Climb Oslo

Jake Hayward

Introduction

Diploma title: Climb Oslo

Candidate: Jake Hayward

Discipline: Interaction and service design

Supervisor: Mosse Sjaastad

Date: Fall 2023

Motivation

The motivation for this project stems from 2020, when I had just finished my bachelor's degree. However, due to the COVID-19 pandemic, the UK was in lockdown. In May 2020, the lockdown rules changed, allowing me to go outside with one friend. My friend Jim and I decided to explore the woods and stumbled upon a sandstone wall.

The following day, we brought back an old gymnastics tumble mat and a pair of old climbing shoes to attempt climbing the sandstone wall. We spent the entire day exploring different routes on the rock and were hooked from that moment. We traveled all over the UK in search of locations to boulder.

For me, bouldering is the catalyst for adventure. I aim to share these experiences with more people, which led me to focus my diploma project on encouraging more individuals to engage in outdoor bouldering.
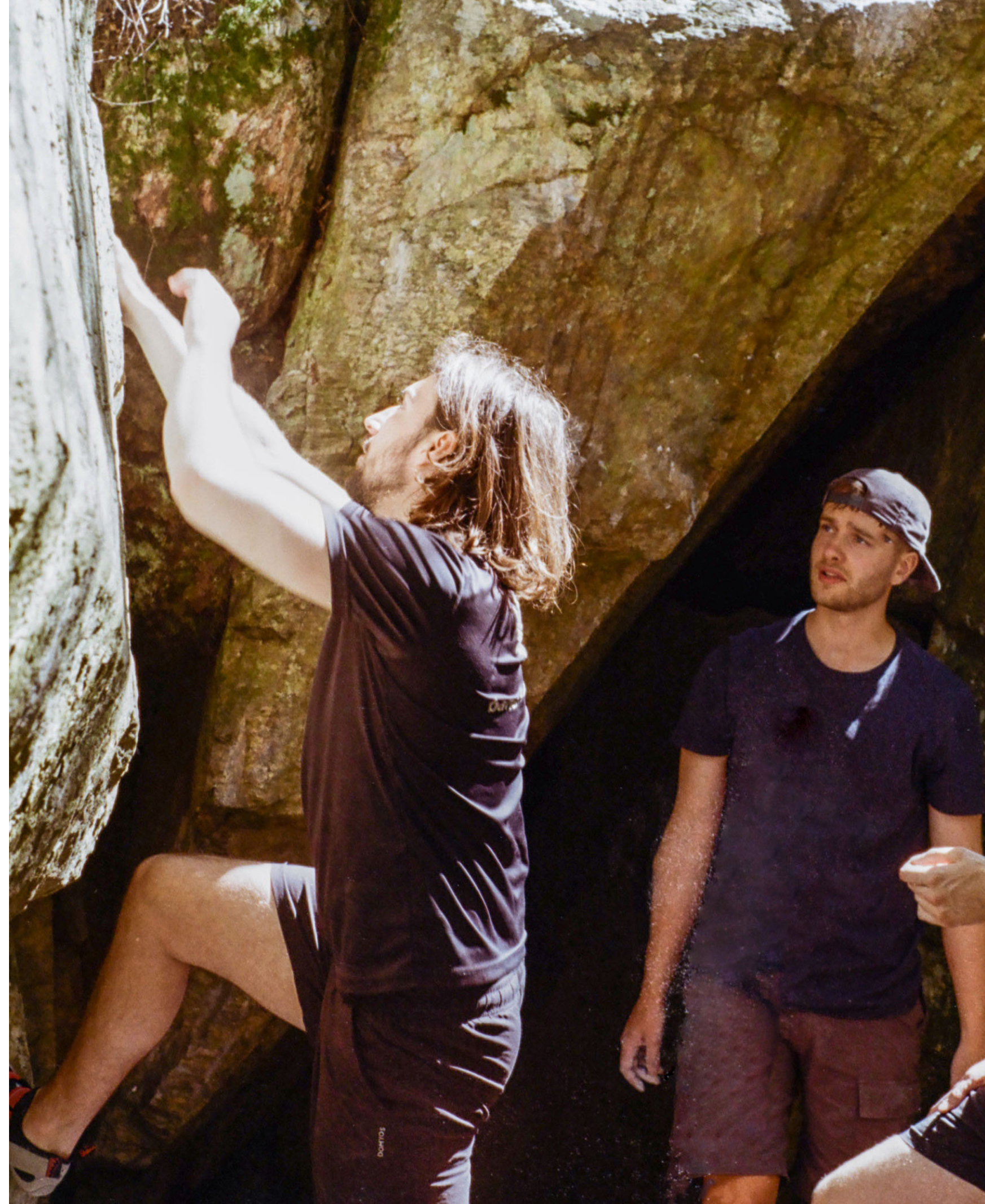
Bouldering is the catalyst for adventure

