have some content prepared for the website. If all the content the client wants to put on their website has been prepared, it is only up to the developer to put that content in to living.

Some designs follow a certain flow of managing content within the website. These can affect the content a little because content should look great too. Typically long and complex sentences look a little sloppy, except in articles and blog posts.

If a client has an old website which they just want to update with the same content that the old website has, it helps the whole process a lot. If however this is not the case, it is recommend to either prepare the backbone of the content or to choose a pre-made layout from any Divi collection which has the basic structure of content made up. This way it is easier to come up with own content as most of the pre-made layouts have filler text as 'Lorem Ipsum Lorem Ipsum' inside of it.

4.1.7 Knowledge

When preparing to start a website project it is highly recommend to learn about the platform where the website is built on. Divi framework is very simple yet powerful WordPress theme which offers a wide variety of solutions for almost anything related to web design and development. Even if the client doesn't understand that much about building a website, Divi has documented it's capabilities in a way that it is easy to understand and allows the client to propose certain designs and developments.

The documentation (Divi Documentation, 2016) has all the information that is required to manage and customize the Divi website. It includes instructions on how to use the Divi framework, what modules are included and how to use them, explanation of the Divi library and much more to manage the Divi website.

4.1.8 Budget

Before proposing a website, the client should have a budget in mind. Building a website typically requires some assets and resources, and all extra services to make the website functional.

Client should know if they are going to be using a pre-made layout to kick start their project or are they going to need a completely new design. Big impact in the long run is the question

of website management and maintenance. If the client is willing to maintain their website by themselves the need for the developer's support lowers the total budget.

The designers can be mostly strict when it comes to website functionality and outlook. The website has to be both efficient and good looking. This means that if the website is going to include a lot of graphical content, they need to be transformed into a website friendly format. Typically a simple formatting of pictures takes around ten minutes to change the resolution and file format per picture. Videos and other graphical content can take a little more time so we recommend to count in the amount of graphical content for the budget.

If the client doesn't have a budget in mind but has all the necessary components prepared and has a vision of what they want from their website, the developer team can give a proper estimation of how much the project is going to cost depending on the client's needs.

4.2   During the project

When all the terms have been discussed about the project and the project has moved on to the actual development phase there are a few key rules while working on the website.

The design and development process depends on the client's needs. In many occasions the website project starts from sketching and mock-ups, but if the basic structure for the website is somewhat simple enough, the building can be started on a subdomain where all temporary work will be made.

By developing the website in a subdomain, it is easy to afterwards move that whole installation to another server within a short amount of time. This way it can be managed who are able to access the content which is under development.

4.2.1   Time

While developers are working on the website it is possible that they have a number of other projects going on at the same time. Clear time tables and project estimations should be done at the right time, and all delays need to be eliminated.

If all the pre project work has been successfully done then 'during the project' -phase is only executing the plan which typically should be straight forward development if nothing too hard comes along.

Since developers are developing everything online they do not necessarily have to arrange meetings during the development process unless anything urgent comes along.

4.2.2   Effort

Developers should always provide help and support during the project and stay available around the clock if necessary. Client is encouraged to stay active on the development process to make sure developers are doing everything right for the client's needs.

The development process can be seen from the subdomain unless the access is retained for any given reason. An example reason could be a problem state where the site is not very functional or is not looking like the developers want it to look like. This can cause stress or unease for the client as seeing a work in unfunctional development state might not be something they want to see.

Mostly developers should grant access to the website while developing it and by doing so, both parties can communicate about different elements and aspects that are going to be included in the website.

4.2.3   Availability

Both the client and developer should inform the other party about their availability and are they reachable during the project. Communication is the key throughout the project to build the best possible website.

Some good communication gateways can be used if no meeting are arranged. Skyping and mailing are good solutions for staying in touch.

4.2.4   Finalizing on subdomain

When the website is getting ready it will be tested to be functional on all browsers and devices that are available at the time. This way the developer maximizes the efficiency of a good end-user experience on as many platforms as possible.

