



# Escola Técnica Superior d'Enginyeria Informàtica Universitat Politècnica de València

# DEVELOPMENT OF A WEB SERVICE FOR ONLINE RECRUITMENT

Trabajo Fin de Grado Grado en Ingeniería Informática

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# 1. GENERAL INTRODUCTION

#### 1.1 Summary

This is a project where we develop a web service for recruitment people that lives in Finland. It is also a web service for the national companies of Finland where we will promote them and also help them to choose the most suitable candidates for their job offers.

The service will have a subscription plan that the company will choose and pay for it, so the service will know how many candidates would need to choose. It will choose the most prepared candidates for the job offer that the company specified.

In the other hand, we have the users that are searching for a job, they will need to register into the website giving us some details and information that will help the service to choose them to the job offers that suit them the best and also, they will need to upload a presentation video to their profile, so when their are chosen for a job offer, the companies can decide if it's the correct one for them or not.

With this project we want to create a web service for online recruitment as we have described to generate earnings from them while we promote the national companies of Finland and we also help them to find the more suitable workers for their companies what will improve the efficiency of the company.

# 1.2 Objective

The current objective of the project is learning how to create an online service with WordPress and using a plugin called "Elementor".

Also the objective is to develop a service that will help year by year to people to find new jobs all around Finland and help Finnish companies to find new workers that fit perfectly for their job offers.

# 2. WORK METHODOLOGY

## 2.1 Methodology

Working methodology has been based in weekly meetings via Google meetings with the company to explain what has been done during the previous week and to let them know the problems faced and the problems that we couldn't solve, so we could get tips and help directly from them.

On the other side we also had weekly meetings with our Finnish tutor, Teppo, to let him know how everything was going, to receive feedback from our work and also to receive some tips and help for the work we were doing.

Finally, we were doing daily work for the project as it was the only thing we had to do and we did not had that much time to do it. This is the reason why we were using HacknPlan, a website where you can log your project management to have all your objectives organized to make everything in time.

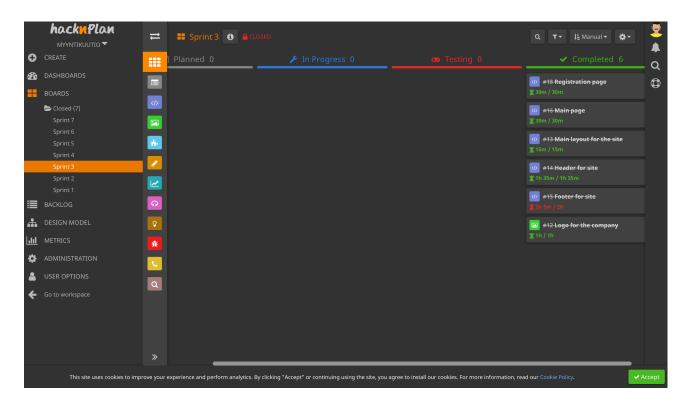


FIGURE 1. HacknPlan Screenshot from the Boards Page

This has helped me to maintain all the objectives we had and the company was giving to me on time so we could finish the project in the time given.

#### 2.2 Project Structure

The project has been structured in 7 Sprints as it can be seen at the previous image.

The first sprint were the initial steps of the project were we did research on other companies from Spain with similar services and we got ideas for the myyntikuutio online recruitment service. Also in this sprint we thought about monetization, visuals for the website, name for the service and the logo that we were going to use.

At the second sprint we started with the main work for the website, were we started to do the footer, the header, main layout and finally the registration page for both types of users, the ones searching for a job and the companies trying to search the right workers for their companies.

At the third sprint we continued with the registration pages, the functionality of the website and some more visuals, like illustrations and texts for our website.

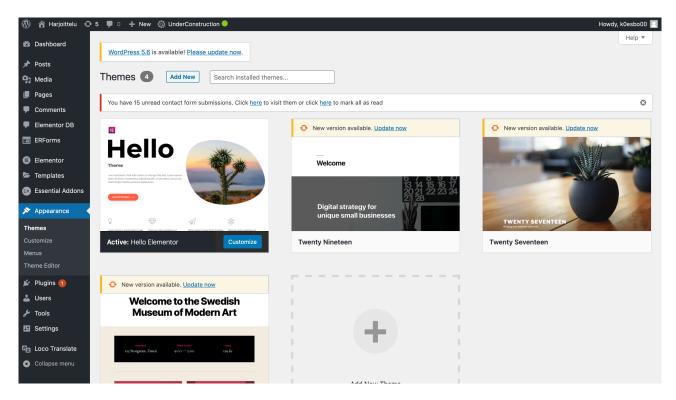


FIGURE 2. WordPress Screenshot of the theme in use at the Website

At the fourth sprint we started with the landing pages, learning how to use ActiveCampaign and doing the logging pages and the functionality to log in and log out.