Abstract

The research stage of this project aimed to uncover the issues preventing indoor climbers in Oslo, Norway from engaging in outdoor bouldering. The research methods used for this part of the project were expert interviews, climbing workshops, surveys, and desk research. The findings from this research were then synthesized, resulting in four main insights: Accessibility, Safety Information, Planning, and Communication.

Following the findings from the research stage, the project moved on to the design stage, which focused on addressing the four main insights. The design methods used for this part of the project included design workshops, usability testing, card sorting, workshop run-throughs, shadow testing, design sprints, and field testing. The final designs that attempt to address the research problems are as followed: a prototype planning tool, a print branding campaign communicating the brand values, an interactive indoor safety workshop on outdoor bouldering, an equipment rental starter package and an over arching brand.
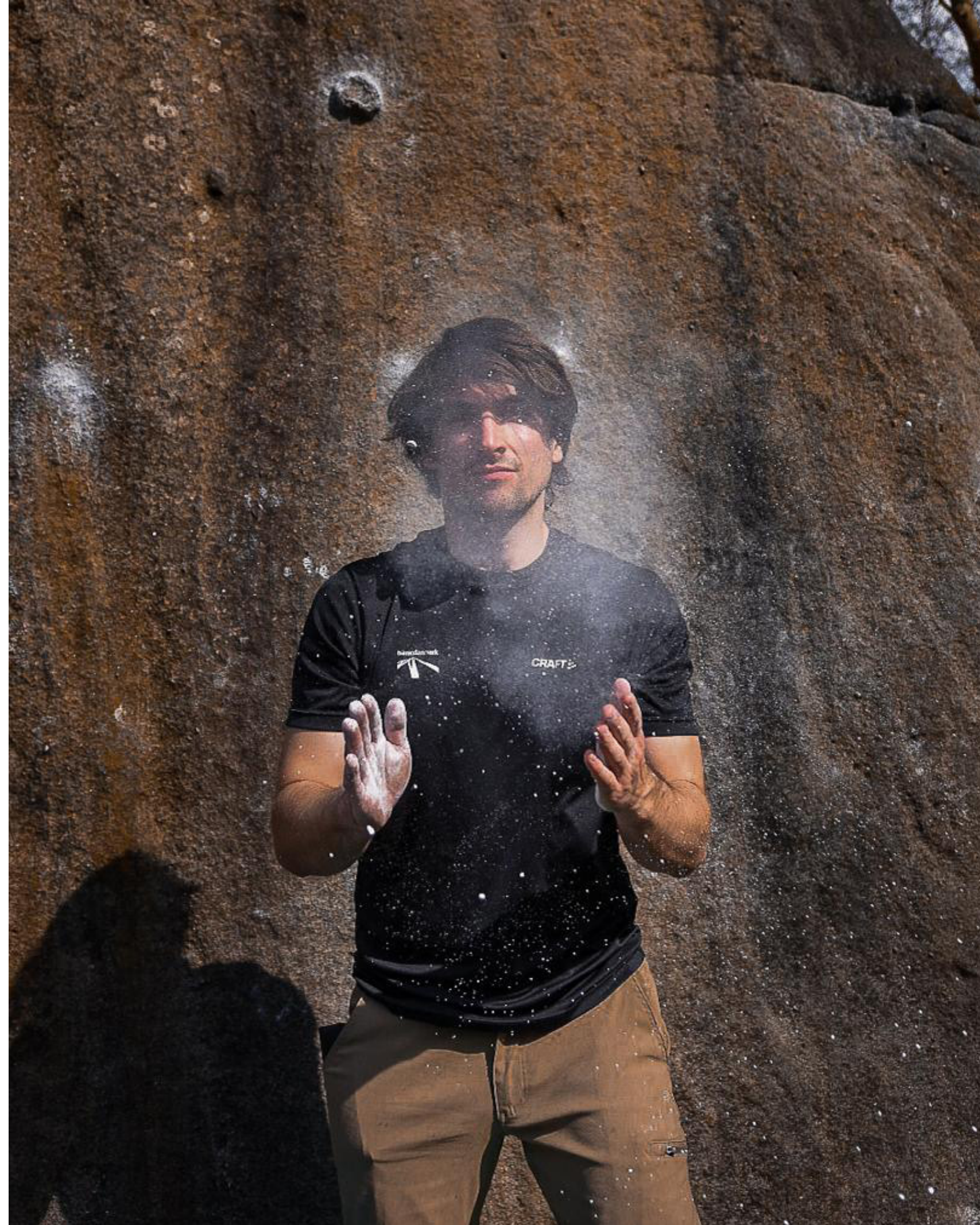
Context

