

Design process for a photography service application

The application of Double Diamond to UX/ UI Design Process

Abstract

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<p>The rapid development of technology is an important driving force to promote the digitization of forms of shopping, payment and information searching. Many digital solutions provide products and services that have been developed to serve new consumer trends, better experiences, and customer preferences. As well as online shopping for tangible and intangible goods is gradually becoming a habit in the community, service industries are no exception. In that competition, the photography service is one of the markets that is rarely mentioned but has a lot of potential for growth. It requires a very high professionalism and standout factor, each photographer acts as a service provider. For customers, to find out and choose a photographer according to preferences and requirements among the numerous service providers is not easy.</p> <p>Based on that, this report presents the idea of a platform called FinFo, an online marketplace where photographers can list their services. The study aims to create a case study of a mobile application that aggregates service products provided by photographers. FinFo is the solution for connecting customers with photographers, helps them save time searching and make it easier for them to make the right decisions for their needs. In order to attract the attention of the user, it is necessary to combine the User Experience and User Interface elements smoothly. Since then, the using process on the app will be capable of reaching full satisfaction and leaving a deep impression on the mind of user. The thesis work made use of design thinking principles to create an interface with high usability.</p> <p>The thesis serves as a project-based report on the process of creating FinFo application. The relevant background theories are explained in a thorough way that contributes to the success of the project. The author applies sequentially four phases of the Double Diamond design method to create user personas, customer journey, information architecture and user flow. Regarding to the process of understanding user, the author used both quantitative and qualitative methods in order to develop a product that exactly satisfy the needs of user. The survey is distributed to obtain a rating for product availability. At the same time, the author interviewed two potential clients to get more insight for the design process.</p>		
Keywords user experience, user interface, design thinking, double diamond, photography, mobile application		

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1 Introduction

The digitization industry is growing strongly in countries around the world, more and more technology products are introduced on the market. Changes in user behavior increase the use of mobile phones, what customers care about is not only from the function or quality of the product. Businesses have continually adjusted their online and mobile strategies to stay competitive. There are many factors that constitute the success of these digital products, of which the User Experience (UX) and User Interface (UI) are indispensable.

Nowadays, every business field needs to have beautiful and impressive images for advertising, marketing and catching attention from customers. Especially in this 4.0 technology era, the demand for images has never been so high, from product photography for fashion brands to outdoor photography for events. The attraction of photography does not stop at capturing moments with specialized digital cameras, but also in editing and post-production to match its purpose and artistic intent.

Unlike the physical product, the photography industry is a specialized service product of art. When there is a need for photographers, users will face a lot of concerns: price, newbie or experienced photographers, uncertainty about the quality of photos once taken. Depending on the nature and intention of the photography genre, there will be different compositions and factors that determine a good photo. From the perspective of a photographer, they will help customers take the best quality photos.

However, hiring a photographer that fits with each individual style, budget, and schedule can be challenging, since there are so many photographers or photography service providers out there. Similar to other types of services, finding a photographer will take time going through each stage from searching for information, coming up with ideas to making a decision.

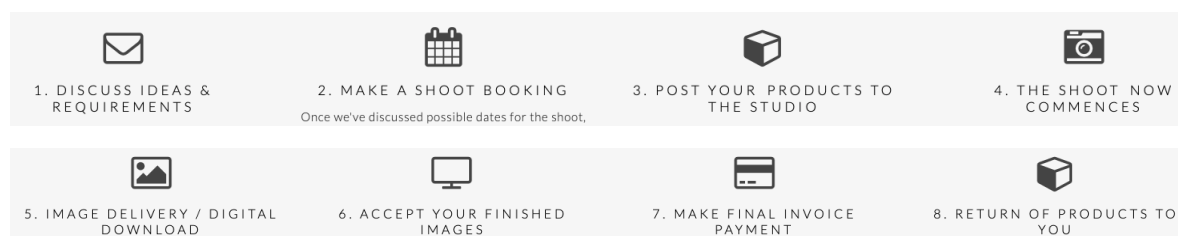


Figure 1. An example of a photography service process

After personally experiencing finding a photographer to take a commercial album for the old company, the author found that finding and choosing a photographer to meet the needs and preferences among countless studios is not an easy task. Realizing that listing and aggregating a list of photography and videography service providers could be better systematized and built into an online marketplace. Since then, the idea of FinFo was born to help participants easily make choices that suit their style and budget when there is a need for photography. FinFo will be an environment that serves a transparent payment method and ensures the legitimate interests of all parties. In addition, FinFo is also a solution to supply-demand imbalance problems for freelance photographers, saving a lot of seeking time and increasing user experience.

1.1 Objectives and Research goals

Kambala (2019) determines that up to 75% of users will rate the aesthetics of the app and website interface, they are more likely to make a purchase on platforms with an eye-catching interface than a weak interface and experience. UX and UI have the effect of creating momentum to decide whether users will go to the final step of paying in the purchase process on a platform or not. Therefore, the first look along with the smooth experience interaction that UX / UI brings is the essential factor to draw the user's attention.

User experience and interface illustration also contribute significantly to highlighting the business brand in the digital age. Branding becomes more powerful and valuable when the UX/UI design thinking process of the business is built coherently, simply but attractively, to increase user interaction. (Tsynkevich 2022.)

This thesis is a report on the UX-UI design process of creating a mobile application that helps connect users with a need for photography and photographers. As working with a professional photographer, customers will be guided to pose to get the best frame without spending too much time setting up. Besides, for small and medium enterprises and startups, a well-invested photo not only enhances the awareness of company, but also creates customer satisfaction, thereby boosting revenue. The main goal of this project is to create a platform allows customers whether business or individual easily book their preferable photographers in a convenient and quick manner. Along with the initial research, the author utilized both quantitative and qualitative research method to set a base for features in design process of FinFo. To avoid the phenomenon of bias and make this project not being subjective, the author conducted a survey consists of thirteen questions to examine the need of FinFo. Meanwhile, two interviews with participants help the author gain more insights, not only select the preferences from given options, but also let them give answers in their own words.

This thesis will cover the following research goals:

- What is User Experience and User Interface?
- What is Design Thinking and the Double Diamond design model?
- Using “How might we” questions to help enhance usability
- Analyzing the journey and pain-point of user before this solution is introduced
- Applying Double Diamond model to build an UX case study

1.2 Thesis Limitation

Since this topic stems from difficulty in personal experience of the author rather than based on the case of an organization, therefore, the product of this project will be considered as a case study to apply principles in design thinking. Besides that, unfortunately, there is no previous version of the application to be able to conduct comparison steps for evaluation. there will be restrictions on retrieving customer information.

1.3 Thesis Structure

UX/UI is a common term in many fields, especially jobs related to programming and design. UX design will consist of the entire feeling of the user, in which UI design will focus on the aesthetics and surface look of the product. UX and UI always need to be tied together, each cannot work alone to create an impressive and coherent user experience (Lamprecht 2022).

In order to create a service provider application that concentrates on maximizing usability and user experience, this thesis is divided into four main phases. Beginning with an introduction to the project context, objectives and research statements. Then in the second part, theoretical backgrounds that related to the design process for this topic will be introduced. It includes basic knowledge about principles and studies used as a guideline for the entire design process. Then with a better understanding, the author applies the obtained knowledge to the final prototype of the initial idea to create a complete interface to the application. Finally, a conclusion is presented to summarise the whole empirical studies for project.

2 Knowledge background

2.1 What is User Experience?

According to Don Norman, one of the founders of Nielsen Norman Group and author of the book “The Design of Everyday Things”, as known as “the father” of the term “user experience”. He introduced User Experience as the way user interacts with a product, it comprehends all phases that an end user might encounter. In order to create a product with a good user experience, there needs to be a close combination in the design process with other elements such as function, marketing, usability, and aesthetic.

UX design is a standardized process that includes many different approaches and tools. UX design can also be understood as an alternative way of thinking about product development, in which the user is at the center of the design and construction of the product. The important thing in UX design is to decide based on what users really want, listen to their needs to find a satisfying solution. In addition to focusing on user needs, UX design cannot be separated from a primary goal of meeting business requirements. A product is considered to have good UX when the business requirements with the user needs are balanced. (Klein 2013, xvii.)

2.2 What is User Interface?

UI stands for User Interface, the point of interaction between the user and a digital device or product – such as a phone screen, or the touchpad of a coffee machine, etc. When applying UI design to building websites and applications, designers will need to pay attention to factors related to the look, feel, and visual interactivity of the product. when applying UI design to building websites and applications, designers will need to pay attention to factors related to visual interactivity of products including page layout; color layout; to more detailed elements such as function buttons, text content, images, and even effects on the page. (Wood 2014, 6.)

According to a consumer insights report (Microsoft 2015, 6), it takes an average of eight seconds to get human attention when they open an online application or website. This means that a good initial UI will play the role of capturing the first glance of customer when coming into contact with the product.

2.3 What is design thinking?

Design thinking is a mindset, it is also considered as a way of thinking for designers when facing with any problem (Brenner & Uebernickel 2016, 3-4). The image below (Image 1) is

a typical illustration to describe the Design thinking process. It means that in the early stages, people are often in a very confused state, then the direction will be gradually revealed until the ultimate goal is found, which is the final solution for the initial problem.

