

Project 1.2

(Winter 2015)



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1. Introduction

This section has been written by Lavinia Avadanei

Before going to Berlin, we have searched for different clients for our “Mobile first” project. We have contacted a few potential clients, and in the end we have decided on Silo Coffee, a coffee shop that offers specialty coffee and food. We have chosen this client because one of the owners was interested in collaborating with us, but more important, the client doesn’t have any website at the moment, which looked like a good choice. The only problem with this client is the fact that they are interested in a website as a professional image of the company, which could affect our mobile first concept. However, in order to overcome this issue, we will create a responsive website with the “mobile first” theory in mind. We will implement features that are mostly used when people are on the go and are using their phones and with content that is easy to read on smaller devices. This way, we will keep a balance between what the client wants and our ideas, based on research.

1.1 Problem statement

When we have decided to work with this client, we have tried to find a problem area that we could solve through our project. We have noticed that Silo Coffee is posting very often on their social media profiles (Facebook, Instagram and Twitter), but they are missing a website, which we believe is a very important tool for a company. Therefore, the main question that we are trying to answer to in this project is the following: **How can we supplement the use of social media with a website, in order to create more value?**

Out of the main question, some sub-questions arise:

1. What are the advantages of using a website?
2. What are the specific things that we could implement on the website that will add value?
3. Why will the users go on the website instead of social media?

1.2 Delimitation

In this section, we will shortly explain what were the things that we wanted to implement, but in the end we have not, as well as the reasons behind.

Silo Coffee is also selling brewing equipment, but this information is not available on social media, only in the café. Therefore, our initial idea was to make a subpage on the website where customers can

buy the products. However, the reason why we have not pursued the idea of creating a web shop is the fact that we are missing the skills, but mainly because the client is not interested in managing the stock. So, we have decided to create a subpage with only a presentation of the available products.

Secondly, on the subpage about Coffee and Food, the idea was that when you click the button under each category (coffee, food, other drinks), a PDF file with the specific menu would open. But since we only had the menu for the food in a PDF format, we have decided to use that one for all three categories and not spend time creating the menus for coffee and drinks as well, as this was not a very important aspect at the moment.

1.3 Methodology

In order to answer our problem statement, the following methods and tools will be used:

- Data generation (qualitative and quantitative research)
- Competitor analysis
- Culture analysis
- SWOT analysis and TOWS
- Determine the target group
- Build personas that belong to the target group
- Create user scenarios
- Create a communication plan for each persona
- Test usability

2. Analysis and findings

This section has been written by Lavinia Avadanei

In this section of the report, we will present the data we have gathered through different methods (interviews, surveys, and observations) and an analysis of this data that will guide us in designing the website for Silo Coffee.

2.1 Research

2.1.1 Interviews

Owner interview

We started our data gathering with an interview with one of the owners of Silo Coffee, the one that we have been in contact with. The questions we used in our interview can be found in Appendix 1. The interview was approximately 30 minutes long and we both recorded it and took some notes.

From the interview we have found out that the coffee shop was first opened in August 2013 in a tourist area in East Berlin, after the two Australian owners have tried to find a good coffee in the area and they couldn't find a place that served one. So they decided to open their own. At the beginning they were offering only coffee and they were recognized as a specialty coffee place, but with time they changed the focus and added food and desserts to their menu.

The owner says that they want to be seen as a special and premium café, because they are using only high-quality and organic ingredients and they are pretty expensive for the area. Moreover, they want to be seen as a relaxed place where you can enjoy the time spent there and have a chat with the baristas.

Approximately 70% of their customers are regulars, but there are also many tourists coming in (especially Australian, American and British) because they are speaking English and the menu is in English. Silo Coffee's biggest advantage and clear differentiation from other cafés is the fact that they are serving breakfast, and the fact that they want to focus on both coffee and food.

The owner considers that they have two main target markets: the people living in the area and the expats that are coming to Berlin for a period of 6 months. They are keeping an eye on customer reviews, and have noticed that international are giving 5 stars, whereas German people only give 4 or 3.5 stars.

When asking him about the website, he told us that he sees a big advantage of using a Facebook page as a communication tool, because content management is very easy and you can re-engage customers. And since a lot of costumers use Facebook, they keep their page updated all the time. On the other hand, he also sees the advantages of a website, because it looks much more professional than a

Facebook page, and people see it as the official image of a company, where all the information is up to date. Moreover, on the website you have control on how it looks, which is not the same for Facebook that has the same layout for all pages. He is not interested in having the possibility to book a table online, because that will mean many weekly e-mails and because they want to keep the casual approach where customers can just come in without booking in advance.

With regards to future plans, they are planning to start roasting their own coffee in collaboration with another coffee shop, and with a different brand name. Another idea they have is to make a series of videos with brewing techniques that could be added on the website.

User interviews

On our second day in Berlin we have continued with user interviews that we have prepared the previous day. The questions for these interviews can also be found in Appendix 1, together with the questions for the owner interview. We collected eight answers in total during our stay at the café, because many customers didn't want to be bothered and answer our questions.

The majority of the customers that we have interviewed were visiting the café for the second time, two were there for the first time and two were regular users. People found out about the café from different sources, either randomly went in, or found out from friends or from blogs/reviews. We also had a mix of tourists and locals that answered our interview questions.

The reasons for them visiting the cafe are different, for example: the good coffee, delicious food, the nice atmosphere and cozy interior, the friendly staff, but the reason that is most common is the atmosphere of the place. For the question about the device that they mostly use to access the Internet, the answers were again diverse and included mostly computers, then phones and last, tablets.

The last question is the most relevant for us and we wanted to find out what kind of information they are looking for when accessing a café's website. Opening hours, directions and menu were the most common answers, but customers were also interested in seeing photos that represent the atmosphere, reviews, events, new coffee types, contact, prices as well as information about the owners and staff. These answers will be of a real help when deciding what kind of information we should include on the website.

2.1.2 Observation

During our third day in Berlin when we have done users interviews, we have also spend some time to observe the behavior around the café and find extra information that will be useful. During the few hours we have been sitting there, we have noticed that the café was almost full of people at all times. There were both males and females of different ages that came either alone to enjoy a cup of coffee or to eat something, or accompanied by friends. The baristas were very friendly and helpful, and for some people they served coffee or desserts to go. But the most interesting fact was that people were allowed to come inside with their dogs.

2.1.3 Survey

We have also used a survey to gather more information and to help us in building personas. The full survey design can be found in Appendix 2. We contacted the client to post the link for the survey on their Facebook page in order to get the right respondents, but since he did not reply, we posted the link on our Facebook profiles asking people that are going to cafés to fill it in. After we collected 104 responses, we closed the survey because we considered this as enough data.

The first questions were about demographics, data that we will use in persona building. Most of the respondents had an age between 20 and 25 years, followed by 25 to 30 years, with a majority of females. Nationality and occupation are very diverse, therefore we will not mention them here. With regards to income, most of the respondents earn between 4000 and 8000 dkk a month, but also between 8000 and 12 000 dkk and even over 15 000 dkk a month.

When asked why they go to a cafés, most people answered that it was to hang out with friends and for the coffee, followed by food and drinks. When choosing a café, atmosphere is the most important decision factor, followed by quality of coffee, prices, quality of services and quality of food. Moreover, most of the respondents are going to a café occasionally, while others go 2-3 times/week or 2-3 times/month. In general, people like to try new places sometimes and just a few sticks to what they know or are looking for something different all the time.