This project will be focused on the discipline of bouldering, "Bouldering is a form of free climbing that is performed on small rock formations or artificial rock walls without the use of ropes or harnesses. While bouldering can be done without any equipment, most climbers use climbing shoes to help secure footholds, chalk to keep their hands dry and to provide a firmer grip, and bouldering mats to prevent injuries from falls." (Wikipedia)

The project will be based in Oslo, Norway. The city is unique in terms of bouldering, as its forests and surroundings are easily accessible through the Ruter public transport system. There are over 2000 bouldering routes available, with more routes being developed each year (Jørgensen, Oslo og omegn).

Bouldering as a sport is gaining popularity, especially in Oslo. In the last year, five climbing centers have opened in Oslo, and one opened while I was working on this project. Additionally, bouldering has recently gained Olympic status, increasing its exposure. It made its debut in the Summer Olympics 2020 in Tokyo, Japan (olympics).

Target group

The target audience for this project are individuals who are already particpate in bouldering at climbing centers in Oslo. These indiviudals have a foundation of knowledge and skills, making the transition from indoor to outdoor bouldering smoother. Those who already have an interest in climbing and enjoy the sport are likely to find outdoor bouldering appealing as opposed to people who have never climbed before.

While I intend to address all skill levels of indoor climbing, the primary focus will be on beginner and intermediate climbers.

Research

Research methords

My approach to these research methods that I chose for this diploma was mainly centered around expert interviews, climbing workshops, and surveys. I spent less amount of time on desk research.

I conducted this research to gain a holistic view of bouldering in Oslo and to identify the challenges associated with outdoor bouldering. My primary focus was on gathering first hand information to better understand the context within Oslo, most of the desk research I conducted provided limited insights. The desk research evidenced my hypothesis that most of the existing research and products are generated by industry experts. This presented an issue, as the perspectives of industry experts differ significantly from beginner and intermediate. I concentrated on climbing workshops and industry expert interviews for the majority of the project to undertstand both perspectives.

The research revealed that beginners faced distinct challenges compared to those emphasized by industry experts I discovered that many existing products and services where not designed for the needs of beginner outdoor climbers. Despite outdoor bouldering being relatively accessible sport compared to other climbing disaplines, beginners need a base level of knowledge and skills to navigate the outdoor climbing environment.

Surveys

Industry expert interviews

Climbing workshops

Desk research

Offline survey

I designed a paper survey with two questions. The first question was whether participants had ever participated in outdoor bouldering. If yes, then the follow-up question was the frequency of outdoor bouldering activities. If no, then I asked why have you never bouldered outdoors before? I carried out the survey at Torshov Klatresenter in Oslo, in the bouldering section. I manged to collect rensponses from 51 participants.

I conducted this survey to test my hypothesis, that majority of climbers who boulder indoors have never bouldered outdoors. Additionally, I aimed to gather insights into the factors that prevent climbers from outdoor bouldering to use in my second online survey.