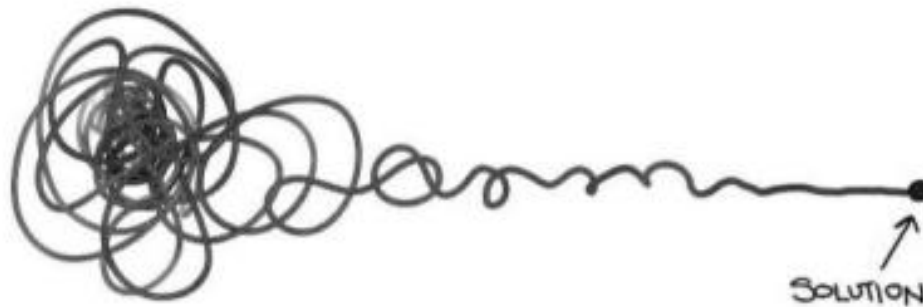


Figure 2. An illustration of design thinking process

Many of people when looking at the word "design" will immediately think of it as an art discipline. In fact, art design is one field, graphic design, object design or software solution design is different fields. What is the essence of the word 'design'? It is about the process of figuring out how to solve a problem that creates positive impacts for the business. Unlike the Fine Arts segment, where the drawings are good or bad, meaningful or not will be judged on the aesthetic taste of the viewer, it also depends on subjective, personal and right-brain bias. Design Thinking is a method that combines intuition and science with a focus on developing solutions using brainstorming techniques, while still being based on user empathy.

For those reasons, design thinking is not the process of creating an artwork, but a process of continuously researching users, challenging assumptions and redefining problems aimed at finding more optimal strategies and innovation. (Lockwood 2009, 26-27.)

2.4 Double Diamond

In all of the creative processes, ideas are first released randomly and in a mass, then they will be discussed and considered to choose the most ideal. To delve into how the Design Thinking process is generated, British Design Council proposed a model called Double Diamond in 2005. Double Diamond is a visual model that describes the creative process divided into four main stages: Discover, Shape, Develop and Deliver. (Design Council, 6.) It

emphasizes the iterative process of getting from problem to the best solution, which first diamond focuses on problem shaping and the second diamond is solution creation. No matter what the task is, it is vital to find out and identify the right problem to solve, or ask the right questions before doing it. After the key questions and challenges to be faced have been raised, the conceptualization will be carried out. Double Diamond overcomes the situation of forgetting the problem-defining leading to creative misdirection. (Benito 2015.)

If exploration and discovery are continued, the project will lead to rambling (divergent phase), there needs to be a time when it is necessary to stop spreading ideas to summarize into important points (convergent phase). Today's most practical methods bring every creative project to Double Diamond's four-step standard. (Elmansy 2021.)

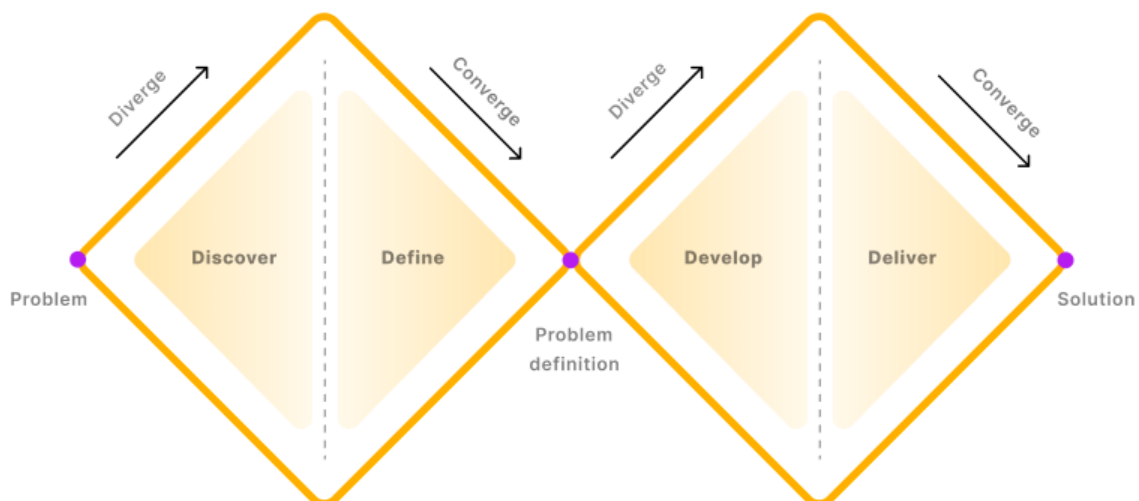


Figure 3. The illustration of Double Diamond design method

2.4.1 Discover

The first phase of Double Diamond is also the first phase of each project. Designers will focus on the topic to expand on direct or indirect questions in order to discover aspects and factors related to the problem. The goal is to get the most colorful, multidimensional description of problems that users and businesses are facing. In this phase, designer will use research methods such as survey, interview, metrics, etc., to understand key pain points that come up from these customers. (Design Council 2015a.)

2.4.2 Define

When having a better understanding of the problem space and all the answers to the questions just posed related to the main issue are ready, then comes the selection part. Based on feasibility and priority, all of which aim to answer the question: “Which makes the most sense for the user?” (Design Council 2015b). In other words, this is where designer synthesizes findings from the above analysis and prioritizes what to work on.

The two steps above conclude Phase 1 of Double Diamond to clearly define the problem to be solved.

2.4.3 Develop

Once the core problem has been identified, this stage is for acceleration where it is widened to explore concepts and designs. The first solutions are created, shaped, tested and kept on iterative until the most suitable idea is selected. This process helps to find the best ideas that are accessible to the users. (Design Council 2015c.)

2.4.4 Deliver

After going through three phases, the final step is to go narrow down and refine the solution which was agreed upon in the team. In order to put the idea into practice, it is required to pass tests such as concept testing or usability testing to ensure the design has the same impact as it was intended. This step will be iterated until the needs and problems of real users and businesses are satisfied. (Design Council 2015d.)

3 Research approach

3.1 User research

The analysis of the user audience, their behavior and preferences play a very crucial role in the success of a product. User analysis helps designers deeply understand how users use the product, thereby finding effective solutions to help users better interact with that product. (Ghosh 2018.)

The Council of Industrial Design in the United Kingdom states that a User Research or UX Research is a research process about target users, including their needs and problems. The purpose of this study is to enable designers to get the best possible insights in order to create optimal products and minimize post-finishing revisions.

It can be said that UX research is the way to find real solutions for users. There are many different methods and aspects to research in the field of UX, but they all have the same goal of finding ways to add context, recognize key information to use in the design process, as well as understand what users really need. For an UX research to be done well, a structured approach must be taken when collecting data from users. It is important to use an appropriate method for the purpose of the research, from which to interpret the data and design products with more accurate customer insight. (Travis & Hodgson 2019, 9.)

User researchers use different methods to map out problems and opportunities in design, while finding important information to use in the design process. UX research helps identify and prove (or disprove) assumptions, find similarities across target audiences to recognize needs and goals of customer. In addition, UX research also increases the designer understanding of the customer, who will directly judge whether the product has value or not. There are two commonly used user research methods: Quantitative and Qualitative research. Depending on the importance and size of the project, designer can implement either method or both. (Interaction Design Foundation.)

3.2 Qualitative research

Qualitative research often reaches the target user in the most natural way to ensure that their behaviors, opinions and views given will be the most objective and accurate. This method will be done through conversations, observations, and real experiences to describe the motivations for which users behave. Qualitative research is not looking for huge amounts of data but rather producing the right amount of data. With the data collected, designer can know how audience feels through what they observe and evaluate, making it easier to select valuable and useful data when designing. (Leavy 2017, 19.)

The purpose of qualitative approach is to answer research questions with data that support the results found, those results are not corroborated by econometric or mathematical models as in quantitative research.

3.3 Quantitative research

After talking, observing, the question is: "Is what has just been gathered also true for other users?" Quantitative research is often applied to research objects that can be converted in numbers. In other words, quantification helps to test and evaluate behavior on a large scale. This approach uses more structured methods (e.g. surveys, analytics), quantitative data reflect levels, variances, and are numerically represented during the collection process. Designer collects measurable data about what users do and test the assumptions made from qualitative research (Ritter & Winterbottom 2017, 100).

The purpose of quantitative research is to generalize measurement results, to test the relationship between variables in statistical form. For example, when asking how satisfied customers are with the quality of a service, the answers should be quantified in numerical form such as level one corresponding to 'Very dissatisfied' to level five means 'Very satisfied'.

3.4 Why UX research is important?

A product that is not suitable for the user will create a bad experience for the user. The slight consequence is that the product is difficult to use or the feature is not reasonable with the needs of the user, and the heavy one can make digital products, even with good orientation, still not achieve the goal and let users slip to other applications.

In fact, it is very difficult to orient the product in a user-centric manner if the product team does not capture its users from the beginning. Even if research is done, there is no guarantee that user needs will not change in the near future. That is the reason why UX Research exists and should be well-invested from the beginning phase.

4 About project

4.1 FinFo background (Discover)

Nowadays, having beautiful photos is an important part of the spiritual life of many people. To meet that demand, the photography market has many people engaged in professional and amateur photography services, but there are still difficulties for customers to choose the photographer that suits their style and preferences. With that in mind, an application called FinFo was built towards developing a solution to connect photographers with clients who are in need of a shooting service.