At the fifth sprint we started with ActiveCampaign automations, making some registration forms and the automated emails for the new users.

Then at the sixth sprint we started to make all the service useful at every device, so you could enter the website without problems from your computer, tablet or phone as it was totally responsive in all of them.

Finally, with the last sprint we just did some fixing and little details for the company to make the website completely ready for them.



FIGURE 3. Website seen through a mobile device

# 3. START OF THE PROJECT

#### 3.1 Problems Faced

During this project we have had some problems because of using some software, plugins and services that we did not used before, so we needed to learn it before and do some research about them, so we could use them perfectly.

Also we had a big problem with the company, because before starting the project they were not sure about what they really wanted, but we managed to figure out how to work, what to do and we made our plan for the starting in time.

Then we had the problem that we had some ideas in mind that they were not agree with about visuals, architecture of the website, etc. But as they were the ones deciding if we could do something specific or not, we just gave them some different ideas for everything we were not agree so they could find the one that fit better for them.

#### 3.2 Programs Used

we have been using some different programs, some of them completely new and some of them not because we were using them during the first period, we will explain them now.

#### 3.2.1 WordPress

#### 3.2.1.1 Definition

WordPress is a free system for content management that is used to build and maintain websites.

It provides a user interface for designing, publishing and updating websites. It is an easier way to develop a website because you do not need to code in HTML or any other coding language as you can choose one of the many different website templates or themes it has itself. With these templates and themes you can build your website with your own style and build a custom navigation bar. After this you can start creating pages and post with formatted text, links, images or other types of media. WordPress can be also really useful for someone completely inexperienced as it is easy to create and publish a website.

But you can also install plugins to customize much more the website and give more services and functionalities to the website.

#### 3.2.1.2 Way of use

We have been using WordPress since we started with my project as it was the system that fit the most the project and also was the main system used during my first course and it was the system the company wanted me to use for their online recruitment service.

In WordPress we have been using many different plugins, themes and templates and we have been customizing them as the company wanted to make the service as better as possible for them.

It has been an easy way of developing the website as we did not have too much experience with HTML and with website development but still was a challenge to know how to use it perfectly to get the best advantage possible from the WordPress system.

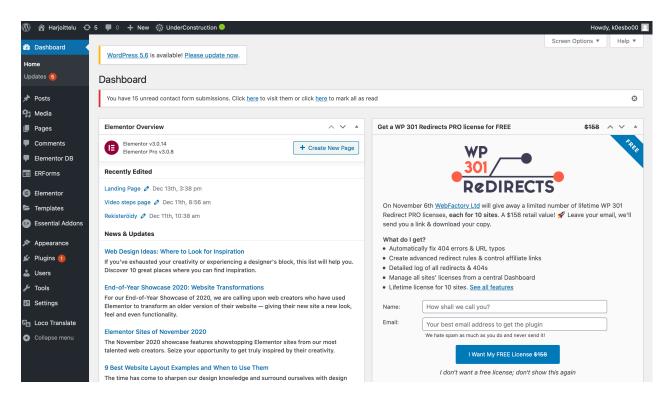


FIGURE 4. WordPress Overview Screenshot

#### 3.2.2 ActiveCampaign

#### 3.2.2.1 Definition

ActiveCampaign is a private cloud software platform based in Chicago, Illinois that is used usually by small or mid-sized business for customer experience automation or CXA, that combines the email marketing, the marketing automation, the sales automation and the CRM categories. It also is SaaS (Software as a Service) focused on marketing and sales automation.

# 3.2.2.2 Way of use

In my project we have been using ActiveCampaign for email marketing, so we did an automation of the email marketing to make sure that after each user is registered, they will receive an email with information of their new account and with some marketing from our service to make them being more interested in learning how to use correctly and successfully our recruitment service.