The survey results indicated that:

• 53% of participants had experience outdoor bouldering, while 47% had not.

Although this did not validate my hypothesis, it did demonstrate that a significant proportion of climbers have limited or no outdoor bouldering experience. The primary reasons for not participating in outdoor bouldering were "lack of experience" followed by "don't know where to boulder outdoors."
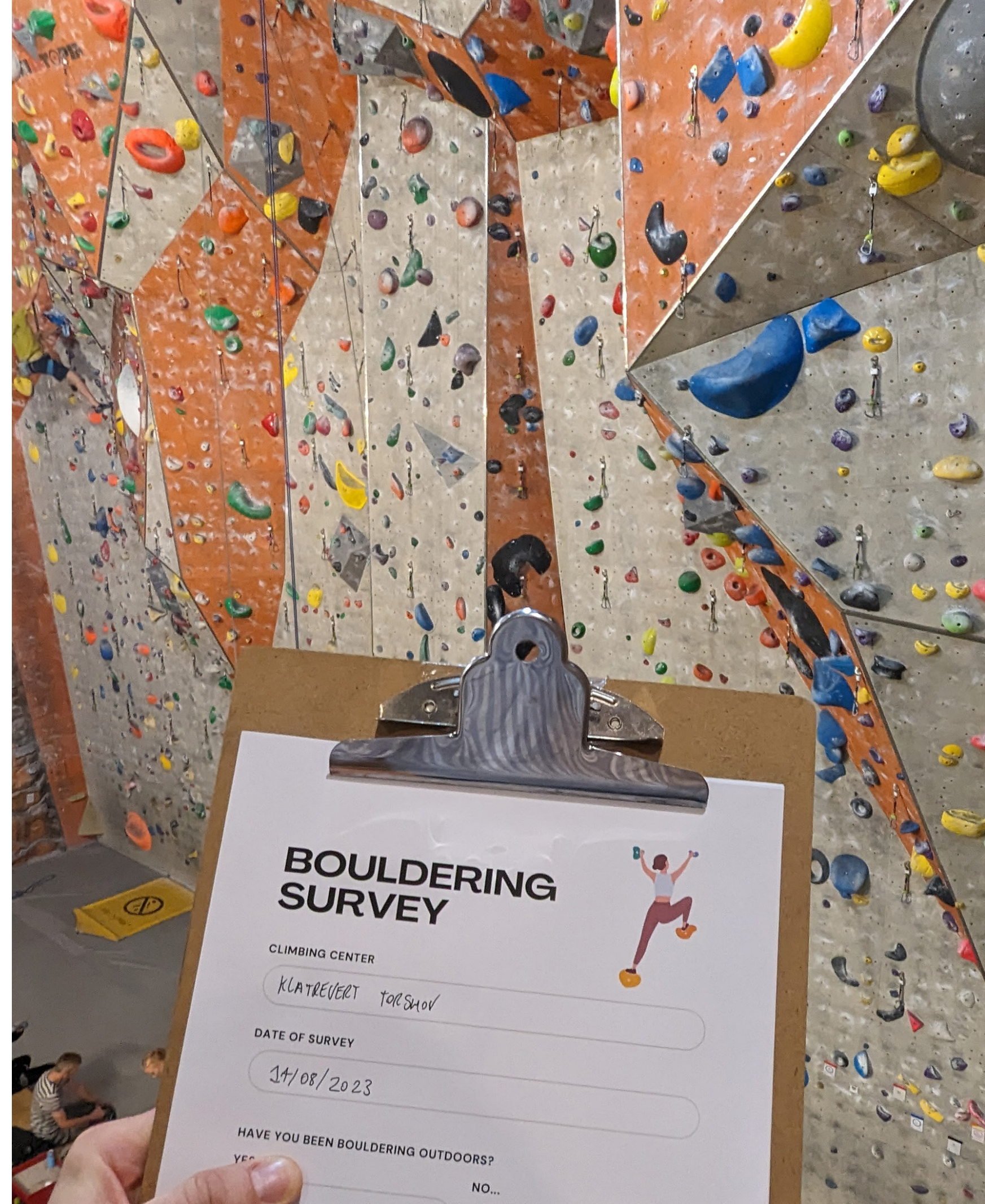
Online survey

I created and distributed a survey to various Facebook climbing groups based in Oslo. The questionnaire comprised three questions: "How often do you boulder indoors?" followed by "How often do you boulder outdoors?" and finally, "What barriers prevent you from bouldering outdoors?" I received 78 responses from this survey.