The project aims at customers from 18 to 40 years old who own smartphones, in which, the main target group is young people who tend to prefer online transactions. FinFo is a place to aggregate photography service providers and freelance photographers, helping to save searching and comparing time for customer.

4.2 S.W.O.T Analysis (Discover)

The SWOT is a widely used model as its usefulness in helping to analyze the important factors inside and outside of the project. SWOT stands for: Strengths, Weaknesses, Opportunities and Threats. In which Strengths and Weaknesses are considered as two internal factors of the project while Opportunities and Threats are two external factors. SWOT analysis can be applied to an entire business or to individual projects to clearly identify the goals and factors that can affect those set goals. In the process of planning, SWOT analysis acts as a highly effective tool to help businesses have an overall view from which to come up with appropriate strategies. (Kenton 2021.)

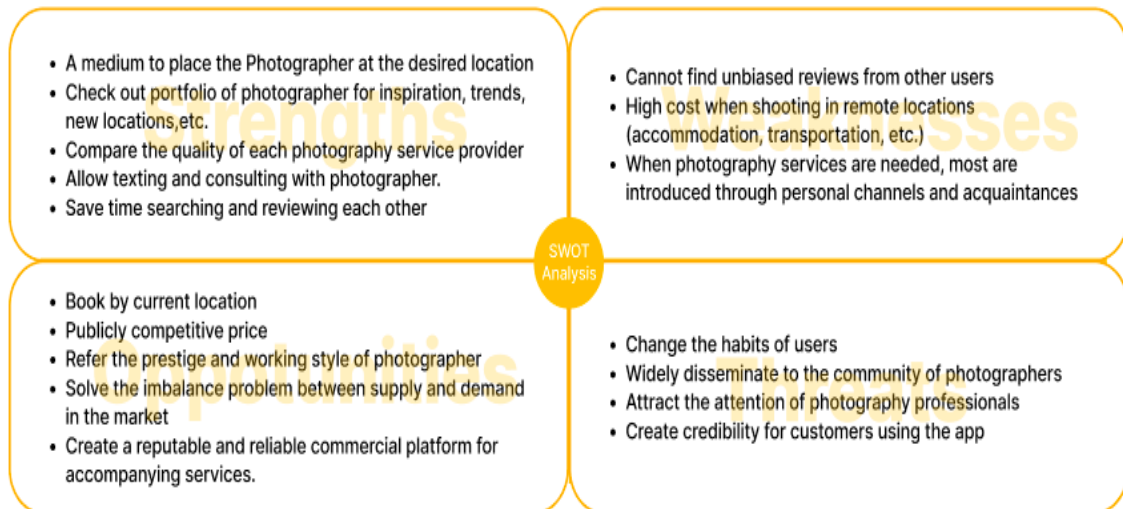


Figure 4. S.W.O.T analysis of FinFo

4.3 User research (Discover)

The author conducted a survey, reaching out to people in the range of potential customers to observe any pattern and similarity in what they may want. With the results from the survey, the author is able to gather initial and follow-up insights. Key insights derived from the survey:

4. Have you ever wanted to find a photographer (or photography service)?

79 responses

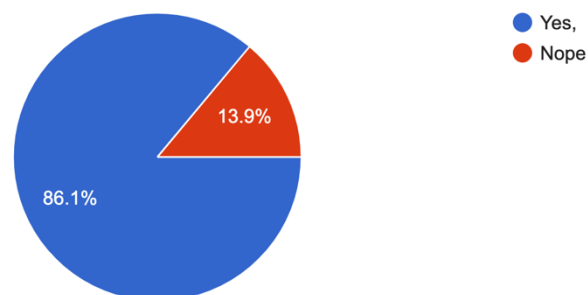


Figure 5. Data obtained from the survey about the percentage of participants who have ever searched for a photographer

5. If you need to book a photographer, How did you find that photographer (or photography service)?

79 responses

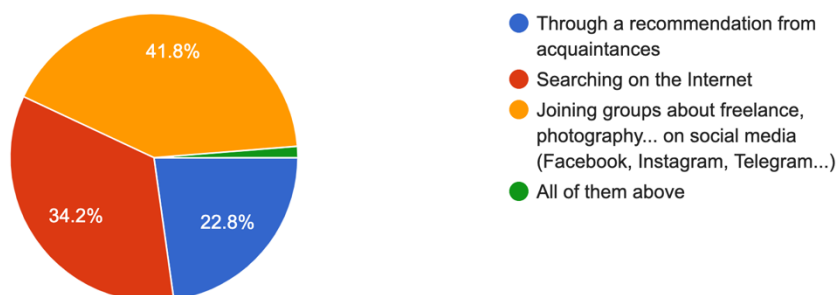


Figure 6. Data obtained from the survey about how people searching for photography service

The result shows that most people have ever had the intention of hiring a photographer. Although, there is a small number of participants who have never had demand for a photography service, that does not mean they would not be in demand in the future. As in the chart (Figure 6), the majority voted joining groups about freelancing and photography on social media, this means people tend to look for an environment where there is interaction between seller and buyer.

11. What factors influenced your decision to choose that photographer?

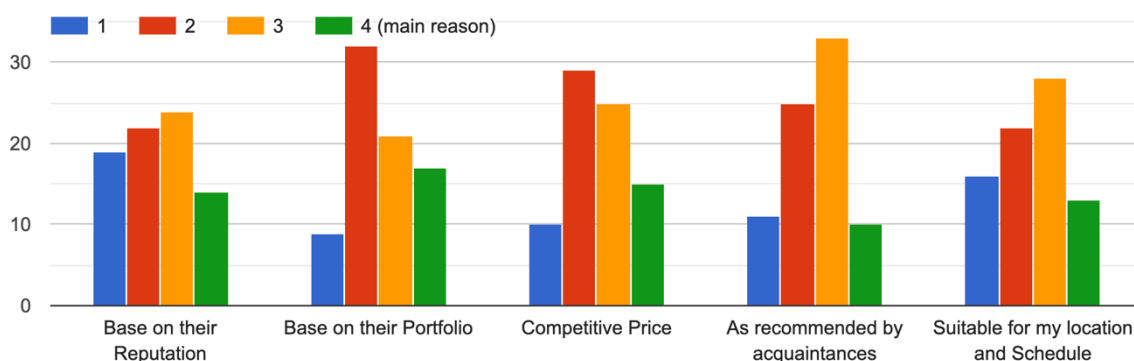


Figure 7. Data obtained from the survey about the priority when looking for a photographer

This question is done by rating each option once on a four-point scale of criteria. that lead to the decision to place a photography service provider. In which, two out of five factors that most people give 4 points are “Base on Portfolio” and “Competitive Price”. This means when making a purchase decision, users will give priority to those two factors. On the contrary, people seem to care less about the reputation of the photographer (Figure 7). This insight supports for the application to be a place where user can view photographer’s portfolio in an organized way.

10. What is your goal when looking for photography services?

79 responses

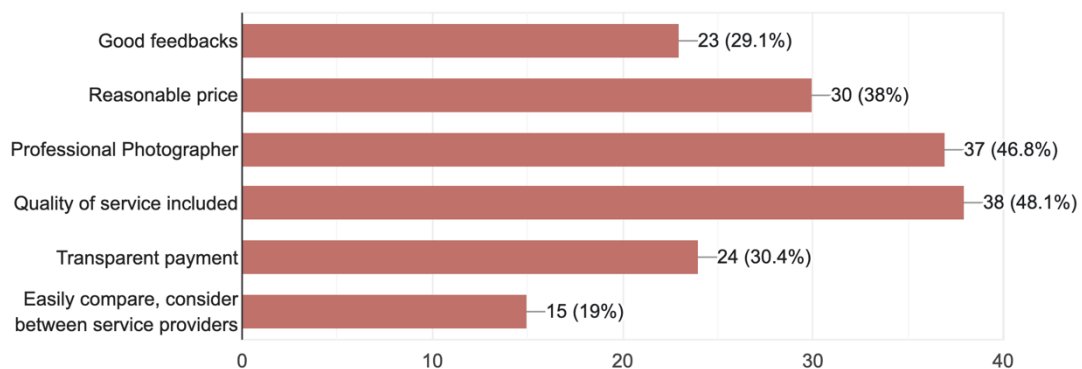


Figure 8. Data obtained from the survey about the criteria for hiring a photographer

As in the poll (Figure 8), two aspects with the highest rate are “Professional Photographer” and “Quality of service included”. It reminds the author to design FinFo that have elements to highlight the professionalism of the photographer and the quality of the service attached (by previous customer reviews in many different forms).

One of the main inadequacies that the survey has exposed is the non-disclosure of prices when users find the service (Figure 9). This is understandable because price is a sensitive and difficult to price factor in the art service industry. To avoid the situation of customers being charged additional fees incurred (hidden costs), FinFo is a place to publicize and standardize customer benefits that are easy to follow.