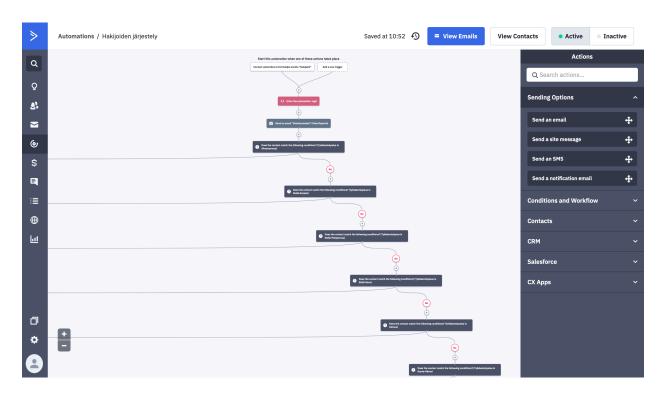


FIGURE 5. ActiveCampaign automation

#### 3.2.3 HacknPlan

#### 3.2.3.1 Definition

HacknPlan is a project management service usually used for game development that we used because it was good enough for what we needed.

With HacknPlan you have a "kanban board" where you can put all your tasks, user stories, etcetera so you know what you need to do next and what is still missing or what is already finished/completed.

With this service you can also define sprints or iterations with a limited number of tasks so you do not put too much in the main board and you can divide your work in different sprints to maintain a better order and do not lose any of your tasks/ objectives on the development. Finally you can also create milestones that hold a group of sprints in case the project is too big and you need to group your sprints in different milestones.

#### 3.2.3.2 Way of use

In my project we used HacknPlan to manage all my tasks correctly week by week so we were always having everything on time for the company meetings and the tutor meetings. we also used it to log all the worked hours to see in what fields we were expending more time or less time. This also helped me to know if we were missing something or if we were dedicating more time than needed to something and forgetting about something.

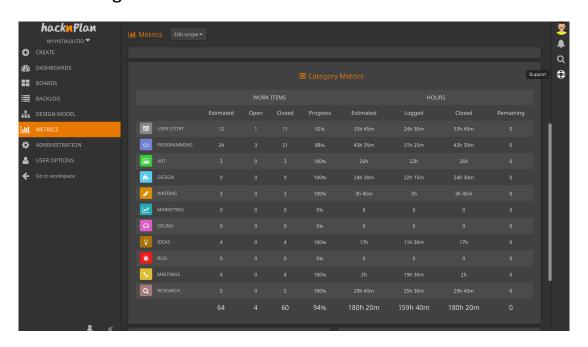


FIGURE 6. HacknPlan Screenshot of the logged hours on the Website Work

# 3.3 Plugins Used

#### 3.3.1 Elementor

It is a plugin in WordPress for website building with a lot of settings that helps you to build your website much easier and with a good looking. It is also an extendable and developer-friendly plugin that gets bigger and give him more functionalities as other developers create add-ons, themes and products.

#### 3.3.1.1 Contact Form DB

Contact Form DB is a secondary simple plugin that was designed for the Elementor Form Module that helps us saving the contact form submission in the database

#### 3.3.1.2 Pro

Elementor Pro adds a few new features to the basic ones. The basic features are the drag & drop Editor, themes, popups, pixel layouts, marketing solutions, an extendable platform, mobile responsive editor and widgets for your website. The Pro features are, theme builder where you can build your own footer, header, 404 page and blog post saving a lot of time and enhancing your results while you ensure consistency across your entire website.

Then we also have the popup Builder where you can create email subscriptions, login forms, promotion & sale banners, announcements, exit intent, welcome mat and related products & upsells

And finally adds the WooCommerce Builder too, where you can design your own single product and archive page templates visually and without any coding, what makes it easy and useful for everyone without the need of knowing how to code.

#### 3.3.1.3 Essential Addons for Elementor

Just the essential plugin you install after installing Elementor as it has a lot of new free elements like advanced data table, calendar events, filterable gallery, ...

#### 3.3.2 ActiveCampaign

This plugin helps you to use ActiveCampaign, what were explained before, into WordPress.

With this plugin you can create personalized customer experiences across channels. It makes easier to embed the ActiveCampaign forms into any WordPress post, sidebar or page without doing anything else, so you can push the data directly to ActiveCampaign CRM. Also gives your website a user tracking that allows you to track all visitors that go through your website to know in which products or post or pages of your website visitors / customers are much more interested so you can automate personalized follow-up emails.