The last question provides really useful and interesting information. Except the things that were already mentioned in the interviews about information that users expect to find on a café's website, there were also other stated in the survey, for example information about equipment and coffee types or

information about food. But the prevalent answers are photos, atmosphere, opening hours, directions/address, menu, prices, events and reviews.

2.2 Competitors

From the interview with the owner we have also found out that there are around 15 specialty coffee shops in Berlin. He doesn't really see these as competitors because they are collaborating and recommending each other. Some examples are: Happy Baristas, Coffee Profilers, Companion Coffee, Bonanza, Distrikt Coffee and so on. Happy Baristas, which is new on the market and is situated in the same neighborhood, is opened by one of the previous employees of Silo Coffee and Coffee Profilers, which are older, have a more professional approach. He considers competitors as the other cafés in the area that are trying to imitate Silo's offering at a lower price.

When looking for some of the other coffee shops that the owner of Silo Coffee mentioned, we have noticed that some of them are using only social media, the same as Silo, but some also have a website, which creates a more professional image of the specific coffee place. Moreover, we have visited Happy Baristas, which is in the same neighborhood, to check the atmosphere and see what they do differently. There were not as many people as in Silo. The coffee was great and they had a wide selection of homemade desserts, but they did not focus on food. The atmosphere inside was different, even though it was nice, at Silo the cozy and home-like feeling are much more emphasized.

2.3 Culture analysis

For our culture analysis after Edgar Schein's model, we have mainly used information that we got from the interview with the owner and observations that we made in the café during our visit there. It is divided in three sections: artifacts, espoused beliefs, values, and underlying assumptions.

We will mention the artifacts that attracted our attention and we think they are the most important ones. First of all, the furniture is from wood and designed and crafted by the owners themselves. The staff is very friendly with the customers and speaks English even though they are in Germany. Another interesting thing that we have noticed is the fact that the customers are allowed into the coffee shop with their dogs. Moreover, they have new coffee regularly and the menu changes with every season. Their food is ecological, as well as very tasty and good-looking, even though is a little expensive for the area. The coffee is of high quality and they also offer other drinks that are organic and natural. Their future plans includes video creation with brewing techniques, so people can try to make their own coffee at home.

The espoused beliefs and values of the company are coziness, openness and transparency, diversity, novelty, style and creativity, and making everyone feel welcome.

The underlying assumptions of the coffee shop are friendliness and comfort, offering a home-like feeling, as well as a premium and unique experience to their customers, caring about the environment, helping at growing the coffee industry, importance of relationships and communication and sharing their experience with others. One interesting assumption is that they consider they should not do something extra to attract customers, but continue what they are doing, and whoever comes, comes.

The culture analysis of the company will help us further in the process, so we will transmit the same values through the design and the content of the website.

2.4 SWOT/TOWS analysis

We based our SWOT analysis on information given to us by the owner of Silo Coffee, their customers and online research. Having done the SWOT analysis, we then utilized the TOWS analysis.

Silo Coffee has several strengths, the major ones being their cozy atmosphere and the high quality coffee, food and drinks. Especially the fact that they serve food differentiates them from other cafés in the area. They also sell coffee brewing equipment, which we believe it is a strength, as it shows that they are passionate about coffee, even if people are not visiting their café but brewing their own coffee at home instead. Another strength is that their menu changes regularly (seasonally) which can help at keeping customers interested in visiting the café.

However, Silo Coffee also has multiple weaknesses. The largest and most obvious of these being the fact that they do not have a website to represent themselves. Their prices are also high for the area, and on some days, it can be hard to get a table there due to the large amount of customers.

While they do use social media really well, our thoughts are that a professional-looking website will make the café appear more serious, and give them more exposure in the specialty coffee community which in the end could enable them to expand their business. This is one of Silo Coffee's opportunities, and the one we can help them with. Other opportunities we agreed that the café has are filling new

customer's needs (offering food as take-away) and collaborating with other specialty coffee shops to grow the coffee industry (this is something they are already doing). Another opportunity for Silo Coffee is the growing interest of specialty coffee in Germany (Euromonitor International, 2015) which they can take advantage of by offering new types of quality coffee.

The largest threats that Silo Coffee faces are the growing popularity of home-brewed specialty coffee (Euromonitor International, 2015) and competitors (potentially new cafés in the area) imitating Silo Coffee's offerings at a lower price. However, we think that through Silo Coffee's strengths of regular changes of the menu and focus on quality and cozy atmosphere they can still come out on top. As for the popularity of home-brewed specialty coffee, Silo Coffee can combat this through also being a supplier of the equipment used for this. That way, Silo Coffee will still draw in the customers who have decided to start home brewing, either to buy new equipment there or check out new coffee arrivals.

To see our full SWOT & TOWS analysis, please see Appendix 3.

2.5 Target group

The target group is defined by the following characteristics:

- Males and females between 20 and 40 years
- People that live in Berlin
- Internationals (either tourists or living temporarily in Berlin)
- Coffee enthusiasts that know a lot about specialty coffee
- People that appreciate quality food and coffee
- People that have a higher income

2.6 Personas and user scenarios

For building personas we have used information obtained from the users interviews, combined with survey results. We have created three personas that belong to our target group. These personas represent the foundation of the features in the website.

The first persona is a 30-year-old male from Berlin who knows a lot about coffee and comes to Silo 2-3 times per week. The second persona is a 23-year-old female student from UK who lives in Berlin temporarily and who likes places with a nice atmosphere where she can hang out with friends. She comes to Silo occasionally, because she is also going to other cafés. The third persona is a 35-years-old

female from Romania, who travels often and is always trying new places that have good food and a cozy atmosphere. The full description of the personas can be read in Appendix 4.

User scenario 1

After a long day at work, Thorben would like to relax a little bit and enjoy a good cup of coffee and maybe read the news. Then he decides that he will visit Silo Coffee, but before leaving the office, he will access the website from his computer at work, in order to find out if they have a new coffee in the house or if there is an upcoming event. He finds out they have a new type of coffee, and then he checks the opening hours again to be sure he will have enough time. He then sends the address to one of his friends and asks him to meet him there for a chat. In the end he goes on the Products page to check the prices for equipment, because he knows Silo are selling and he is interested in buying one for himself.

User scenario 2

Elizabeth is in the city center on a Saturday morning, meeting a friend. They would like to go to some nice place to have a coffee and maybe eat breakfast. Her friend tells her about Silo and Elizabeth remembers that she has been there a while ago. They decide to go there, but first she accesses the website from her mobile to see the address, because neither of them know the street. The pictures attract their attention and they like the place so they decide to go. On the way, the girls notice that the menu is also on the website and they check to see if it's interesting for them and not too expensive.

User scenario 3

Diana is planning to go to Berlin to meet a potential client. During her stay in Berlin, she also wants to visit the city and spend time in places that could inspire her. So a few days before travelling she goes to Google from her tablet trying to make a plan of where she could go. Since she likes to eat healthy and organic food, she is looking for places that could offer this. Then she finds Silo Coffee and goes on the website to find information first about the food they have and then the location, the prices and very important, reviews about the place and of course photos, so she could see the atmosphere, which is very important to her.

2.7 Communication plan

The overall communication objective for Silo Coffee is the following: Attracting customers through a website that transmits the café's atmosphere.