12. What make you concern when booking photographer?

79 responses

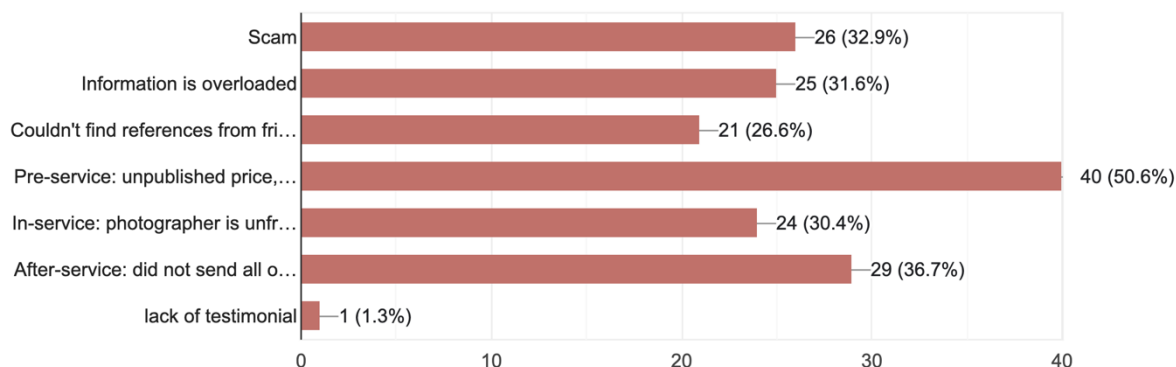


Figure 9. Data obtained from the survey about anxieties in the process

When there is a need for photographic services or hiring a photographer, the ways people usually do in the first stage of sourcing for reference still exist many obstacles and annoyances. These behaviors can be considered quite traditional and have not been systematized to catch up with the current digitalization trend. On the whole, the survey confirmed that there is a need for a platform to commercialize photography services.

In order to reinforce the argument and avoid giving personal bias, the author conducted the interview with two people who work in different sectors. Through two interviews, the author has found out difficulties they came across while completing the task:

- Hiring a photographer is an infrequent activity, maybe only once a year, or for a few years, so when needed, the interviewee does not know where to refer in the midst of many surrounding information. But when there is no demand, advertising posters appear everywhere
- Because it is not a popular item, when considered, the interviewee has to make a list to compare service providers and choose the one that satisfies most criteria
- The purpose of browsing is to check the previous product of photographer whether it is suitable for the style
- There are too many groups on the Internet, they are confused about which group is the main, safe and highly trusted.

4.4 User persona (Define)

According to Harley (2019) from Nielsen Norman Group, user persona is defined as a fictitious but true depiction of a target audience of a product. It is an ultimate tool for capturing and realizing user images, if this character can use the product then the majority of users will also be easy to use or accept the offered product. Due to the close relationship between personas and real users, the more truthful persona is, the higher the effect it has on the product.

User persona will create a common language for designers to clearly aware of who the users they are designing the solution for their personality traits and what their needs are instead of letting individual thoughts create many different versions. Thence, the design process will work more smoothly, even in the product promotion stage, understanding the target audience helps the Marketing and Sales team determine how to reach with the right message. Furthermore, during the product testing phase, persona can become the criteria for selecting suitable participants. (Faller 2019.)

With the data collected from the research, the author created two personas representing the ideal user and customer of FinFo. The personas help arriving at better solutions as it gave an in-depth understanding of the user goals and frustrations as well as the overall personality.

Define

Persona

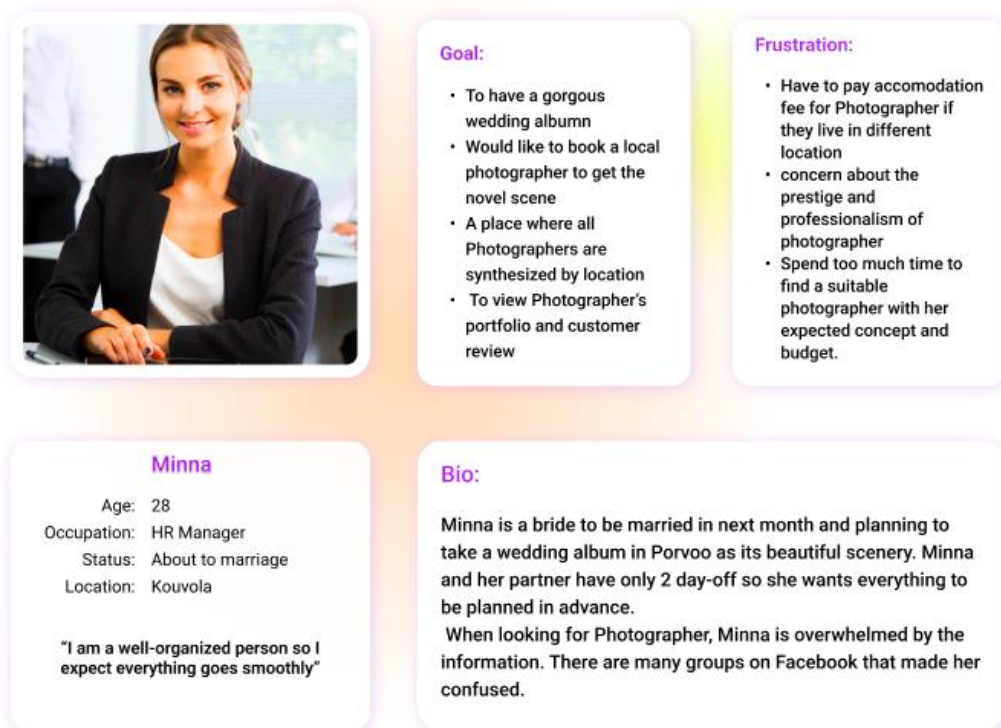


Figure 10. User persona

Minna is an HR manager and working for an insurance company in Kouvola, Finland. She is 28 years old and will get married in the next month. Minna and her betrothed are planning a wedding ceremony and she will take care of the wedding album shooting. In terms of personality, she is an extrovert, decisive and productive person. At work, she is a very sensible work organizer, so she wants everything to be well planned so as not to waste time. About hobbies, Minna likes to explore new places to share information with friends and buy natural products. Her wish is to have a beautiful, affordable, custom-made wedding photo set without exceeding budget. Unfortunately, after spending a lot of time browsing online to find out about wedding photography service, Minna feels confused because there are too many services and groups on Facebook. She could not choose either because of the uncertainty about the credibility of the photographers.

4.5 Problem statements (Define)

- People need a place that can aggregate all photographers by location because there is so much information scattered on the internet

- People need to see reviews and feedbacks from previous customers
- People need to view portfolios of photographers thereby making the most suitable choice
- People need a place where studios, freelance photographer can apply to bring their products and services closer to customers.
- People need to know all of the service information from inception to end-product, including hidden costs.

4.6 How might we Statement (Define)

Fessler (2017) claims that 'How Might We' (HMW) is an approach that makes problem solving and finding solutions simpler and easier to understand. This design thinking technique creates innovative solutions by reframing existing challenges with statements begin with "How might we" keywords. In an interview with Quartz, Duane Bray - president of Ideo said that HMW is a question that helps designer clear up problems, allows to shape thinking and see the problem as an opportunity.

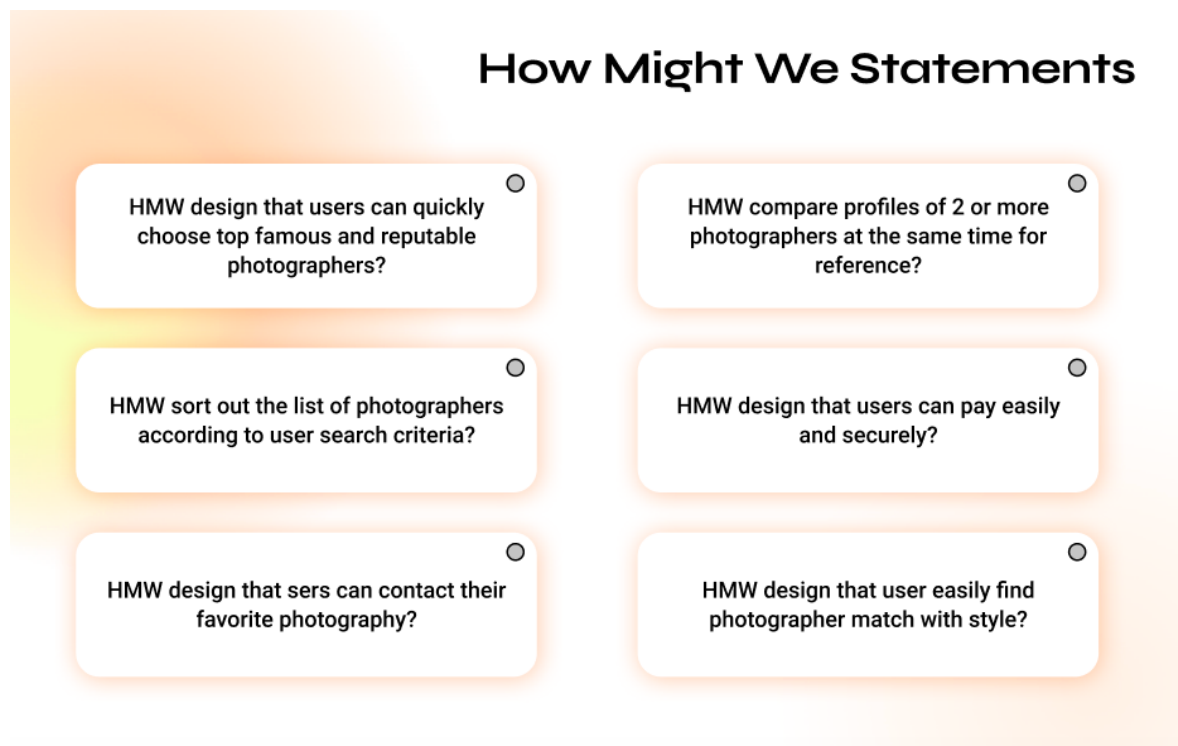


Figure 11. How might we Statements

How Might We method is used to identify and outline the insights and pain-points that collected. Then the revelations are reframed into critical questions that directly influenced the app development.