Finally also allows your site to have a live chat for accounts using conversations with their messaging platform. With this you can give a little human touch to your website that will give the customer a better user experience and will enhance him to buy or use your services more than normally. So with this you can add a customer experience automation (CXA), what is a new approach to building meaningful connections with your users and customers, without knowing in which part of the user journey they are.

# 3.3.2.1 Customer Experience Automation (CXA)

CXA is any technology that can assist users, customers or visitors of a website or a service with the common tasks, sometimes replacing the human work like answering different kind of questions that the user has during the use of the service, to improve the user experience and interactions with our service. CXA uses technologies and systems that help improving the user experience, with features like faster response times than human response times, an improved efficiency of the system or the incorporation of value-added features. It is important to know that it can be implemented in any part of the customer journey, increasing the engagement, boosting the retention and improving the experience of the customer.

Also one of the best benefits of this is that the costs are much lower while the manual labor is improved as it is automatic now and improves the quality of the service.

Examples of it can be, customer-telephony integration, self-checkouts and automated emails sent after visiting the website.

## 3.3.3 Easy Registration Forms

We were using the 2.0.9 version of the plugin.

"Easy Registration Forms" is a plugin developed by

EasyRegistrationForms that allows you to create registration forms for your website users in WordPress in an easy way.

You can create as much as you want and with all the required fields you consider important for your form ranging from simple contact forms to multiple pages registration forms.

It also allows you to see all the submissions on the manager area in the WordPress Dashboard.

#### 3.3.3.1 Features

This plugin has, actually, a lot of features. This features are, an easy drag&drop builder interface and unlimited registration forms that allows you to make everything you need.

It also have a lot of built in user registration forms that come with predefined fields to save your time when doing them.

In case you want more elaborated ones, has the feature of multipage or multi-step forms to get as much information as needed. Also includes a reporting system allowing you to really the information to the interested parties. With this feature you can create different CSV report files and then will send the email to all recipients.

There is also a built in login form widget that you users can use if you add it to your website after they use the registration form, avoiding installing an extra plugin only for login forms.

It is important to mention that you can add subscription plan or membership plans with offline payment methods.

It includes a central area where you can check all submissions and also supports all fields as text, text-area, checkboxes, email, radio, data, select, numbers, files, etcetera... Also has predefined validation logics and a user role based form access and a reCaptcha that you can use to be sure that all submissions are being made by real users and not bots from possible attackers or people trying to get an advantage from your service.

#### 3.3.4 FileBird Lite

We were using version number 4.2

FileBird is a user-friendly media library plugin for WordPress that can be use in all shops or blogs.

This plugin allows you to make unlimited main folders and subfolders so you can manage much better your multimedia files such as videos, images, audios, documents etcetera.

FileBird works for you, helping with the managing of all files, because when having a blog or a shop usually means you will have to upload a lot of multimedia to your website what can be a completely mess in some point, but with this plugin you will be able to order everything in different kind of folders to maintain everything where you want it to be and making a good structure with them, what will save you a lot of time as searching any file will be much easier.

#### 3.3.4.1 Features

This plugin includes a lot of features such as a download media folder, that allows you, to download a folder including all subfolders inside the main one in a Zip file keeping the exact same structure.

Can also choose a folder as a startup folder to go back to work easier and faster and has a user-friendly interface with a drag&drop to move or build the multimedia files.

A smart context menu that allows you to create, delete or rename folders with a right click as you will do on your computer normally, what saves a lot of time.

Also has a one toolbar with a resizable sidebar that allows you to control everything from there.

Important to mention that has compatibility with many of the most important migration plugins so you can migrate and synchronize your website without losing all the structure of your files.

A search feature, useful to find easier all your folders or subfolders and a bulk-delete feature that allows you to delete with an only click and moves all to an uncategorized folder and remains everything intact, just in case.

Finally it also supports RTL languages as Arabic, Hebrew, etcetera and also supports many different languages as English, Spanish, Italian, French, German, ...

#### 3.3.5 Loco Translate

Loco Translate is a plugin that provides you an in-browser editor for WordPress translation files and integration with an automatic service of translation.

You can also use the tools Gettext/localization, meant for developers to extract strings and be able to generate templates.