Persona 1 (Thorben Bauer)

Communication objective: Giving the user the latest news

Message: We have events and new coffee regularly

Channels: Social media

Timing: 1 hour before visiting the café

Persona 2 (Elizabeth Churchill)

Communication objective: Convince the user to attend the café more often

Message: Great place to hang out with friends

Channels: Word-of-mouth

Timing: Just before going there and afterwards, to write a review

Persona 3 (Diana Popescu)

Communication objective: Tell the user about ecological food and quality coffee

Message: We make delicious ecological food that you will enjoy

Channels: Google

Timing: A few days before travelling and when she will return to Berlin with other occasions

3. Design

This section has been written by Lasma Pastare

3.1 Overall vision

Observations which have been made in Silo Coffee, as well as results of interviews show that target audience are people, who are enjoying a high quality coffee, ecological, special meal and appreciate a nice and cozy atmosphere. Professionalism, simplicity and coziness are the values which should be embodied in the website. Moreover, using high quality pictures of the coffee place will better represent the cozy, handmade, home-sense interior.

The images are in round shape, inspired by the first picture of the slideshow, which shows the cup of coffee viewed from above. Furthermore, the already given logo also includes round forms in it.

Through the slideshow on the first page we are giving a comprehensive overview of the website's content. It helps the user not to be confused, making the next step in the website, because he already

knows what to expect in each subpage. To make the decision for user easier, the description of subpages is added in every picture of the slide show.

For the navigation bar text, we chose the font called “Alegreya”, as it was the closest we could find that would match Silo Coffee’s logo. For the body text we decided to go with Source Sans Pro. We chose this font as it has a professional and simple look. For the headlines we have used size 1.2em and for the body text - 1em.

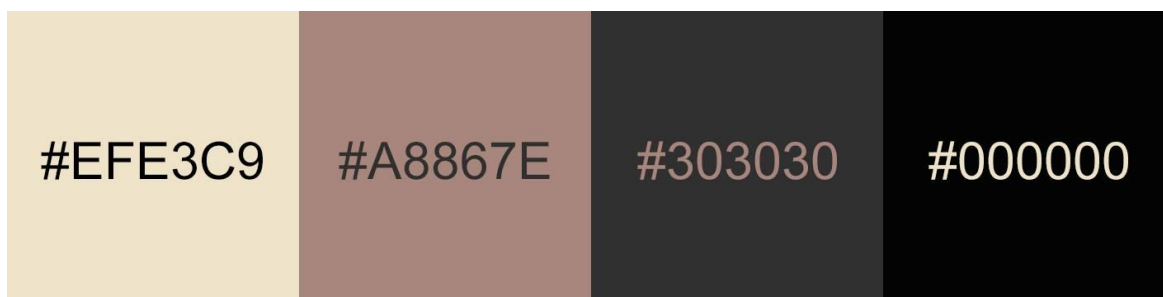
Alegreya

Source Sans Pro

We used a pattern repetition to fill the background. The pattern is light, without contrast in order to not drag attention from content.

3.2 Color scheme

The color scheme has been chosen based on colors that can be found in the coffee shop. Coffee color palettes we found on the Internet have also inspired us. Light, warm colors create a cozy atmosphere and the contrast between light background and dark grey font color keeps the sense of purity, emphasizing the brightness in the pictures. We also avoid applying a black color for the text, because it makes the design heavy and usual. Hence, a beige color (#EFE3C9) was chosen for the background, coffee brown (#A8867E) – for the clickable buttons background and dark grey (#303030) for the font text.



3.3 Moodboard

The moodboard has been created to understand how all the design elements interact to each other and to get the feeling of the website's atmosphere.



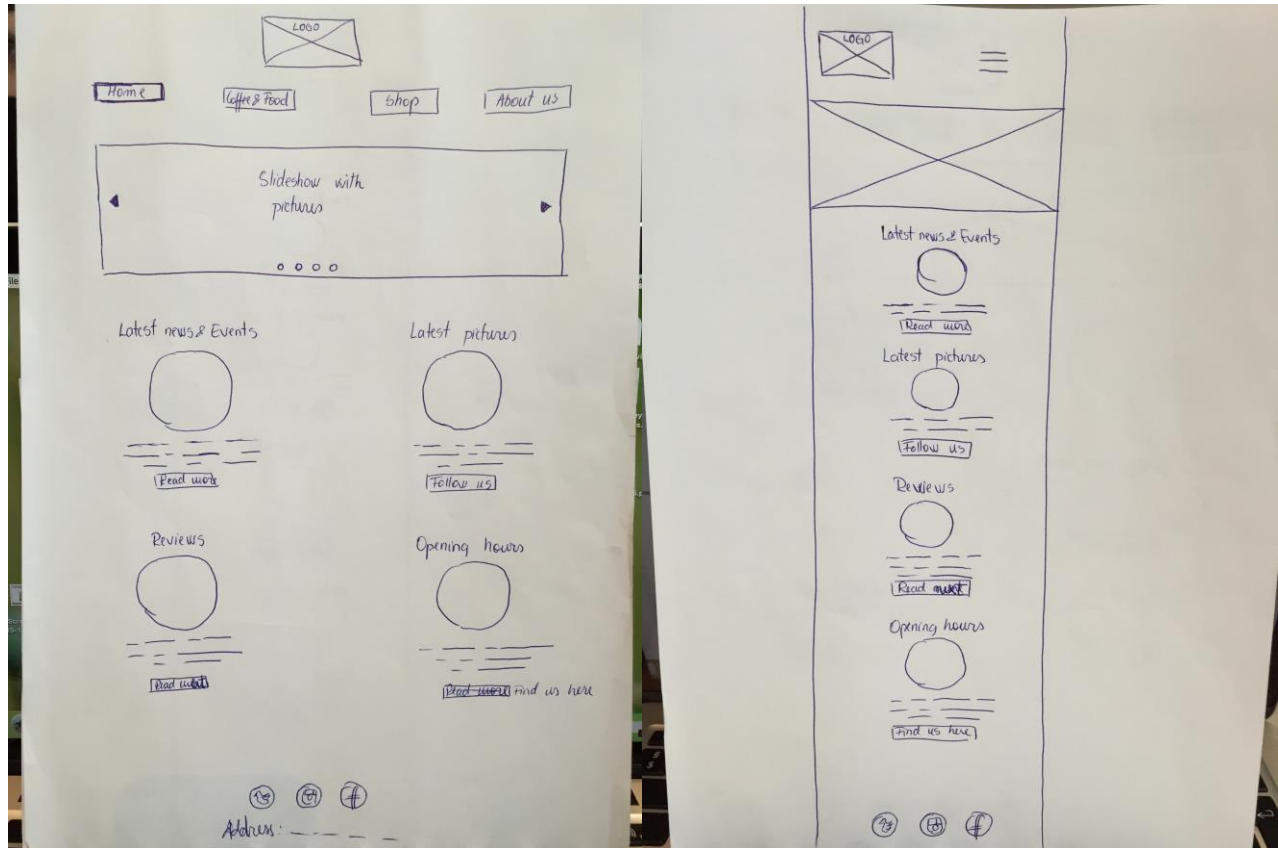
3.4 Sitemap & wireframes

The header consists of two parts – logo and navigation bar. It has been made simple and pure, without additional information or pictures.

The slideshow attracts the attention with the movement effect. It makes the website more dynamic and attractive. It is interesting and appealing for the user, moreover it consists of useful, short information.

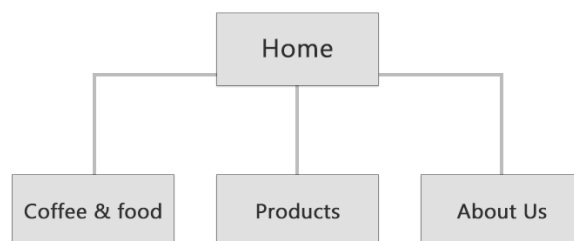
Every persona, especially first persona Thorben Bauer, is interested to get the upcoming events, information of new arrivals or newest expressions through the pictures. That is why, based on Steve Krug's (2014) words "Nothing important should ever be more than two clicks away" we placed this

information right below the slideshow. From the results of the interviews we realized that a lot of users (third persona - Diana Popescu) would like to know others' opinions and impressions about the coffee place. This information can also be found in the first page. All three personas visiting the website are looking for the opening hours, so we included that as well.