4.7 Customer Journey (Define)

Customer journey is a description that customer goes through to achieve a certain goal in the process of using product. It helps designers understand customer behavior and capture exactly what customers think and interact with, while ensuring consistency across the entire process. The segmentation in the interaction process allows designers to have a thorough grasp of the problem to optimize solutions for each activity. (Agius 2022.) A study shows that companies that build customer journey maps achieve 50% growth better than other companies (Maechler et al. 2016).

The journey map is presented in a vivid visual representation of every action, emotion, thought and motivation that occurs during the timeline when customer use the product. This timeline includes information about the channels and touchpoints users use to interact with. (Agius 2022.) A customer journey map can be designed in different models depending on the nature of the industry and the priorities of the company. However, it usually includes three main stages: before using, using and after using.

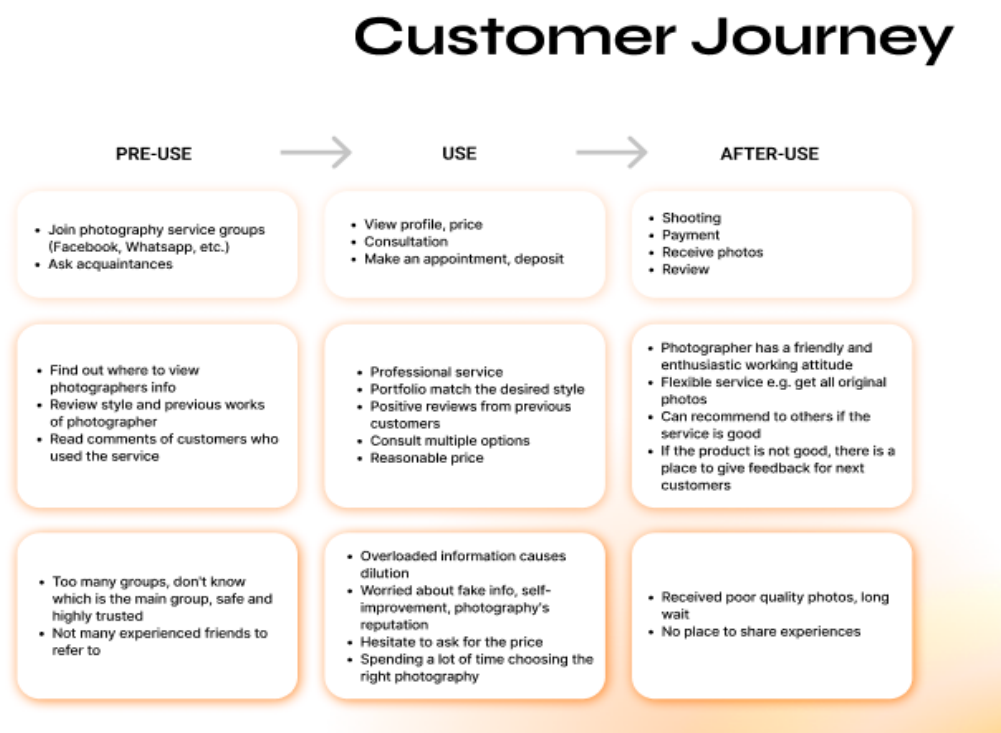


Figure 12. Customer Journey Map

After analyzing information received while conducting surveys, the author moved to create a customer journey map. This work makes better understanding about the contexts of users and gives a clear picture of steps users would take before FinFo is introduced. Also, the map points out bottlenecks in the purchase process, thereby creating improvements in the right place.

4.8 Information Architecture (Define)

Nowadays, the user-centered approach in design is one of the leading trend, especially in the UX industry, information architecture is an important part of the work. Information architecture is the skeleton and name of the information groups on the website, or on the application. If the framework is well designed, new and old information or features can be changed and found easily. (Armagan 2017.)

Rae (2020) wrote for XD Ideas, there are several ways to build, edit, and present an information architecture for a digital product:

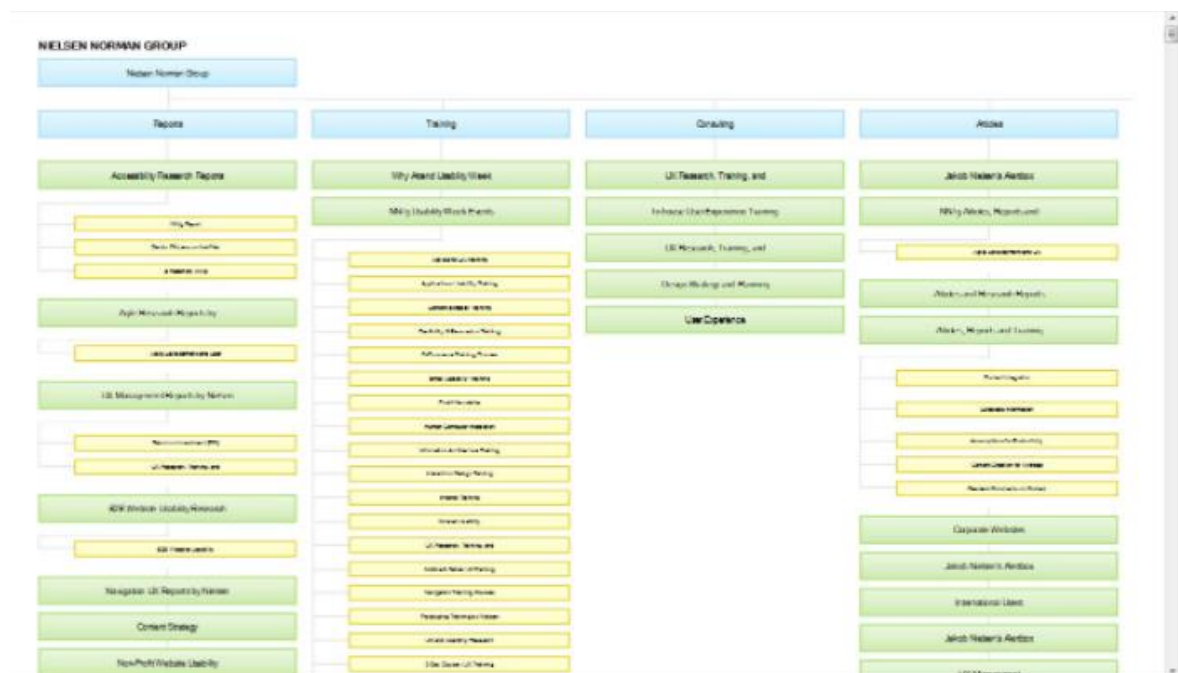


Figure 13. An example of Information Architecture structure

- Site map: representing the hierarchy of information by color to demonstrate subsets, the author chooses this method for the project as its understandability

- Content audit: figuring out related points in a statistical tool to manage the information source
- Diagram: visualizing all elements to make it easy for stakeholders to follow up
- Tree structure: the basic site map added with numbers to inform engineers which pages have priority.

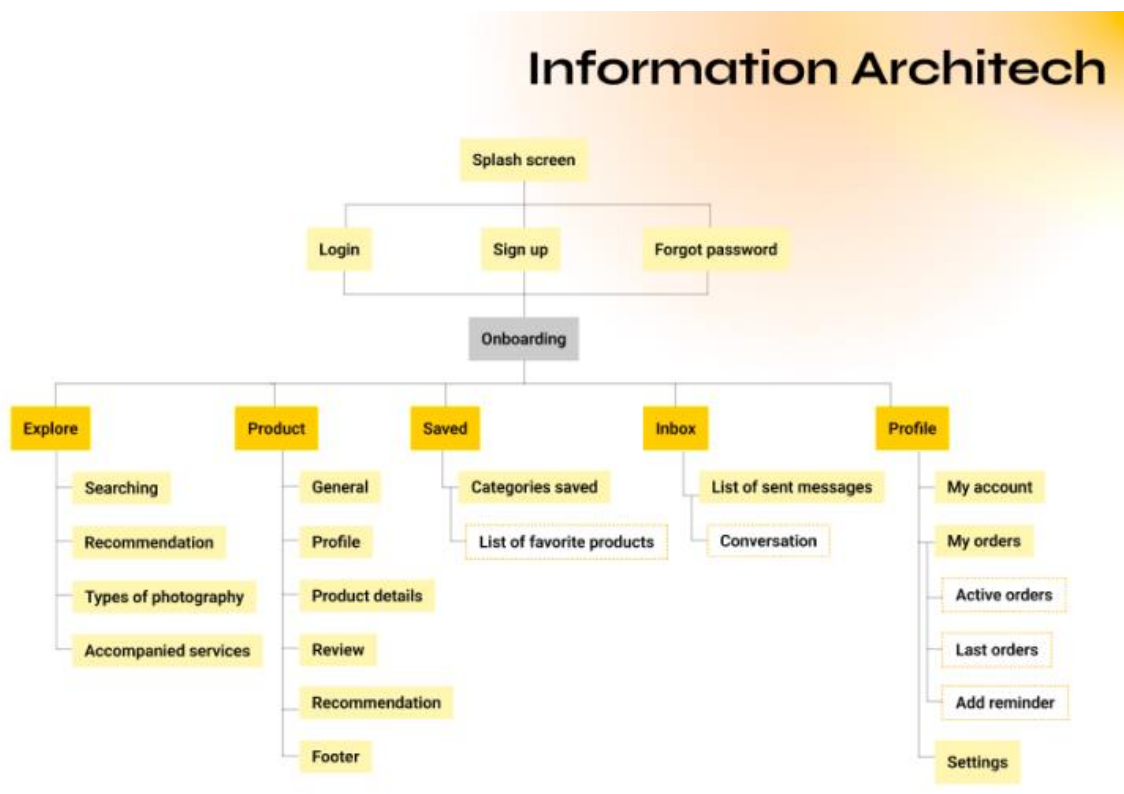


Figure 14. Information Architecture

The author focused on organizing, structuring and labeling content in an effective and sustainable way. Following the goal of helping user easily find information to complete tasks, the information architecture is made to clarify how items relate to each other within the system.