#### 3.3.5.1 Features

The features includes an editor within WordPress admin for translation so you can translate to website to the supported languages that includes also support for RTL languages as Arabic, Russian, Hebrew, Chinese, ...

It also has an integration of different translations APIs as Microsoft, Google, Yandex, and DeepL.

It is very important that you can upload language files directly into your theme or plugin.

The possibility of extracting translatable string from your source code.

A native MO file compilation where you do not need to get Gettext into your own system.

Also a support for PO features like comments or plural forms or references, a PO source view and a configurable PO file backup. A feature for protecting your own translations into a language directory where you can save them.

Finally also a built-in WordPress locale codes.

we have been using this plugin to translate the website from English to Finnish as we can not write or talk that language and with the help of a Finnish student and this plugin it was possible to make the whole translation of the website to the main language the company was searching for, Finnish.

#### 3.3.6 Under Construction

Under Construction is a plugin made by WebFactory Ltd that allows you to create a page that show to the user as if it was in maintenance, under construction, coming soon or a landing page in less than a minute.

It is basically a very simple, fast and user-friendly plugin that helps you saving time.

#### 3.3.6.1 Features

The first of all is that, of course, you can set the under construction mode to on or off. Based on this you can also automate this page to be disabled in a specific date and time. It allows the Google Analytics tracking ID.

There are also more than two hundred themes available so you can find the one that fits the most to your website and also you can customize the CSS to make it more on your own style. You can change the title, headline, content and description. You can create a pop-up or option box on the page to collect emails that you can synchronize with different types of autoresponders and also add a discrete link to the login form. Finally it is also possible to add different social links like Facebook, Instagram, Youtube, etc and a whitelist for users to decide who can see the actual page of the website and who can just see the under construction page.

Also important to mention that is compatible with a lot of different caching plugins as WP Super Cache or WP Fastest Cache between others.

# 3.3.6.2 Way of use

As the website was already available for everyone we used in quite many pages to show that they were still under construction and they were not showing anything relevant still.

#### 3.3.7 User Menus

User Menus is a plugin developed by Code Atlantic and created by Jungle Plugins that gives really useful features to websites with logged in users.

In a simple way, it just gives you much more control with navigation menus to make them much more efficient and useful for the different users that visit your website.

#### 3.3.7.1 Features

The features of this plugin are actually not that much as it is very simple but allows you to do the following things to the user menus:

You can decide who can see the menus, if it is displayed only for logged out users, if it is displayed only for logged in users or if it is displayed for everyone, so basically you can do 3 different kind of menus that will be displayed to different groups of visitors. And also you can make that logged in users can see their username, their first name, their last name, their display name, their avatar, their nickname or their email in a menu item. But of course you can make them see more than one, only one or none of them if you don't need it.

Also you can add a logout link to menu or a register link to menu or a login link to menu.

And finally it includes a custom menu importer what will allow the migrations to be possible with a normal menu export/import.

## 3.4 System info

#### 3.4.1 Server environment

As an operating system we were using Linux and as a software we were using Apache. Then for MySQL we were using the version MariaDB Server. For PHP we used the version 7.3.20 with 10000 as maximum Input Vars and 64M as maximum post size. we also had GD and ZIP installed and elementor library connected.

#### 3.4.2 WordPress environment

In the WordPress environment we were using the version 5.5.3 without WP Multisite. Using a maximum upload of 64 MB and a memory limit of 256 M. The language was English from US with a 0 timezone and debug mode inactive.

On the moment the URL for the website was <a href="https://harjoittelu2020.myyntikuutioprojektit.fi">https://harjoittelu2020.myyntikuutioprojektit.fi</a>

The theme was the default one, 'Hello Elementor' with the version 2.3.0 by the Elementor team and without a child theme.

#### 3.4.3 Personal environment

As my personal environment we were using Intel Mac OS X 10.15.06 and Safari version 605.1.15.

# 3.4.4 Active Plugins

All the active plugins were:

Active Campaign, Easy Registration Forms, Elementor, Elementor Contact Form DB, Elementor Pro, Essential Addons for Elementor, FileBird Lite, Loco Translate, Under Construction and User Menus.