For the next three subpages we have been followed by the principles of hierarchy as well, setting the important information at the top and additional information below. The wireframes for the other pages can be seen in Appendix 5.

We also created a sitemap, and after careful considerations and testing it on users, we decided on the one below (same as the one used in the wireframes above).



3.5 Mockups

Using our wireframes as a base, we created a mockup for our home page, both for desktop/laptop and mobile. These mockups can be seen below:



3.6 Gestalt laws and C.R.A.P. analysis

The proximity principle:

Making the website, we have been followed a few principles of Gestalt's theory. One of the laws is proximity. This principle has been used in creating the articles. Every article in the main page consists of title, picture, text and button. Proximity creates a bond between elements. That helps the viewer to find the connection between random objects on the page easier. Similar order with slight changes can be observed on additional pages.

The symmetry principle:

The symmetry principle has been used in making the light background open the darker pattern background. Both sides away from axis of symmetry are the same. Moreover, this principle has been applied when arranging the articles.



The alignment principle:

Alignment refers to lining up included elements to each other. In all pages there is used the centered alignment between objects in footer and header. The pictures have been also aligned to each other, creating the webpage more organized and readable.

The repetition principle:

Repetition of the similar colors, fonts, patterns and shapes helps to create a pleasing and cohesive composition. Building the website, we have tried to design the same warm and appealing atmosphere which can be seen in the pictures of Silo Coffee. Hence, we have applied similar colors in the color scheme. Round forms for all images and social media icons has been inspired by Silo's logo.

The white space principle:

A very important part of creating a layout is to include white space. This principle provides visual breathing room for the eye. Using appropriate margins and space between the text, the overall airiness lines can be created on the webpage. We were trying not to lose the viewer's attention with unnecessary information, many colors, densely arranged objects.

The contrast principle:

To make the website more interesting and less monotone, we have used contrast by applying the coffee cup pattern right next to the smooth, one-color background. The contrast can also be noticed between the font color and background color. Furthermore, we tried to use relatively dark images on our site to create higher contrast to background which would make the images more visible at a glance.

4. Interaction

While we followed our wireframes when making the mockup and later coding the website, there were some changes which were made to the final website.

Since our client was mostly using social media, we could not divide that from the website and should not interfere with their way of doing that. So we integrated all the social media they are using, like Facebook, Instagram and Twitter, so the user can see them on the home page and also check them out at any moment, because we have the icons in footer and it's shown on every other page. Thanks to PHP we were also able to show some reviews from TripAdvisor/Facebook on our website homepage, more on that when we get to the PHP part of the report.

4.1 Naming conventions

This section has been written by Bo Gjerløw

For our code, we have decided to use the CamelCase naming convention. CamelCase means that the first word is in small letters, with the following words having capital first letters. An example can be seen below:

```
1. .coffeeAndFoodTitles {  
2. }
```

We choose this naming convention, as it is easily readable and easy to follow. We have used this naming convention throughout our website, both in the code and in our folder and file structure.

4.2 HTML

This section has been written by Jevgenijs Zaicevs

For the header menu we went with unordered list `` and `list-style-type: none;` property to hide bullets points. At the same time we did put that list inside `<nav>` tag, so the user would have access to that if he would use screen reader, for example.

For the home page content we decided to go with `<article>` tags for our sections, since we thought that it would be logically because every section was independent from others and was bringing information itself. For the titles, we mostly used `<h2>` tags since all of articles were equally important in our opinion.

Other than that, we were mostly using *divs* in our website to maintain structure. So mostly the structure of our sections was:

```
1. <div class="product">  
2.     
3.   <p>Aeropress</p>  
4.   <p>€30</p>  
5. </div>
```

We used *divs*, as the containers to be able to operate with content without having much trouble, and then we were putting all the content inside those containers. This allowed every team member to access the needed code and section quickly, and even for the person who would see the code for the first time it would give a clear understanding of the code.

During this project, we focused a lot on making the code as simple and readable as possible, that is why we chose that structure, and also why we used a lot of comments so that any team member is able to quickly understand a particular piece of code, mostly in CSS.

4.3 CSS – Cascading stylesheets

This section has been written by Bo Gjerløw

For our website, we have ten CSS files. Inside our ‘css’ folder we have seven of the ten CSS files: a reset.css which removes the default browser styling, two CSS files that are used to style the header and footer, a main style.css, and three style sheets connected to different screen resolutions (using the break points min. width 340, 768 and 1224).

Since almost no devices today have a smaller width than 340px, we decided not to apply any special style below this figure. The reason we used 1224px as the breakpoint for desktops/laptops is that the text on our slideshow images was not easily readable when the resolution was at 1024px, which initially was our breakpoint for desktops/laptops. Since most new computers have a width larger than 1224px, we decided to use this number. Should the website be accessed by computers with a smaller width than 1224px (but higher than 768), it will show the tablet version, which is better optimized for that screen size.

Inside our style sheets, we have used various ID’s (#) and classes (.). ID’s are used for things that only appear once, while classes are used for items that appear multiple times.

As for the remaining three CSS files, there is one located in the ‘contact’ folder (used by the contactFormThankYou.php page) and two inside the ‘SlickNav’ folder, which is used for our mobile navigation.

4.3 PHP

This section has been written by Bo Gjerløw

4.3.1 Shuffling reviews using PHP

For the home page, we wanted to have a section with reviews. Our idea here was to have a selection of reviews that would shuffle when the page is refreshed. We also had the idea of having it shuffle by the user clicking a button, but we decided to abandon that idea as we were unsure how to do it.

We started by creating a variable named *reviews*. We then made that variable equal to an *array* as seen below. Inside that *array* we have multiple strings.

```
1. $reviews = array(  
2.     '  
3.     <br>  
4.     "We went there for the coffee which was really great. The service was fast and very f  
   riendly. Best coffee in a long time. We tried one of there sandwiches after we saw several pe  
   ople eating them. There were very delicious. Worth taking the subway to get to!"  
5.     <br>  
6.     - zaniack',
```

Our strings inside our *array* have been put in single quotes (') because we do not have any PHP variables inside these strings, which means there is no reason to use double quotes ("). We have five strings in total inside the array, but to save space we decided to only show one of these in this report.

Inside the strings, we have some HTML codes. The image tag is used to show how many stars each reviewer has given to the café. On the image tag, we have also applied some inline styling. The reason we decided to use inline styling instead of having a style sheet connected to this code, is that the amount of CSS styling needed is very little and because of this, it would be a waste to create a new style sheet just for this. We also use the break tags to signal when there should be a break on the screen.

```
1. shuffle ($reviews);  
2. echo current ($reviews);
```

We then shuffle these strings using the PHP function *shuffle*. This means that it will randomly select one of the items inside the array that is equal to our variable. We then use the function *echo current* to show the current randomly selected string on the screen.

4.3.2 PHP include

During this project, we have been using PHP include. By using this method, we can minimize our code and avoid having to edit various files when wanting to change for example the name of a menu item. This makes maintenance a lot easier. Using PHP include also helps the readability and makes the code easier to understand. Using PHP include is a good example of writing modular code (Doyle, 2010, p. 620).

In our case, we used PHP include for five different items – our header, footer, slideshow, and review section.