If any problems occur while testing the website, the developer might need a few more days to fix those issues, depending on the size of the issue that has been found.

If everything is going according to the time table and the website works as expected, it is time to get ready for the transforming phase. This means that the all databases, libraries and

web content is moved to the actual server where the website is going to be functioning full time after the launch.

4.3 After the project

Once all the content of the website has been moved to its own web server it is set up by activating all its components. Components include themes, stylesheets, scripts, databases and plugins.

Typically, a transform of the entire installation from one web server to another doesn't require that much time, but it is possible that some malfunctions might occur during the transformation. Once the website has been fully transformed to its own webserver it is first and foremost protected by a password so no end user can accidently go to the website. This is done to make sure that the final website that is launched will work and look like it should. This also requires more testing and might postpone the actual launch.

This is also the time to complete the websites metadata entries to do a working search engine optimization for the website. Each page of the website requires individual search engine optimization so if it is wanted to be totally done before the launch it is recommended to give us at least a day or two to finalize it here.

4.3.1 Launch

Launching of the website for public is commonly done at day time. Developers discuss with the client when they want to launch their website and provide help with bringing in visitors and customers through their own marketing strategies. Social media marketing and email marketing are very popular ways to reach out for new customers.

For user traffic statistics developer can use the Jetpack plugin (Jetpack 2016). User traffic data plays a big role when analysing launch date success. Depending on the project's details and what kind of services have been included we are looking to see minimum of hundreds of visitors to the maximum of tens of thousands of visitors to be visiting the site during the launch date.

Once the site is granted for public access it's password protection is disabled and its purpose and address is shared via online marketing platforms. It is good to know that the better the

server which is running the website, the more it can handle traffic especially during the launch date but also during it's normal traffic days.

4.3.2 Results

During the following week after launch, the website has been visited by any number of people around the marketing circles. It is recommended to gather user statistics and behaviour of the website and analyse it to give both parties a better understanding of how the website is visited by its users. These statistics are used for future purposes if any upgrades or changes need to be done.

4.3.3 Upgrades

Whenever there is a need for an update or an upgrade for the website or its server they can be done within a few days depending on the size of the change. Small tweaks of styling, functional changes, web server upgrades and marketing plan updates can be done.

4.3.4 Website maintenance

Since WordPress websites require constant updating for security and software reasons, it is recommended to update the necessary systems, themes and plugins as soon as possible. The developers get instant notifications from all of their client websites when there are any malfunctions, outdated systems or software or any other errors. Developers are dedicated to deal with all necessary updated as soon as possible.

Typically, dealing with these updates don't take that much time since they are usually just a few button clicks that need to be taken care of. As an example let's say that client's website, which is running WordPress version 4.6 and Divi 2.7.10 has an update on both WordPress and Divi. The administrator receives an instant message from the cPanel (cPanel 2016) that recommends them to take care of the updating. They then log in to the client's WordPress installation and take all the necessary back-ups before updating, and then update after that. It is common that when WordPress is updated to a newer version, the themes also require an update.

It is also possible to have a website update all its software automatically. This is not recommended since running automated updates on a website can easily break themes and plugins due to a mismatch in software compatibility.

4.3.5 Contract

Building a website is a project between two parties. It is good to have a contact which states some strict points about everything around the service and the product. This way if anything is going to go wrong in the future, it's good to have the legal aspect covered. One handy example contract for freelancer web designers and small businesses can be used from Stuff & Nonsense (Stuff & Nonsense Contract Killer 2016) website. It covers the basics of a website project work and can be modified to fit the providers and client's needs.

5 Conclusions

Following a framework, guideline or any model in whatever project, helps to keep track of things and makes it easier to manage everything better. Based on this project a more complete and business-friendly document was created, called Divi Standard 1.0. It was built with Photoshop CC.

5.1   Divi Standard 1.0

Here are a few pages from the Divi Standard 1.0, which includes 42 pages overall.