# 3.4.5 Elements usage

There were 11 pages, 3 posts, 2 theme-single post, 4 theme-Header and 13 theme-footer. And in total there were 2 buttons, 9 dividers, 5 forms, 42 heading, 15 images, 1 login/register form, 2 posts with title, comments, info, content and excerpt, 2 shortcodes, 1 slide, 29 text editor and 3 videos.

## 3.5 Privacy Policy

We had a simple privacy policy with a link from the main screen of the website and saying which personal data where we going to collect. So the data collected as it is shown at the screenshot was the data from the comments form, the IP address from the visitor and the browser agent string for avoiding possible spam in the posts.

We were using the Gravatar service to see if every mail was using a hash created from the visitors mail.

And finally we tell every user that after publishing a comment in a post then his own profile picture will be shown to everyone that visits the post.







# **Privacy Policy**

#### Who we are

Our website address is: https://harjoittelu2020.myyntikuutioprojektit.fi.

# What personal data we collect and why we collect it

#### **Comments**

When visitors leave comments on the site we collect the data shown in the comments form, and also the visitor's IP address and browser user agent string to help spam detection.

An anonymized string created from your email address (also called a hash) may be provided to the Gravatar service to see if you are using it. The Gravatar service privacy policy is available here: https://automattic.com/privacy/. After approval of your comment, your profile picture is visible to the public in the context of your comment.

FIGURE 7. Screenshot from Privacy Policy post

# 4. SPRINTS WORK

#### 4.1 Sprint management

For the sprints we had 7, one each week before the meeting with the company where we were deciding and planning all the work for the next sprint and of course checking all the work done to decide if there was something that we should change or improve from last sprint.

And after that meeting we had a private meeting with my tutor to check how to approach this new sprint and to see if we needed any advice or help from the tutor to continue working on the project.

There is a photo with a summary of every sprint with the most important steps of every sprint done during the whole project.

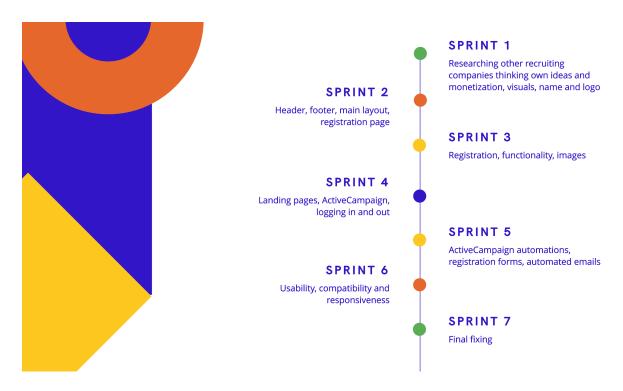


FIGURE 8. Sprint management

#### 4.2 Sprint one

Sprint one or the starting sprint, was the one after the first meeting with the company where they explained me the whole project, their ideas for it, how we were supposed to work and what we were supposed to finish in this first week.

So the first and second day we started with some research about different companies in some other countries in Europe like Spain, Portugal, France, Finland...

The objective of this research was giving me an idea of how this services work, how we should approach the project and how to work on a properly way to make a great website.

After this research we took notes to expose them all the ideas we were taking for the next sprints for the visuals, the way of using the website and of course the monetization, to make suitable plans to make money from the website and at the same time make users have a useful service.

On the third day we started doing some different mockups of the website to show them the ideas we have got from other companies. This mockups were just simple headers, footers, login, registration pages and possible main screens for the future website, with different groups of colors, different fonts and sizes.

Then after two days working on the visuals, on the fifth day we started thinking on a name for the website, having some ideas from the start that turned to be good for them and at the end we gave them around 10 different names from where they got one that was 'Duunis'

And finally on the sixth day we started drawing some simple logos as I am not a Graphic Designer to give them an idea of how could be the actual logo of the website from where they took few of the ideas and made a new one suitable form them.

#### 4.3 Sprint two

In the second sprint, we started the first two days working on the header of the website for what we had few problems to make everything fit and be perfectly understandable. The header was including the logo of the service and the menu to navigate to every page of the website easily. We also made a small wave design to blur the header with the content of the web. The next two days we worked on the footer what was a little bit easier than the header as we already knew how to do it. we included different social media that the service was going to include in the future, name of the service with a small description, a field to give us your mail for more information, address and number of contact and link to all the different pages of the website.