I aimed to collect responses from both indoor and outdoor climbers, identify barriers to outdoor bouldering, and compare the frequency of indoor and outdoor climbing. There maybe be a bias, as individuals in Facebook climbing groups may have a larger knowledge and skill set being a member of one of these facebook groups. However, this data provided more detailed responses and could be used in combination with the paper survey to cross-verify the information.

- The majority of climbers (80%) engaged in climbing once a week or more, but 33% had never climbed outdoors, and 37% climbed only once or twice a year.
- The primary reasons that prevented climbers from outdoor bouldering included "lack of equipment," "absence of a climbing partner," "don't know where to climb," "difficulties in traveling to boulders," "safety concerns," and "lack of experience."

Interviews

As part of my research process, I aimed to conduct interviews with experts within the climbing industry. I conducted 14 interviews with experts from climbing apps, centers, shops, magazines, and outdoor organizations. Gryttr, 27 Crags, Arcteryx, Piteraq, XXL, Oslo Sportslager, Chill out travel, Fri Flyt, Oslo city bike, OSI Klatring, Oslo Klatresenter, Vulkan klatresenter and Klatreverket. I reaching out to people via email and engaging them in person by visiting their shops and other places of work.

My objective was to as much information as possible about the current state of outdoor bouldering within the climbing industry. I aimed at gathering insights like products and services offerings, challenges associated with outdoor activities, and explored potential opportunity areas with the interviewies.

I gained insights into the organisational structure of outdoor climbing, identifying key actors and their involvement within the outdoor climbing scene. The interviews on the next couple of pages are key interviews to the project providing the imporant insights to the project.

- I learned that the experts who worked in the climbing industry were not fully aware of the challenges faced by beginners, which I had learnt from the climbing workshops and surveys I had conducted.

Chat with Albin

I arranged an interview with Albin Bonafede, an employee at the outdoor sports and climbing store Piteraq in Oslo. We had a long discussion about outdoor climbing, diving into his personal experiences as a climber.

The purpose behind this interview was to gain insights into Albin's experiences working in a climbing store. I aimed to understand the types of questions customers typically ask and what purchases they make in store. I also wanted to explore Albin's personal experiences as an outdoor boulder in Oslo.

During the interview:

· Albin highlighted the importance of preparation for outdoor climbing.
· He highlighted the need to identify a climbing spot in advance and mentioned that he often advises customers on suitable locations based on there climbing ablity, when they are purchasing items like crash pads.
· Albin also stated that a certain level of climbing experience is necessary before venturing into outdoor bouldering.

Coffee with Tina

I interviewed Tina Jørgensen, the founder and owner of the guidebook website and book 'Gryttr.' Gryttr is a voluntary-based organization that offers bouldering routes and map information, helping climbers to locate boulders to climb and locate their specific locations in Oslo and Sweden.

I aimed to speak with 'Gryttr' because it is one of the most comprehensive guidebook organizations covering Oslo, documenting over 2000 routes in the city alone. These routes have been carefuly photographed and plotted by Gryttr (Jørgensen, Oslo og omegn.) My goal was to understand the organisation and Tina's involvement in both the climbing industry and Gryttr.

Within Gryttr, Tina focuses on the UX design of the website, using her past experience as a UX designer. There are also two other developers on the Gryttr team who contribute to the backend coding on a voluntary basis.

- The Oslo climbing community plays a critical role in Gryttr's continuous development of new routes, with outdoor climbers sending in information to be published on the website and guidebook.

Chat with Hanna

I reached out to Hanna Vartia from 27 Crags. During our conversation, we discussed the 27 Crags app, exploring their past work, current work, and future plans.