It is logical to use PHP include for our header and footer, as these are items that are used on every page, and therefore it makes thing a lot easier for us as we only have to edit one file to apply this to all pages. However, the review section and slideshow only appears on the home page, which means we could just have put this inside our home page file (index.php). Our reasoning for putting these in separate files is to minimize our code inside the home page file, and to avoid using too many different coding languages inside our home page (the slideshow uses JavaScript and the review section uses PHP).

4.4 JavaScript

This section has been written by Jevgenijs Zaicevs

We have built our slideshow for our home page (desktop/laptop version only) using JavaScript, so a little bit of explanation is necessary here.

At start we are creating an array and preloading pictures to avoid delays between slides and that is why we are doing that inside `<head>` tag. This piece of the code is inside our header.php.

```
1. <!-- Script used for the slideshow -->
2. <script type="text/javascript">
3.     var slideimages = new Array() // create new array to preload images
4.     slideimages[0] = new Image() // create new instance of image object
5.     slideimages[0].src = "img/slideshow/slide1.jpg" // set image src property to      image pa
        th, preloading image in the process
6.     slideimages[1] = new Image()
7.     slideimages[1].src = "img/slideshow/slide2.jpg"
8.     slideimages[2] = new Image()
9.     slideimages[2].src = "img/slideshow/slide3.jpg"
10.    slideimages[3] = new Image()
11.    slideimages[3].src = "img/slideshow/slide4.jpg"
12. </script>
```

After we have preloaded our pictures and created four instances to store them in the array (first item in the array always has index `[0]`) we put them into cache which means that we can display them at any time.

We then move to our slideshow.php file where the rest of the code for the slideshow is written in.

We are adding HTML code to display the first image of the slideshow and also adding an ID `slide` to give our JavaScript an access to change the image. Also we're adding `javascript:slidelink()` code which is JavaScript URL that will execute JavaScript function when clicked.

```
1. <a href="javascript:slidelink()"></a>
```

Then we are creating the script itself where we are defining our variable called *step* and which will increment through the images, so at start we're setting it as 0 (this value will increment during slideshow and return to the first picture after it will reach maximum defined value, in our case it is 4). Moving forward we added a function called *slideit()* where we access our first image and then changes *src* of the image to display the next one. So at start we access the image container we already have in our code by ID *slide* and after that we change its *src* property to another image location (path) that's why we needed to preload pictures in an array. Also we're adding *setTimeout* line, which means that the slideshow will change every 3500 milliseconds (3.5 sec).

```
1. <script type="text/javascript">
2.
3. //variable that will increment through the images
4. var step=0
5. var whichimage = 0
6.
7. function slideit(){
8. //if browser does not support the image object, exit.
9. if (!document.images)
10. return
11. document.getElementById('slide').src = slideimages[step].src
12. whichimage = step
13. if (step<3)
14. step++
15. else
16. step=0
17. //call function "slideit()" every 3.5 seconds
18. setTimeout("slideit()",3500)
19. }
```

After that we needed to make our images clickable and leading to different pages, that is why we are implementing *slidelink()* function which is executed when we click in an image. We create one more variable called *whichimage* and set it to *step*, which means that it will increment with every next picture in the slideshow and our function will be able to tell in which slide we are at the moment, and then based on what image we are clicking on, it is opening the link which is also predefined by us and transferring us to desired page.

```
1. //Links
2. function slidelink(){
3. if (whichimage == 0)
4. window.location = "#"
5. else if (whichimage == 1)
```



```
6. window.location = "coffeeAndFood.php"
7. else if (whichimage == 2)
8. window.location = "products.php"
9. else if (whichimage == 3)
10. window.location = "aboutUs.php"
11. }
12.
13. slideit()
14.
15. </script>
```

4.5 Problem handling

This section has been written by Jevgenijs Zaicevs

While creating the website we ran into a few problems. Most of them we solved, but there was one we were not able to solve. This is described further below:

<center> tags in footer.php:

We decided to use this tag as a last resort as we were unable to put our social media pictures in the center of the footer. We know that image is not a block element and we tried to solve that by putting every image in separate `<article>/<div>` and then use `display:inline-block/inline` property and `text-align:center` (same as `align-content:center`). The problem we ran in was that if we align our pictures vertically then they were centered, but the moment we tried to put them in line they were going crazy and flying back to the left side. That is why we decided to use `<center>` tag even though we know that it is an obsolete and outdated way of doing that. However, the tag is still supported by the majority of browsers, and because of this, we do not see using it as a major issue.

4.6 Resources used

This section has been written by Bo Gjerløw

Mobile Navigation:

As we do not yet know how to create a hamburger menu for mobile, we decided to use one that is available online, named SlickNav. While we have modified some elements of the code (mostly styling), it is still heavily based on the template provided on <http://slicknav.com/> and we are not able to explain in detail how it works.

Buttons:

As for our buttons, we created them using this online tool: <http://www.bestcssbuttongenerator.com/>. We used this tool to save time, and to create some effects on the buttons we would otherwise not know how to do.

Contact form:

For our contact form, we based it on an example of one given to us by Murat. We created the form inside the HTML ourselves, but the `contactFormHandler.php` is heavily based on the template provided to us.

5. Usability testing

During the process, several usability tests have been done. We started to do card sorting first, testing ourselves. We had been discussing how to name the items in navigation bar, but when we could not agree and the dispute has started, we realized how important is to do a usability test. We asked people to help arrange the cards and to change the names of the sections, if needed. We ended up with a simple and understandable navigation bar. Also, the section “Products” has been changed a few times. Initially “Equipment”, than “Shop” and finally “Products”.

The second test we made was to test the wireframes. Overall, the interviewers liked how elements were arranged. They preferred round shape pictures better than square ones. Users explained that the wireframes with round shape images are more original and better link to the overall all design concept. Some changes were made in footer as well. First, we considered to only include social media icons, but after the results of usability test were summed up, we realized that most of the users are looking for a address of the place at the bottom of the page.

After we started the interaction part, we realized that something was missing in the webpage. It looked empty and a bit blank. We decided to experiment with some relative patterns to fill the background. And it started to look much better and cozier. It was the time to test the new version. Users approved that the website appearance has been improved.

The final usability test has been made to test the real website. We gave the two users three tasks in order to find out if the web site is understandable and user friendly. The first task was easy for the both of users, but the approach, how they got the information was different. The path that both interviewers

took was the same, doing the second task. The last task was the hardest, however users have found the products and contact form in a very short time. The full notes for our final usability test can be seen in Appendix 6.

6. Conclusion

As a conclusion, we would say that we were able to accomplish our goal of adding value for the client. We successfully created a visual identity for the company, while still keeping it tightly connected with the client's social media usage. Through thorough research and a focus on the design aspect, we created a simple but elegant website for our client.

To answer our problem statement: We supplemented the client's usage of social media, by creating an official face of the company, where users can get a feel of the café's atmosphere and find all the information they need such as menus, short text about the café's offerings and practical information. Based on our research, these are the most important things for the users when they visit the website.

To wrap it up, this project was a great possibility for us as a group and for every individual member to see our strong and weak points and to learn how to overcome them. While our website is not the most advanced, we still feel that we learned a lot during this project, and that we have improved our knowledge of the different subjects. We have complimented each other with our different skill sets, and worked well together as a team. It has also been a great opportunity to be able to work with a real client, because this enables us to understand how the process works in reality. The ability of choosing our own client is also something that we loved about this project.

References

Books:

Doyle, M., 2010. *Beginning PHP 5.3*. Indianapolis: Wiley Publishing, Inc.