4.9 User Flow (Define)

According to Downs (2020), user flow is a diagram that illustrates the path that users will take through a website or an application to reach their needs in the shortest amount of time. The flow is used to evaluate the customer experience as well as limit customer leaving the product before converting. A user flow can be generated at any stage of the design phase

to help strengthen the information architecture. In order to distinguish the meaning of each action, the flow is designed with a variety of shapes that show the association in each step of use in different parts of the customer with product, such as:

- Cornered rectangle or circle expresses Start and End
- The rhombus represents Decision
- Transition arrows used to navigate the user
- Rectangle symbolizes Page, Screen or Action
- Square sometimes used for Notes.

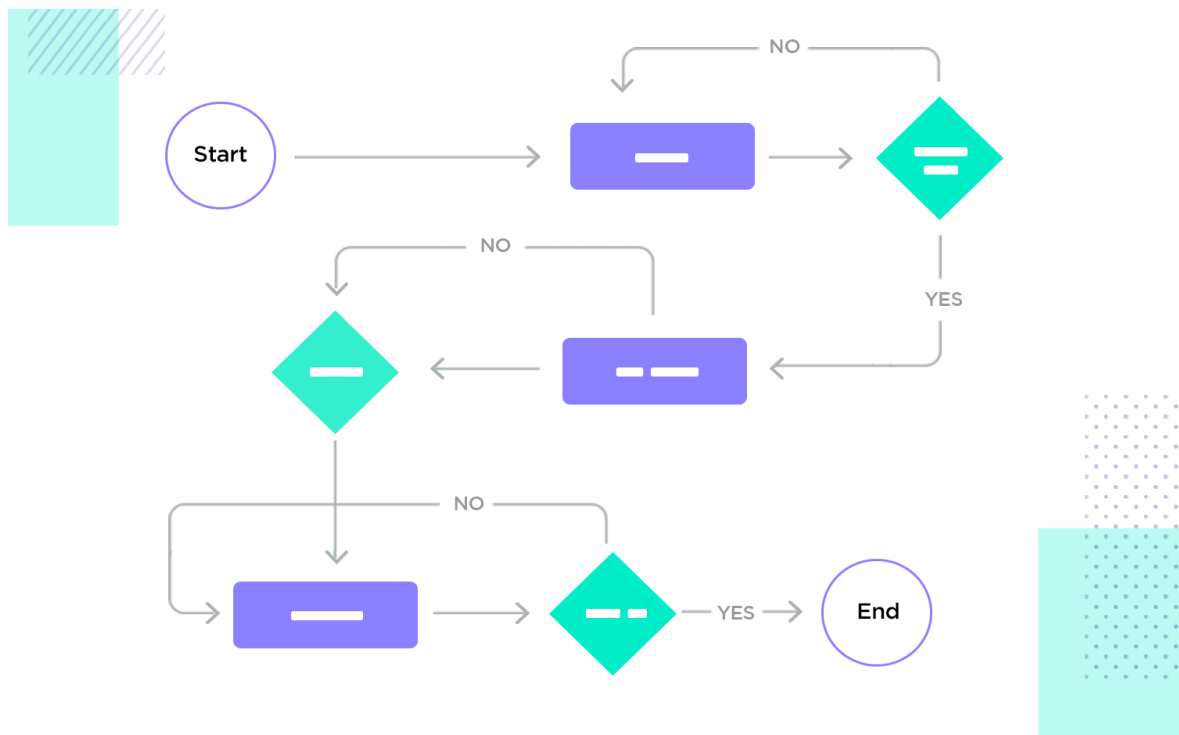


Figure 15. An example of User flow

At this point, the project had become well-grounded. Core features, structure and its functionality have been logically linked with the green arrow indicating approval (Yes), and the red arrow indicating the approval is not yet completed (No). The purpose of this stage is to organize and string all content from the research phase.

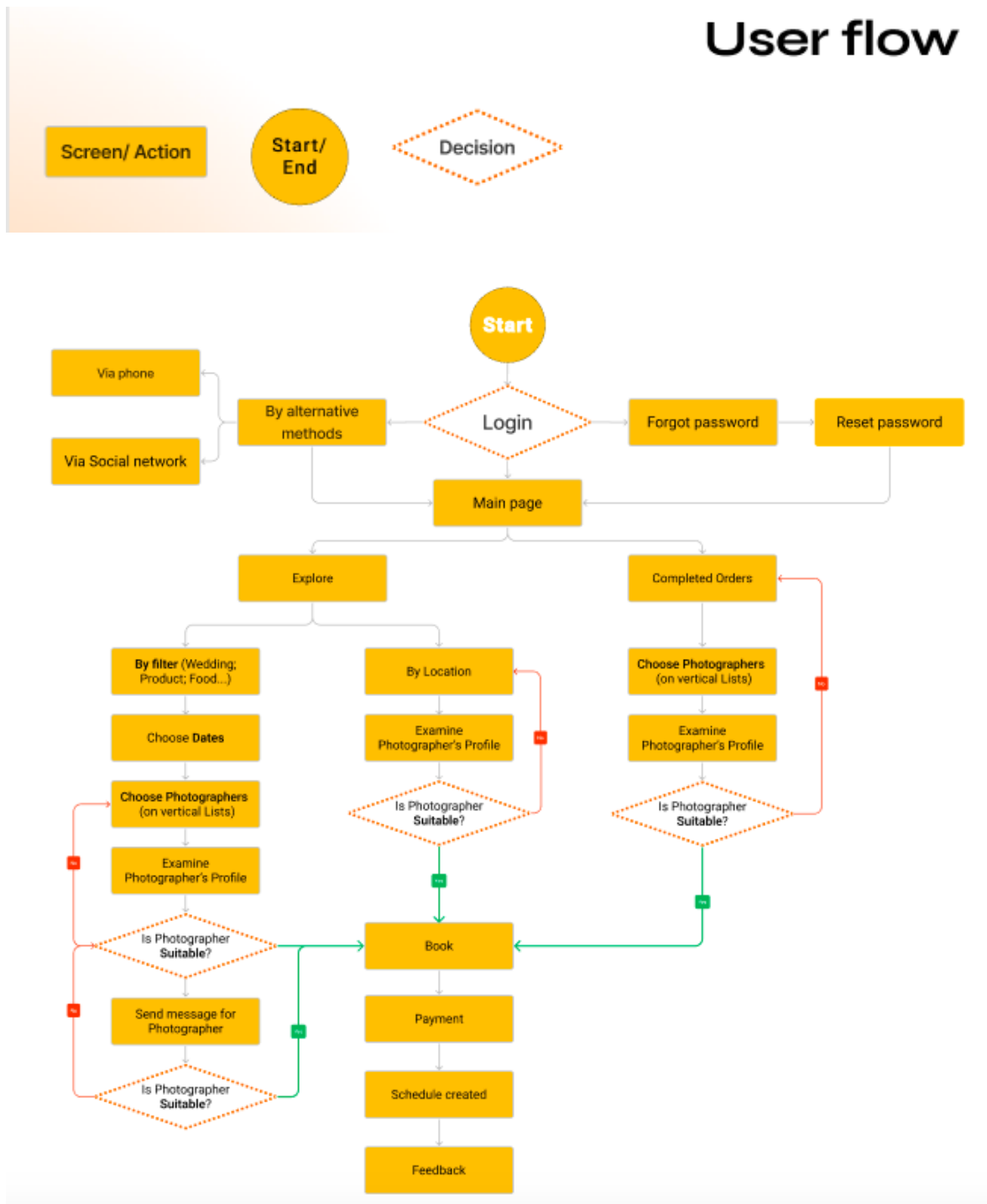


Figure 16. User flow of FinFo

4.10 UI Kit (Develop)

As the goal of this project is to create a durable interface design, a step that could not be missed is establishing the UI kit. A well-prepared UI kit can make the work process as smoothed out and continuous as it could be expected under the various circumstances.

4.10.1 Color

Color highlights the brand value that the designer wants to bring to the user. In addition, color can determine the style of each field. It is important to choose the right colors as they can affect the mood, behavior and stress level of customer, thereby promoting or distorting the brand message. For example, red and green have been used for so long that they are ingrained in the psyche to signal permission and ban respectively. Blue helps calm feelings while red puts in alert mode. (Solar 2019.)