27 Crags are one of the largest bouldering guidebook apps globally, with over 100,000+ downloads on the Google Play Store (Google Play, 2023). I wanted to undertstand the workings of 27 Crags, understanding their company focus, and gain insight into their upcoming projects.

In our discussion:

- I learned that 27 Crags has experimented with many approaches to encourage indoor climbers to explore outdoor climbing, such as through outdoor workshops.
- Their current focus is on digital products rather than physical ones.
- They do not have plans for new ideas; instead, their focus is on addressing existing issues with their app, which is ther main priority and focus for now.
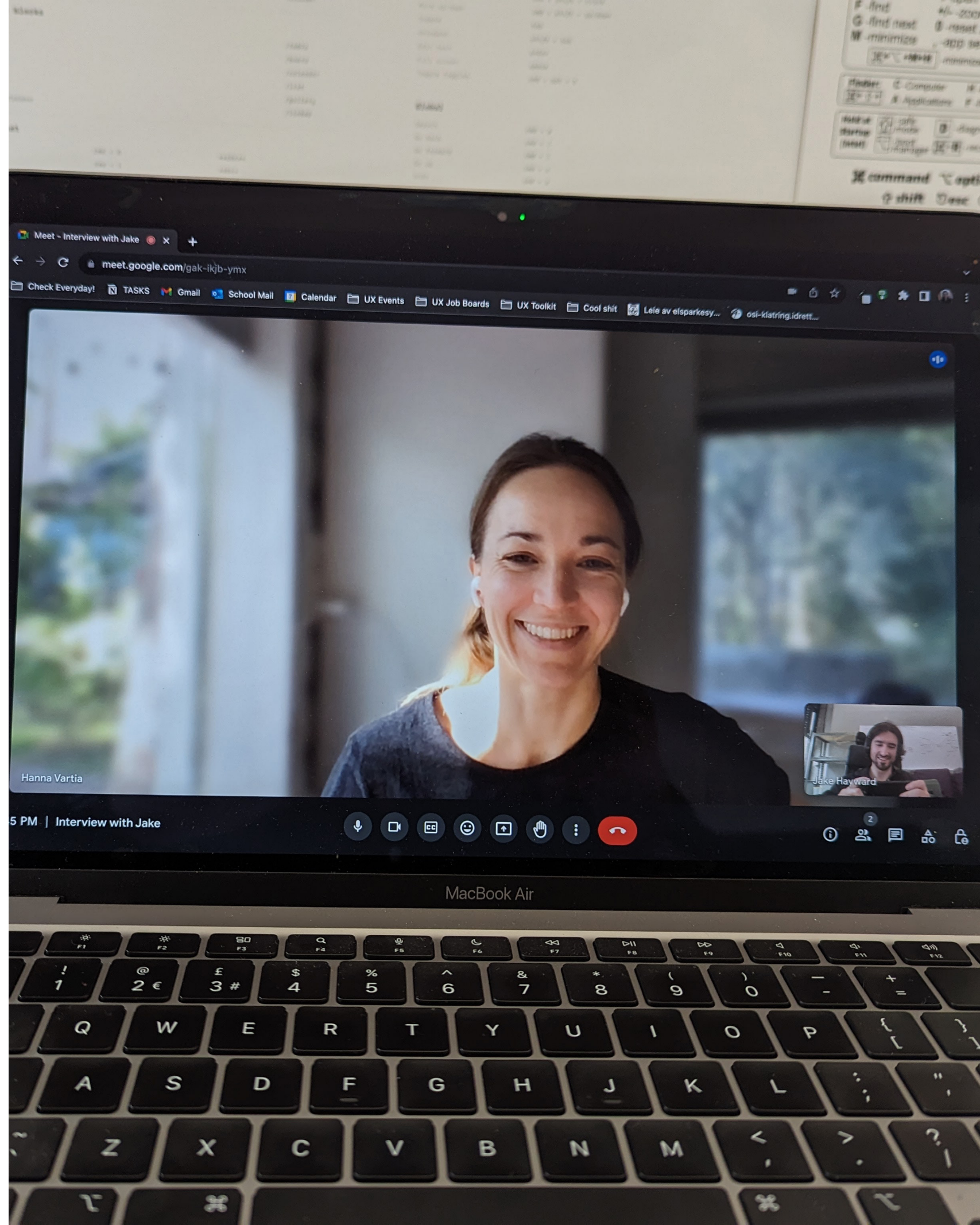
Coffee with Benjamin

I conducted an interview with Benjamin Fagerli, a climber and climbing center worker at Klatreverket in Oslo. He is involved in organising outdoor workshops and developing boulders, which means finding new unclimbed boulders, cleaning them with brushes to expose the rock, then climbing and rating the routes based on skill level.