Then we started with the main layout of the website, the main screen, which had a banner with a welcome message and a photo on the background. There was also going to be a video explaining how the website was working and also the text with a summary for those who did not want to see it. And scrolling down there were few post you cold access from the blog.

Finally last two days we worked on the registration page, giving the first steps to have a completely working registration form and page where we were asking for name, email from the new user, skills that he wanted to show to the companies and the job preferences, so the website will know what to show to him.

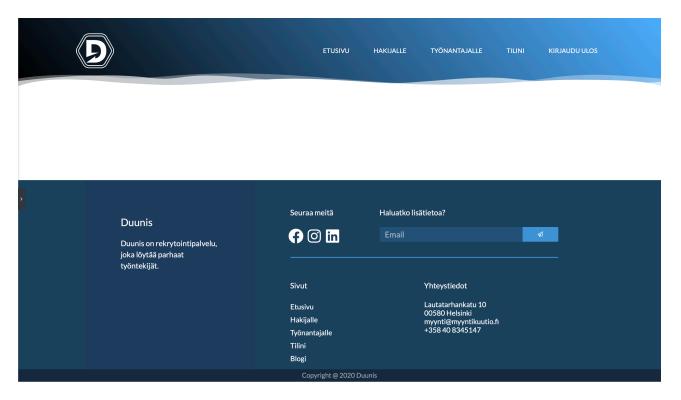


FIGURE 9. Screenshot from Header + Footer from the website

#### 4.4 Sprint three

After the sprint two, the company was quite glad of my work but they wanted more improvements in the registration page so the first day we worked on the registration page and finished all the improvements they were searching for.

The second day we started searching for media for the service, this took me the next two days as we did a big research for free images that we could use in the service at the start and also we worked with photoshop to edit them a little bit to be able to use them in a more proper way into the service.

Finally last days we worked in the functionality of the website, what took me a few days

For functionality we mean everything that was making the website working and also was helping to the user to have an easier service to be able to use it without problems and for longer time to have much more probabilities of finding their job or to update from the side of the companies the job offers they had at the moment. Finally we finished with the user page so everyone would be able to see their profile with their bio, name, surname, nickname, email and photo they uploaded

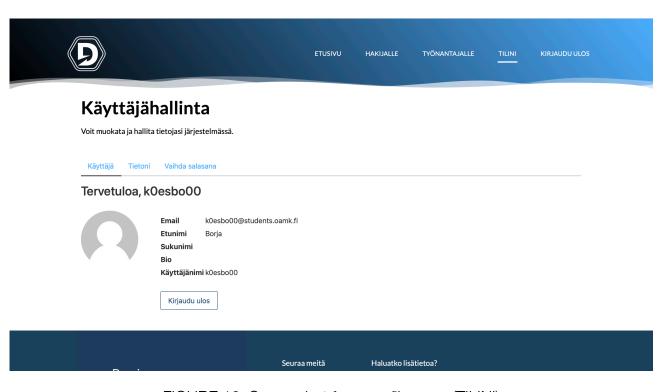


FIGURE 10. Screenshot from profile page (TILINI)

#### 4.5 Sprint four

On the sprint four we started with the landing pages, we did two of them that were opening in different cases depending on the user login. If the user that was login was a person looking for job, then the landing page was the one made specially for him, to give him important information, with a link to an extra post that was giving him tips and trick for the video interview. For the important information we are talking about tips about the website, explanation about how the service works and what can and cannot do the user using the website.

On the other hand, there was the landing page for the user offering jobs from their company to explain him how to do it in a proper way and giving him some information on how the service was going to work and how was going to decide all the possible candidates to their job offer.

Then we started with the login and log out page and functionality, this took also few days and we asked for help to the tutor as we were quite lost. We did some research on internet and got the help from the tutor, ending on a page where you could do the logout and then login again in your profile choosing also if this user was normal one, company user or administrator.

And at the end we started on the ActiveCampaign, only with some research to start understanding how was it working, how should we use it, why was it that useful and also trying to do some test with it to understand much better how it worked as it was the first time using it and we did not have any idea on how to start.

Also we asked the company at the start of the next sprint to get a little bit more knowledge as it is always much better when you get an explanation directly from an expert. So we got that explanation and then we were ready for next sprint as they were also okay with the work done during lasts sprints and everything was already okay for them.