The main color of FinFo is orange tone, the color of autumn. Orange is the color of vitality, enthusiasm and dynamism, it carries in it a youthfulness, hiding to prepare to explode. Bright orange color also helps to dispel fatigue, stimulate joy and creative thoughts to help work more effectively. (Lundberg 2020.)



Figure 17. Color guide of FinFo

4.10.2 Typography

Typography is used to refer to the style, presentation and display of letters on the designed product. This is also seen as the art of interacting with letters in the working process. Having a unique content is indispensable for a suitable and professional typography. A font is a

complete set of letters, punctuation, numbers, and special characters, in a type, format (normal or bold), shape (straight or italic) with appropriate sizes and can be distinguished (Birch 2020).

According to Hannah (2022), Typeface is a system of different letter shapes, each shape is a separate typeface, for example Arial is a typeface. Typeface is classified into 3 categories:

- **Serif:** letter with legs, due to having a stroke added to the beginning or end of the main stroke gives a feeling of classic. This is a great choice for traditional projects such as print publications, magazines or newspapers.
- **Sans-serif:** letter without legs, sans means negation in French. In contrast to the Serif style, the Sans-Serif has a more modern, brighter, and clearer style. Therefore, it is better displayed on small screens like computers and phones.
- **Decorative:** a typeface full of creativity, outstanding, liberal and often used in informal case.

The author used Gothic A1, a Sans-serif type to express the youthfulness that suits target customers.

TYPOGRAPHY

Headline 1

Gothic A1 /60px

Headline 2

Gothic A1 /50px

Headline 3

Gothic A1 /38px

Headline 4

Gothic A1 /22px

Paragraph

Gothic A1 /24px

Figure 18. Typography guide of FinFo

4.11 Wireframing (Develop Phase)

Working closely with the customer journey map and information architecture, the author proceeded to set up a wireframe to get an overview of the layout of the application. The wireframe was built with basic structure of a page before visual design and content is added.