I wanted to find out Benjamin's experiences as an boulder developer, outdoor climber and climbing center worker. I aimed to understand the content of the courses he teaches and the process of developing boulders.

In the interview, Benjamin highlighted key aspects of the courses:
- The outdoor courses he teaches are primarily on safety, especially for climbers who are new to outdoor bouldering.
- As part of the course, Benjamin instructs participants on how to find boulders using guidebooks, or online guides.
- He arrives at the bouldering spot for the workshop in a car equipped with the mats and other equipment so that it is more convenient for the climbers.

Workshop one

I organized an outdoor climbing event, promoting it to both the AHO Klatring group (the school's climbing group) and OSI Klatre club (the Oslo Student Union climbing group). On the day of the climb, seven participants took part in the event, with four of them bouldering outdoors for the first-time. Throughout the workshop, I documented the experience through photographs and observations. Following the session, I conducted interviews with the participants to gather more insights.

I planned and ran this event to explore the experiences of beginner climbers transitioning to outdoor climbing and to identify potential challenges associated with this transition. I also wanted to look for the challenges that climbers who had already experienced climbing outside faced.

- Despite the lack of outdoor climbing experience, the beginners enjoyed bouldering outdoors.
- Some participants mentioned that their friends were interested in joining the workshop but couldn't join due to a lack of owning a pair of climbing shoes.
- The climbers suggested that future events should include an introduction to the basics of outdoor climbing, so that they felt safer climbing.

Workshop two

I organized an outdoor climbing workshop for the second time and invited both AHO Klatering group and OSI Klatre club again. Three climbers attended this event—two climbers had previous outdoor climbing experience and one had never bouldered outside before.

I created a second climbing workshop to see the diffrences and similarities in experiences between the first workshop and the second. Choosing a different climbing area this time to see the difference with a new location, different public transport choice, and a new set of climbers.

- Although I was recommended this area and it was suggested as good for beginners, there was a small number of beginner routes. The result of this was that the beginner climber left early due to a lack of suitable routes for there skill level, despite enjoying the outdoor setting.
- The beginner climber expressed that they felt unsafe climbing, stating they lacked basic safety techniques.

Existing products

Throughout both workshops, I evaluated guidebooks and websites that provided information on bouldering locations and routes. I tested these tools with both beginners and more experienced outdoor climbers.

The purpose was to test the effectiveness of existing products and services, identifying what worked well, what didn't, and areas for improvement.

While exploring the books and websites to locate suitable climbing spots, I encountered challenges. It was time-consuming to find appropriate places as these resources relied on selecting individual boulders. Instead of using the guidebooks I gained advice from other climbers on climbing locastions. It was helpful in the first workshop but the advice for the second workshop was not as accurate.

- The beginner climbers in the workshops struggled with understanding the outdoor grading system, which is different from the color-coded system used indoors.
- The process of finding routes suitable for the skill level was difficult, involving flipping through the book or scrolling through the phone to identify suitable grades to climb.
- Participants found it challenging to view boulders and the map at the same time using the websites, often resorting to opening multiple tabs.
- Overall, the current products were complex, time-consuming and not beginner friendly in locating boulder locations and identifying suitable climbs at the bouldering area.

Desk research

I reviewed and collected insights from a combination of 8 academic articles and 9 non-academic articles, the content I explored was diverse and covered a range of topics on outdoor bouldering.I wanted to understand the current state of research on climbing and outdoor bouldering, I investigated what research had already been addressed, identifying any gaps in the research, and exploring simularties between existing research and my own.

The research I read discussed the environmental, social, and economic aspects of outdoor bouldering. Some articles focused on developing systems that gather data and utilize technologies like Artificial Intelligence to provide climbers with grade and location information.