Krug, S., 2014. *Don't make me think, Revisited*. A common sense approach to web and mobile usability. [s.l.]: New riders

Reports:

Euromonitor International, 2015. *Cafés/bars in Germany*. [pdf] Available through: Passport <http://portal.euromonitor.com.ez-eaa.statsbiblioteket.dk:2048/portal/analysis/tab> [downloaded 30.11.2015]

Websites:

Mobile Navigation - <http://slicknav.com/>

CSS buttons generator - <http://www.bestcssbuttongenerator.com/>

Websites used, but not directly referenced in the report:

<http://www.javascriptkit.com/>

Appendices

Appendix 1 – Interview questions

Owner interview

1. How long have you been in the business?
2. Is there any story behind the coffee shop?
3. How do you see this place? What is the feeling that you want to transmit?
4. What distinguishes this place from your competitors?
5. Who are your competitors?
6. What is your target audience?
7. Have you previously done any customer research?
8. What benefits are you hoping to get through the website?

User interview

1. Can you please tell us a bit about yourself? (E.g.: age, nationality, occupation, tourist/local)
2. How did you heard about this coffee place?
3. How often do you come here?
4. What makes you return?
5. What is your opinion about this coffee place (interior, atmosphere, food etc.)?
6. How do you usually access the Internet?
7. Would you use your mobile to access Silo Coffee's website?
8. What information would you like to find on this café's website? (E.g.: menu, opening hours, directions, reviews, brewing methods, gift cards purchase etc.)

Appendix 2 – Survey design

Café Survey

* Required

1. What is your age? *

Mark only one oval.

- ☐ Under 20
- ☐ 20-25
- ☐ 26-30
- ☐ 31-35
- ☐ 36-40
- ☐ Over 40

2. What is your gender? *

Mark only one oval.

- ☐ Male
- ☐ Female

3. What is your occupation? *

4. What is your nationality? *

5. What is your monthly income? *

Mark only one oval.

- ☐ Under 4000 dkk
- ☐ 4000 dkk - 8000 dkk
- ☐ 8000 dkk - 12 000 dkk
- ☐ 12 000 dkk - 15 000 dkk
- ☐ 15 000 dkk - 25 000 dkk
- ☐ Over 25 000 dkk

6. How often do you go to a café? *

Mark only one oval.

- ☐ 4-5 times/week
- ☐ 2-3 times/week
- ☐ 1 time/week
- ☐ 2-3 times/month
- ☐ Occasionally
- ☐ Never
- ☐ Other:

7. Why do you go to a café? *

Check all that apply.

- ☐ Coffee
- ☐ Drinks
- ☐ Food
- ☐ Hanging out with friends
- ☐ Working
- ☐ Other:

8. What are the most important factors to you when choosing a café? *

Check all that apply.

- ☐ Atmosphere
- ☐ Quality of food
- ☐ Quality of coffee
- ☐ Prices
- ☐ Quality of service
- ☐ Other:

9. What best describes you when it comes to trying a new café? *

Mark only one oval.

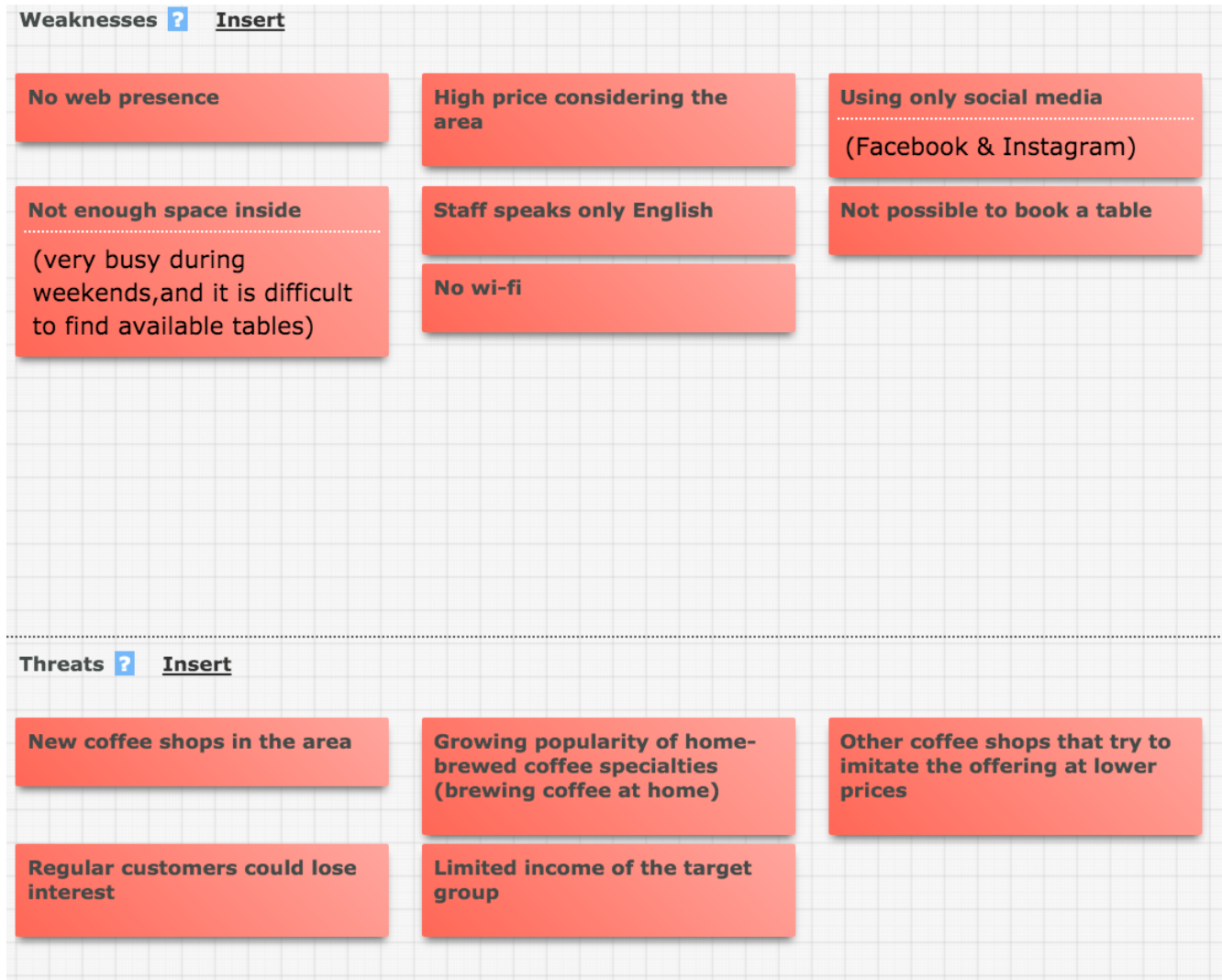
- ☐ I stick to what I know
- ☐ I like to try new places sometimes
- ☐ I am always looking for something new
- ☐ Other:

10. When checking a café's website, what info are you looking for? *

Appendix 3 – SWOT/TOWS analysis

| Strengths ? <u>Insert</u> | | |
|--------------------------------------|--|--|
| Well-known place | Unique place in the neighborhood | Offering coffee and desserts to go, as this has gained importance to consumers in recent years |
| High quality coffee, food and drinks | Cozy atmosphere (Handmade wooden furniture) | Menu changes regularly |
| International approach | New types of coffee | Friendly staff |
| Selling coffee brewing equipment | | Events |

| Opportunities ? <u>Insert</u> | | |
|---|---|--|
| Increasing interest in specialty coffee | Collaborating with other specialty coffee shops and growing the coffee industry | Creating a visual identity through a website |
| | | Filling new customers needs (by offering food as take-away) |
| New coffee suppliers | | |