Figure 11: Divi Standard 1.0 - Cover Page
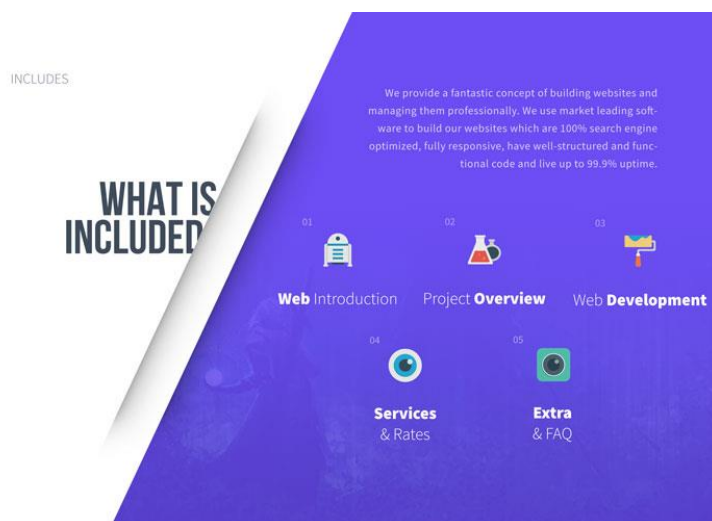
Figure 12: Divi Standard 1.0 – TOC

Figure 13: Divi Standard 1.0 – WordPress Plugins

Figure 14: Divi Standard 1.0 – Your Story

Figure 15: Divi Standard 1.0 – Colour Pallet

6   Final words

Both parties are always involved when building a new website. The developers of the website are the ones who are providing a service, and therefore they are required to provide a secure and functional product that matches the client's needs. The client is the one who is proposing a new product, which means that they are required to clearly explain what they want. By providing resources and explaining the fundamentals for the client, they can better understand what can be done with the website and how it is functioning.

References

Elegant Themes 2016. Divi WordPress Theme
https://www.elegantthemes.com/gallery/divi

Divi documentation 2016. Elegant Themes
https://www.elegantthemes.com/gallery/divi/documentation/

Haara Tech Oy 2016. Haara Tech Oy
http://www.haaratech.fi/

Haara Tech Oy Portfolio 2016. Haara Tech Oy
http://www.haaratech.fi/Layout/

Haara Tech Oy Website Project 2016. Haara Tech Oy
http://www.haaratech.fi/webproject/

WordPress 2016. WordPress.org
https://wordpress.org/

Hostingpalvelu 2016. Hostingpalvelu.fi
https://www.hostingpalvelu.fi/

cPanel 2016. cPanel
http://cpanel.com/

Coolors 2016. Fabrizio Bianchi
https://coolors.co/

Open-Sans 2016. Google fonts
https://fonts.google.com/specimen/Open+Sans

Google Fonts 2016. Google fonts
https://fonts.google.com/

Divi Theme Examples - Fonts, 2016. Divi Theme Examples
http://www.divithemeexamples.com/divi-fonts-preview/

Better Font Awesome 2016. Mickey Kay
https://fi.wordpress.org/plugins/better-font-awesome/

Font Awesome 2016. Font Awesome
http://fontawesome.io/icons/

Pexels 2016. Pexels
https://www.pexels.com/

Pixabay 2016. Pixabay
https://pixabay.com/

Unsplash 2016. Unsplash
https://unsplash.com/

Monterey Premier 2016. Monterey Premier
https://montereypremier.com

Elegant Market Place 2016. Elegant Market Place
https://elegantmarketplace.com/

Jetpack, 2016. Jetpack
https://fi.wordpress.org/plugins/jetpack/

Stuff & Nonsense Contract Killer, 2016, Stuff & Nonsense Ltd
https://stuffandnonsense.co.uk/projects/contract-killer/

Miika, H. 2016. Project documentation for Divi. 2016

Figures