#### 4.6 Sprint five

First of all we started with the registration form as they needed few changes and modifications because their structure was not the proper structure for the ActiveCampaign and with this changes, now we were completely ready for starting with all the automation that we were going to do with ActiveCampaign which was a little bit complex.

So after this minor modifications we started with the automation of ActiveCampaign creating the automations where we were specifying what the user was doing and then how the plugin was responding. So first the automation was starting when the user fill the email field in "Hakijalle" and then press the submit button. Then the user was entering into the automation where we were sending an email to the user with the proper data depending on the list he has choose and this was being decided with a big loop that was all the time asking if the list was X then send email X1, if not, if the list was Y send the email Y1, if not, ... until the last option possible, and just in case there was a bug and there was no list chosen, what could not happen, then there was cancelling the automation. And then there was also another automation to assign a tag to each user depending on the list that he choose to define him into the website.

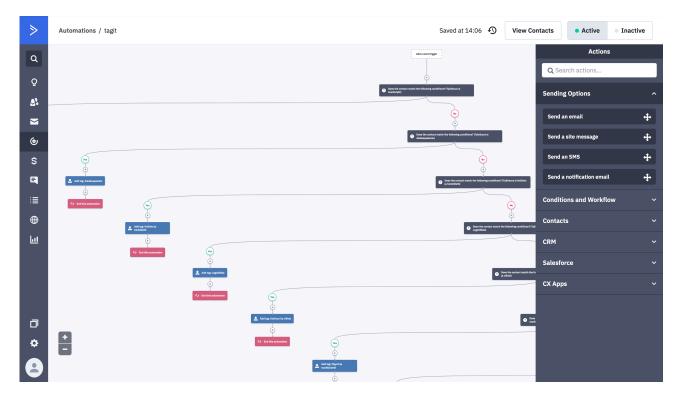


FIGURE 11. Screenshot from tag automation in ActiveCampaign

#### 4.7 Sprint six

In the sixth sprint we worked on the usability making the website more understandable for every type of user. For that we followed the principles of the usability of UX design. This principles are:

1. Visibility of the status in the system, 2. Relationship between system and real world, 3. Control and freedom of the user, 4. Consistency and standards for websites, 5. Preventing errors from user side, 6. Recognizing before remembering, 7. Flexibility and

efficiency when using the website, 8. Minimalist and flexible design, 9. Helping users to recognize, diagnose and correct errors, and finally 10. Helping and documentation.

All this principles helped us to make a better website and get a better result from our work.

We also worked on the compatibility for what we worked preparing the website to be seen by computer screens, tablet screens and phone screens, so we make sure that every user can use it in their different devices and there will be no problems for them or something that will make them leave the website without even using it.

And finally last days we worked in the responsiveness of the website to make the layout completely responsive to every different type or size of screen to increase the penetration of mobile, to offer a better user experience, to improve the brand reputation once the service is on, to improve the search engine ranking, to improve the page speed to make the user more comfortable with the use of the website and more efficient and less cost effective.

# 4.8 Sprint seven

On this sprint we worked on final touches and final fixing for minor changes in the header, in the footer, on the pages and post available, cleaning some plugins and functionalities that we were not using at the end to improve the speed of the website. Making everything in order to leave it in a better way so in the future would be easier to make changes and everything would be much more understandable for new administrators of the website.

Also took some advices from the company for future projects to know were we should improve more and if we were going on the good way-

# 5. RESULTS

At the end of the project the company was quite glad on all the work done, the result was quite good but there was not enough time to finish the whole project as it is a few years long project, so at the end we had the whole website done but there were still missing the service part what will take a long time to be finished and will have a lot of big changes on the final result of this project.

There was a lot of work during the whole project were we worked in a lot of new different softwares and we need to do a lot of research as it is normal in a bachelor thesis with what we learned a lot and we got so much knowledge about website development, automations related to website works, security of the website environment, usability and responsiveness of websites in different types of devices, how to host a new website in an online address and how to use every of the plugins we were thinking of using and all the ones we ended using.

# **6. CONCLUSIONS**

As a conclusion we can see that it was a really big project that we could not finish because of the time available for it but from which we earned a lot of knowledge about our field on studying that will be very useful in the future and for sure we will not regret having. Also it gave us experience on how is it to work on a project from a company having strict schedule with strict delivery days for our work and also having a supervisor that may not like all of our work and will not have any problem on telling us so we can change it immediately to improve the service or the final result.

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