SO strategies

- The coffee shop can take the advantage of collaboration with other specialty coffee places to promote themselves and events that they offer
- Taking advantage of the growing interest in specialty coffee by offering new types of coffee, equipment and high quality coffee

WO strategies

- Using a website in order to create a visual identity and to complement the use of social media

ST strategies

- Diversifying their offer constantly and adding new products will keep the customers interested

- The coffee shop can use the strength of selling coffee brewing equipment to minimize the threat of growing popularity of home-brewed coffee specialties (brewing coffee at home)

WT strategies

- Focus on quality over price

Appendix 4 – Personas

Persona 1

Name: Thorben Bauer

Age: 30

Occupation: Employed in the automotive industry

Nationality: German

Gender: Male

Monthly income: 2000 euro

Key differentiators:

- Regular visitor (2-3 times/week)
- Sticks to one place/café
- Coffee-lover



Personal profile

Thorben is a 30-year old worker from Germany. He loves coffee and he knows a lot about it, and this is why he is a regular visitor at Silo Coffee. He visits the café two to three times per week, often spending time with friends there. Other times he goes there just to enjoy a nice cup of coffee. He likes trying new things, which is why he is interested in finding out about new coffee and events offered by the café. Atmosphere and quality of the coffee is important to him when choosing a café.

IT Equipment

- iPhone 6
- MacBook Pro

Internet usage and behavior

Uses the Internet frequently for social media, reading news, e-mail and shopping.

| User goals | Business goals |
|---|---|
| <ul style="list-style-type: none">- To find the information about new coffee types- To find information about events organized by the coffee shop- To find what brewing equipment they sell | <ul style="list-style-type: none">- Visit the website- Attend the events- Try new coffee types- Buy brewing equipment- Recommend the coffee shop to friends |

Persona 2

Name: Elizabeth Churchill

Age: 23

Occupation: Student

Nationality: British (but residing in Germany)

Gender: Female

Monthly income: 1000 euro



Key differentiators:

- Occasional visitor (once a month or more rarely)
- Likes to rotate between cafés
- Interested in nice places where she can hang out with friends

Personal profile

Elizabeth is a 23-year old student from United Kingdom. She currently studies economics in Berlin, Germany and she has been there for a few months already. She likes trying out different places and occasionally she also goes to Silo. When she goes to a coffee shop she is usually with her friends. That is why atmosphere is very important to her when choosing a café. But she also appreciates a good coffee, because in UK there is a real coffee culture.

IT Equipment

- iPhone 5S

- Lenovo laptop

Internet usage and behavior

Uses the Internet often for gathering information, shopping, social media, e-mail, watching movies.

| User goals | Business goals |
|---|---|
| <ul style="list-style-type: none"> - To get a feel of the atmosphere of the café through the website (photos, design etc.) - To see the menu (and prices) - To find the location | <ul style="list-style-type: none"> - Visit the website - Visit the café more often - Recommend the coffee shop to friends - Post pictures on her Facebook profile |

Persona 3

Name: Diana Popescu

Age: 35

Occupation: Artist

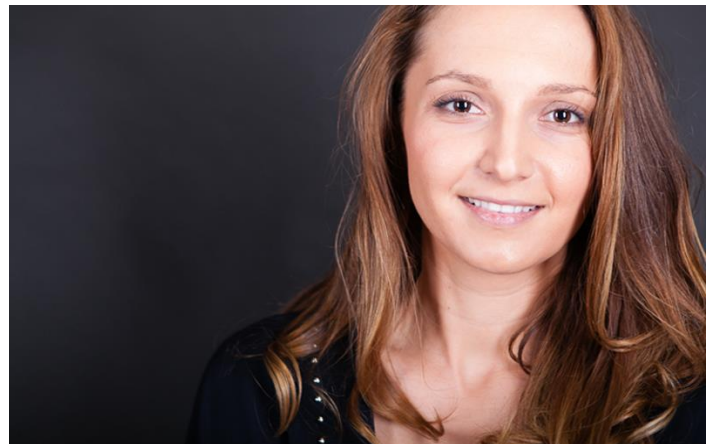
Nationality: Romanian

Gender: Female

Monthly income: 1000 euro

Key differentiators:

- First time visitor - tourist
- Likes to try new places all the time
- Interested in good food and visual appealing places



Personal profile

Diana is a 35-year old single artist from Bucharest, travelling often. She is interested in finding new unique places that could inspire her. She loves healthy and ecological food, as well as quality coffee. She is looking at things from a visual point of view that is why she is interested in the design and atmosphere, as well as the visual presentation of the food.