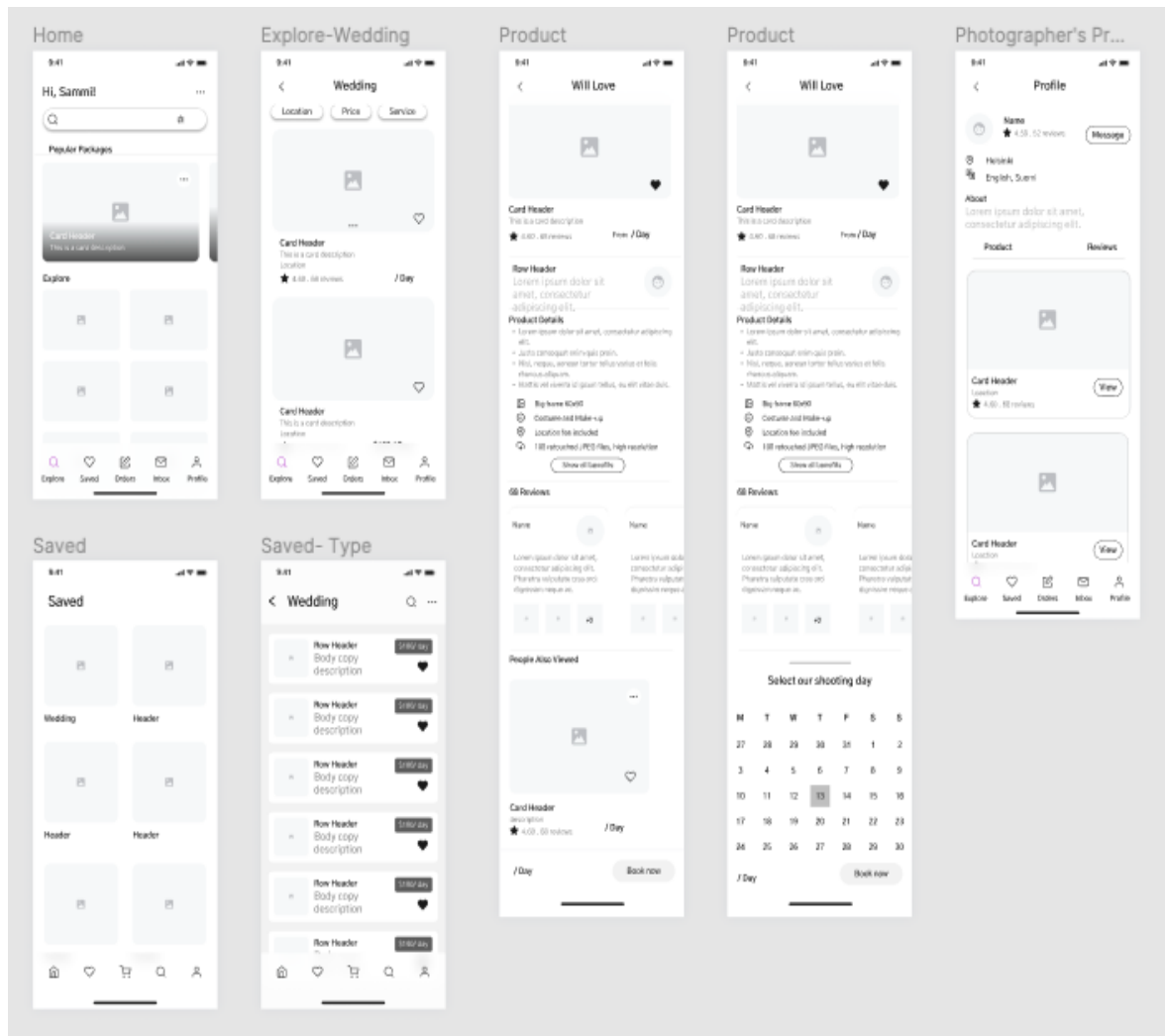


Image 1. Wireframe of FinFo

4.12 Final UI (Deliver Phase)

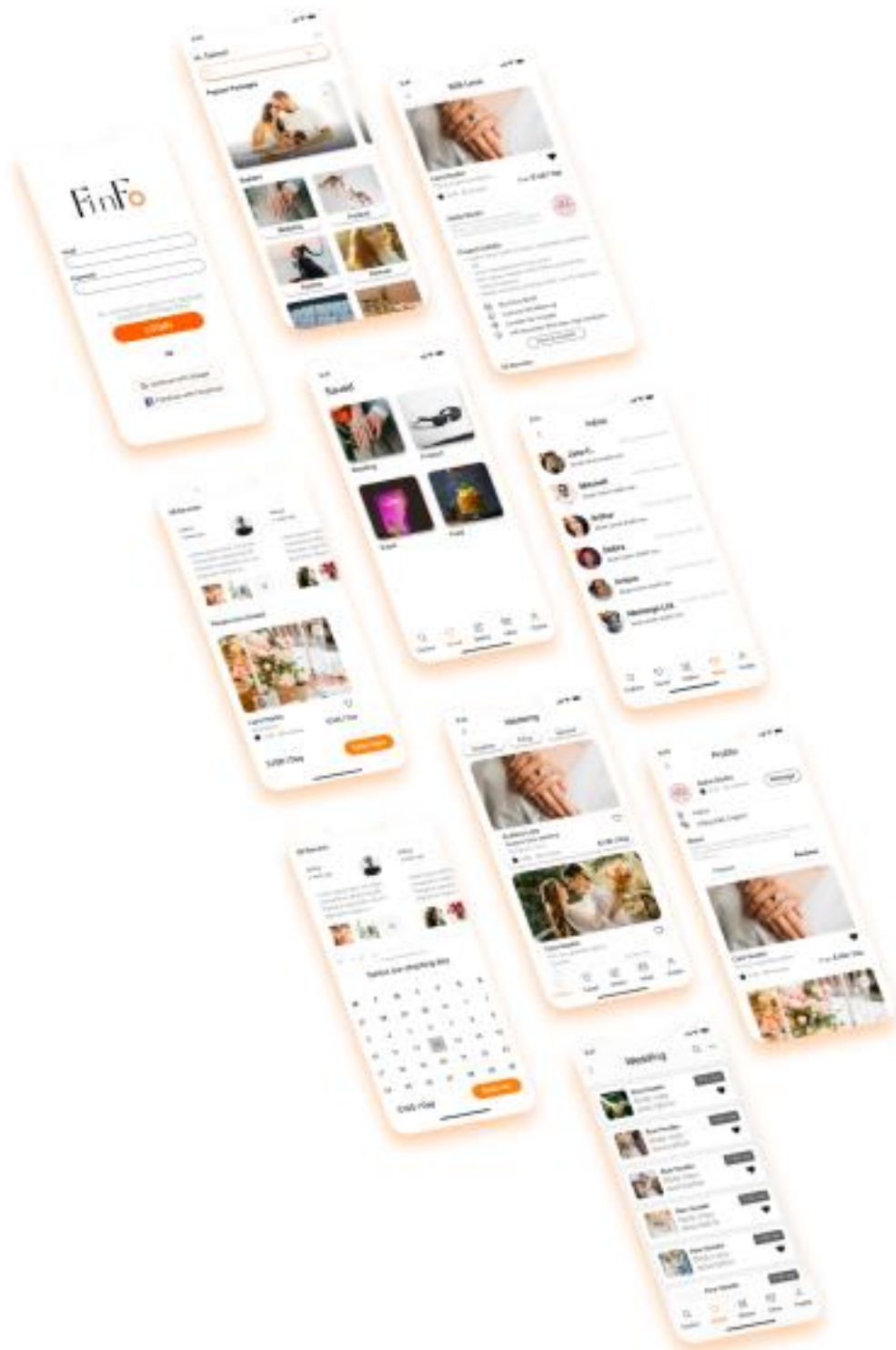


Image 2. FinFo interface

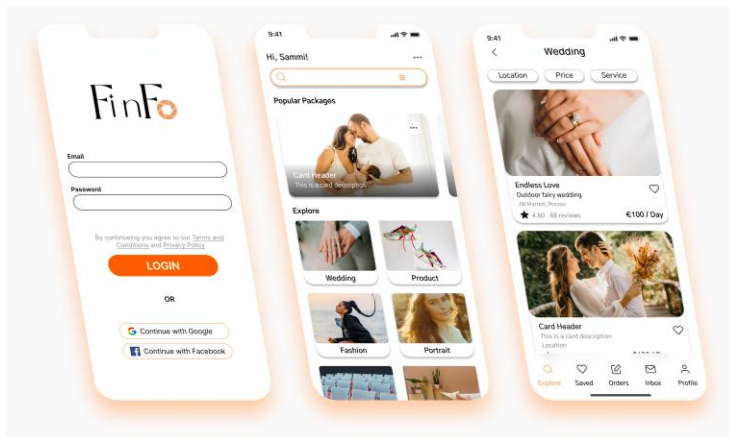


Image 3. FinFo interface

FinFo has five parts, which is Explore, Saved, Orders, Inbox and Profile. With simple and effortless operations in the onboarding step, user can either sign-in using their e-mail or the most popular social networks. This step can be skipped if users are not interested in it at that moment. When the initial onboarding is complete, user will be taken to the “Explore” screen, which supposed to be the home screen. There are three main sections in this screen: the first with search bar and greeting user, followed by the horizontal scroll bar to introduce new and outstanding products, the last part is a list of types of photography. After user chose a type of photography, all service posts will be displayed and viewed vertically with basic information such as product name, price, heart icon (favorite/ save), location, star icon (rating). In the top of product screen, there are tabs to filter by location, price, service type, etc.

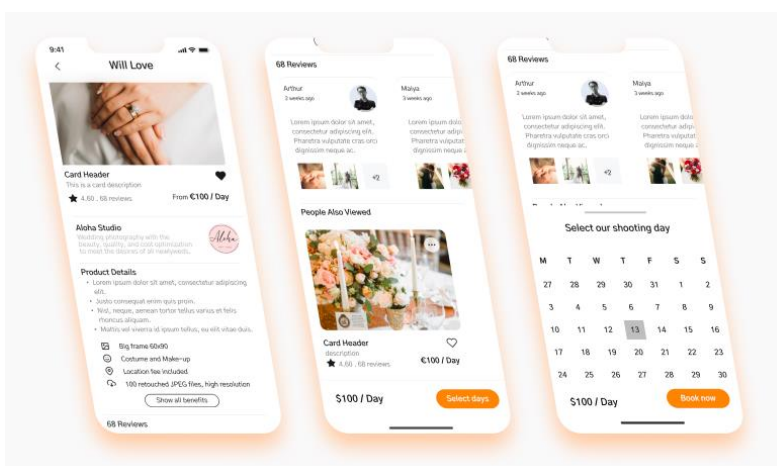


Image 4. FinFo interface

Once users want to see more details about a product, they can touch anywhere in the frame of that product, a new screen will appear. At this juncture, all information about the photography package given by the service provider will be manipulated vertically, including reviews of past customer by star points and photos. In addition, the application also has the function of scheduling with the photographer, helping customers save a step (sending messages to arrange the schedule with the photographer) and giving customers flexibility in choosing dates. The "Book now" button is always present on this screen, giving the user a boost to purchase.

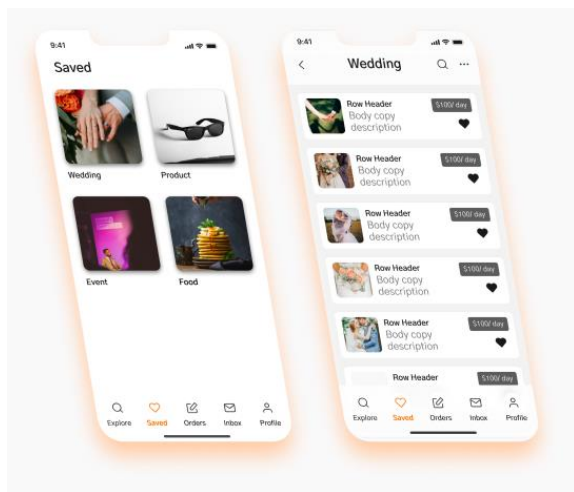


Image 5. FinFo interface

The "Saved" screen is a place that lists the products that customers have clicked on the heart icon, it is also sorted by type of photography. "Order" is the place to store products that the user has bought and is ordered in chronological order, which will reduce user's cognitive load.

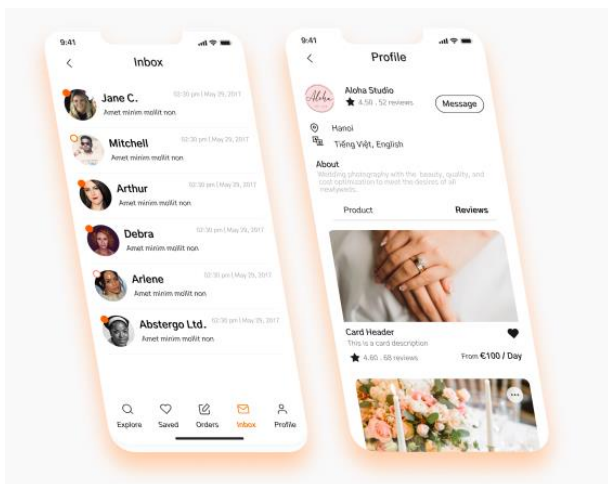


Image 6. FinFo interface

Chat seems to be a way more productive and time-efficient, than traditional email approach. And if the keyword recognition-based chatbot is added for the most common questions, it would save human resources. The "Inbox" section is where user can manage all messages with the photographer, when they have any questions related to the service. Final is the "Profile" section, there is a collection of settings and information related to user, to make their experience personalized. As the user may save sensitive information and payment method.

5 Conclusion

The age of technology is innovating every second, bringing with it the constant development of modern applications for business and human activities. It is not easy for an application with an optimal design to bring a great experience to the user. Nowadays, businesses are more and more focused on aspects of user experience and interface design. A study from Adobe showed that 87% of the 500 managers and heads of departments surveyed said hiring more UX Designers is a top priority for their organization (Faller 2017). Being aware of that, the author determined to learn more skills and knowledge so as not to miss this exciting and potential job position. After having researched and participated in online courses in UX and UI design, this is the first project that the author dedicated to put into practice based on what has been instructed. FinFo was inspired by individual needs and pain points when looking for services in the field of photography. The work is considered as a hypothetical case study that serves as a launching pad for the application of the acquired theory in the field.

From studying the basic steps such as finding definitions or analyzing initial ideas, the author feels confident with those concepts to create the interface for a digital product. In addition to the background knowledge, the author also learns necessary skills to visualize that thought with available support software (Figma). Besides, as a beginner, when embarking upon the implementation process, there were many things that cause confusion. For example, the design processes are relatively similar, but differ in operating methods, or even only in the way they are named. What the author has learned is the systematization of documents, selecting the most suitable method while still complying with certain processes and standards.

To compare with the aims stated above, the author has successfully applied theory into practice to create a fulfilled UI/UX design. This thesis acts as a document that records the process of building FinFo, with step-by-step explanations, from understanding users through User Personas, to a complete design. On the other hand, there is a lot of potential when this project is brought into reality, because the photography service industry still has a lot of space for exploitation and industrialization. At that time, the conduct of collecting user opinions through usability testing and additional modifications will be more fully implemented.

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APPENDICES

Appendix 1: Questions in the survey to user

1. Firstly, how do you identify?
2. Which age group describes you?
3. Are you currently working?
4. Have you ever wanted to find a photographer (or photography service)?
5. If you need to book a photographer, how did you find that photographer (or photography service)?
6. Do you find it difficult to find a photographer that matches your requirements (style, price, professionalism, schedule...)?
7. What type of photography have you ever taken with a photographer?
8. How long do you spend researching and finding the right photographer?
9. How often do you hire a photographer for that need?
10. What make you concern when booking photographer?
11. What factors influenced your decision to choose that photographer?
12. What is your goal when looking for photography services?
13. If there is a platform to help you book appointments with photography conveniently, easily and reliably, would you be willing to use.

Appendix 2: Interview questionnaire for participants

1. What kind of work do you do?
2. Are you an easygoing person or a selective person?
3. When was the last time you hired a photographer and for what occasion?
4. What makes you need the photographer's help?
5. When you have a need to hire a photographer, what do you often do? (Can you tell me what you did when you started looking for a photographer?)
6. How long does that process last?
7. How do you feel about doing it?
8. Do you have any difficulties or dissatisfaction in the process of finding the photographer? (Can you tell me?)
9. If you can experience an application that helps you shorten the time to find and select a good photographer, what makes you feel interested/ looking forward?