IT Equipment

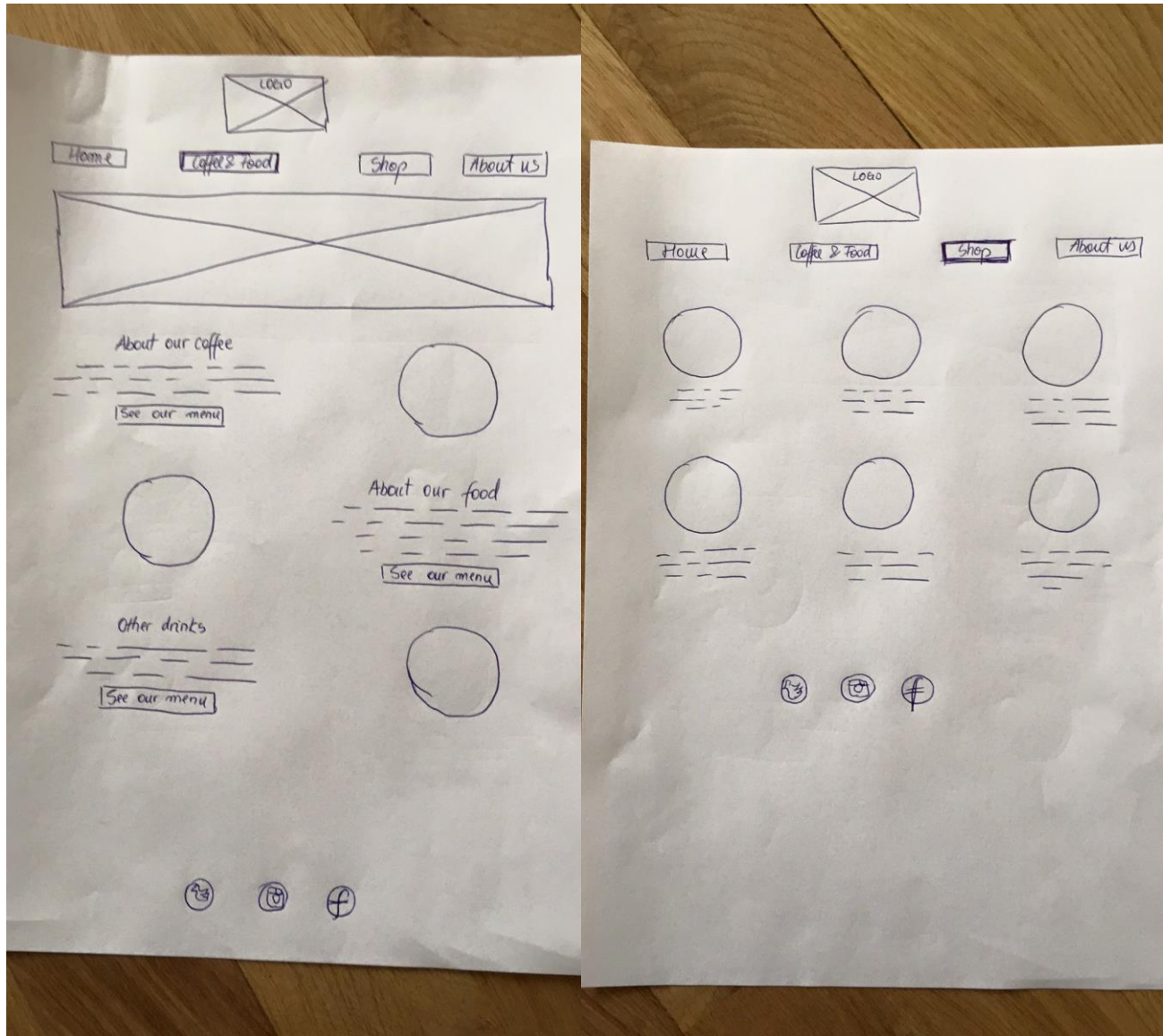
- Samsung Galaxy S3
- Tablet

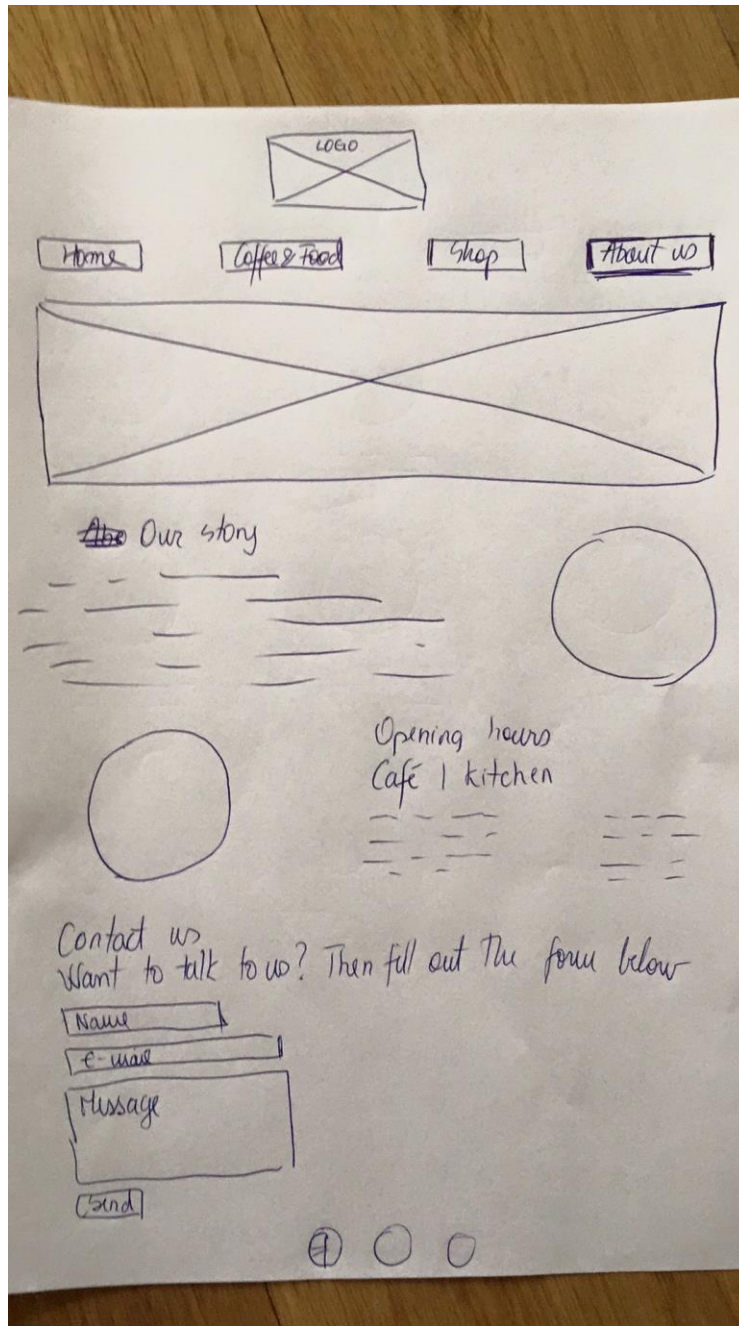
Internet usage and behavior

Uses the Internet often for reading blogs, social media, finding information and shopping.

| User goals | Business goals |
|---|---|
| <ul style="list-style-type: none">- To find an international place where she can relax- To find information about opening hours, directions, prices and menu- To see the atmosphere from the pictures- Check for reviews | <ul style="list-style-type: none">- Visit the website and return with other occasions- Offer all the practical information the user needs- Make her visit the coffee place and try the food |

Appendix 5 – Wireframes for subpages





Appendix 6 – Final usability test

Test 1: Male, 24 years old, Denmark:

1. You are in the city and you want to drink a nice cup of coffee. How you will find the location and opening hours of the coffee shop?

The user found the information very easy using this path: Main Page/About us/Opening hours and then checked the footer for the location.

2. You also want to eat something. How will you find information about the food that the café serves?

The user clicked the button called "Coffee & Food" in the navigation bar, when the subpage appeared he started to scroll down until the title "About our food" and then he clicked on the "See our menu" button.

3. You want to buy a gift for your friend who is a coffee enthusiast. How will you find information about brewing equipment and contact the coffee shop in order to buy it?

The user clicked on the button "Products" right away, when he chose one of the products, he was trying to click on the picture, but could not do that, then he scrolled up to see the navigation bar and clicked to the button "About us". In the subpage "About us" the contact form was easy to find.

Test 2: Female, 20 years old, Denmark:

1. You are in the city and you want to drink nice cup of coffee. How you will find the location and opening hours of the coffee shop?

The user found the Opening hours in the main page by scrolling down and the location was found in the footer right after the opening hours.

2. You also want to eat something. How will you find information about the food that the café serves?

The user clicked the button called "Coffee & Food" in the navigation bar, by scrolling down she found the title "About our food" and then she clicked on the "See our menu" button.

3. You want to buy a gift for your friend who is a coffee enthusiast. How will you find information about brewing equipment and contact the coffee shop in order to buy it?

The user went to the subpage “Products” right away, when she chose one of the products, she was trying to click on the picture, but could not do that, then she scrolled up to click the button “About us”. In the subpage “About us” the contact form was very easy to find.

Appendix 7 – Backlog

Tuesday (24.11)

- Interview with the owner
- Preparing questions for user interviews
- Observations

Wednesday (25.11)

- User interviews
- Observations
- Taking pictures

Monday (30.11)

- Creating the survey for persona validation
- SWOT analysis
- Culture analysis

Tuesday (1.12)

- Sending the survey
- Creating personas
- Communication plan
- Planning usability test

Wednesday (2.12)

- TOWS Analysis
- Sitemap
- Brainstorming about wireframes
- Usability test

Friday (4.12)

- Drawing wireframes
- Moodboard
- Mock-up for the homepage
- Color palette and fonts

- Starting content production

Monday (7.12)

- Usability testing
- Changing wireframes & mock-ups
- Content production

Tuesday (8.12)

- Starting coding
- Choosing images for the website

Wednesday (9.12)

- Coding
- Report writing

Thursday (10.12)

- Coding
- Report writing

Friday (11.12)

- Coding
- Report writing

Monday (14.12)

- Taking care of the last details in the code and fix the things that don't work properly
- Continue with report writing

Tuesday (15.12)

- Finalize the report
- Upload the website on server