All the academic articles I read:
- Content based recommendations for crags and climbing routes
- Do risk perception and safety of sites influence rock climbing destination and choices?
- Improving user interaction for content creation web application tool for rock climbing
- Designing digital climbing experiences through understanding rock climbing motivation
- The distribution of climbing chalk on climbed boulders and its impact on rock dwelling fern and moss species
- Managing environmental impact of bouldering as a niche outdoor climbing activity
- Push or pull ? Identifying rock climbing tourist motivations
- Climbing route difficulty grade prediction and explanation

Content-Based Recommendations for Crags and Climbing Routes

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Abstract. Climbing is a popular sport for active tourists and recreational sportsmen. Alpine climbing areas, such as the Alps, can attract tourists from all over the world. Various websites, mobile applications, and books are used by climbers to obtain information on important aspects of the available climbing routes, including their properties, location, and especially their difficulty. Considering this large amount of information and options, it is in reality difficult for climbers to properly select which routes to climb. Hence, we propose recommendation technologies aimed at supporting climbers in this decision task. The developed system prototype constructs a climber's profile with preferences derived from climber's logbook data collected by a mobile app. Then, the system can recommend suitable crags and climbing routes within the selected crags. The designed interface and the basic computational models for such a system prototype are presented. The proposed technology aims at complementing existing electronic climbing guidebooks and providing decision support to climbers.

Keywords: Climbing tourism · Difficulty assessment · eTourism · Recommender system · Outdoor tourism decision support

1 Introduction

Nowadays, there is a growing interest in sport climbing. Specifically, outdoor climbing has become a popular tourism activity for novices and experts. In some countries, such as Italy, Greece, Spain, and Turkey, climbing has become a foremost advertised activity that is used for attracting many tourists. Thousands of rock-climbing regions have been developed and registered in electronic climbing guidebooks, which have been made available worldwide. In this scenario, some companies have been focusing their business on actively supporting climbers, by providing them reliable, easily accessible, and updated information, even via novel information technology tools.

For example, a local company Vertical-Life[1] in South Tyrol (Italy) offers to prospective visitors an electronic climbing guidebook, which is accessible through

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[1] https://www.vertical-life.info.

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Sythesis and themes

Synthesis

I compiled all my research, including insights, notes, interview recordings, and photographs. I listened back to interviews, writing down insights. I reviewed all the insights I had garthed and labeled each one. After labeling, I categorised each insight label into 7 distinct groups based on themes.

I wanted to identify common themes and assess the importance of each theme. I aimed to create clear design directions, to develop ideas centered around these themes.

From the research, I identified 7 themes:

• Transportation, Safety, Routes, Partners, Planning, Communication, and Equipment.

I further refined these into the 4 most crucial themes that are necessary inorder to get outside bouldering :

• Equipment.
• Safety.
• Planning.
• Communication.

Type ▾   People ▾   Modified ▾

Files

The four themes

Equipment
accessibility

Safety
understanding

Planning a trip

Communication
of the sport

Communication

The communication of outdoor bouldering to the public often is a stark contrast with the reality of climbing, leading to misconceptions and setting incorrect expectations. The portrayal of outdoor rock climbing and bouldering convey an image of being unsafe, elitist, advanced and show challenging destinations. Examples of this misrepresentation can beseen on the walls of climbing centers, across social media platforms, and watched on streaming services such as Netflix. While these portrayals may be entertaining to watch, they tend to restrict the perception of safe and enjoyable climbing to the indoor gym.

It is necessary that the communication of outdoor climbing accurately reflects its true nature in order for climbers to perceive outdoor climbing as feasible, achievable, and desirable. This means conveying the message that outdoor bouldering is safe, enjoyable, accessible, and beginner-friendly. The communication should highlight the additional benefits of climbing outdoors, such as the sense of adventure. Rather than solely showcasing climbing photos, which the need to climb is already been fulfilled, the communication should emphasize desires that are unique to outdoor climbing and remain unmet by indoor experiences.

CLIMBERS JOURNEY

initation   planning   prepping   travel   bouldering
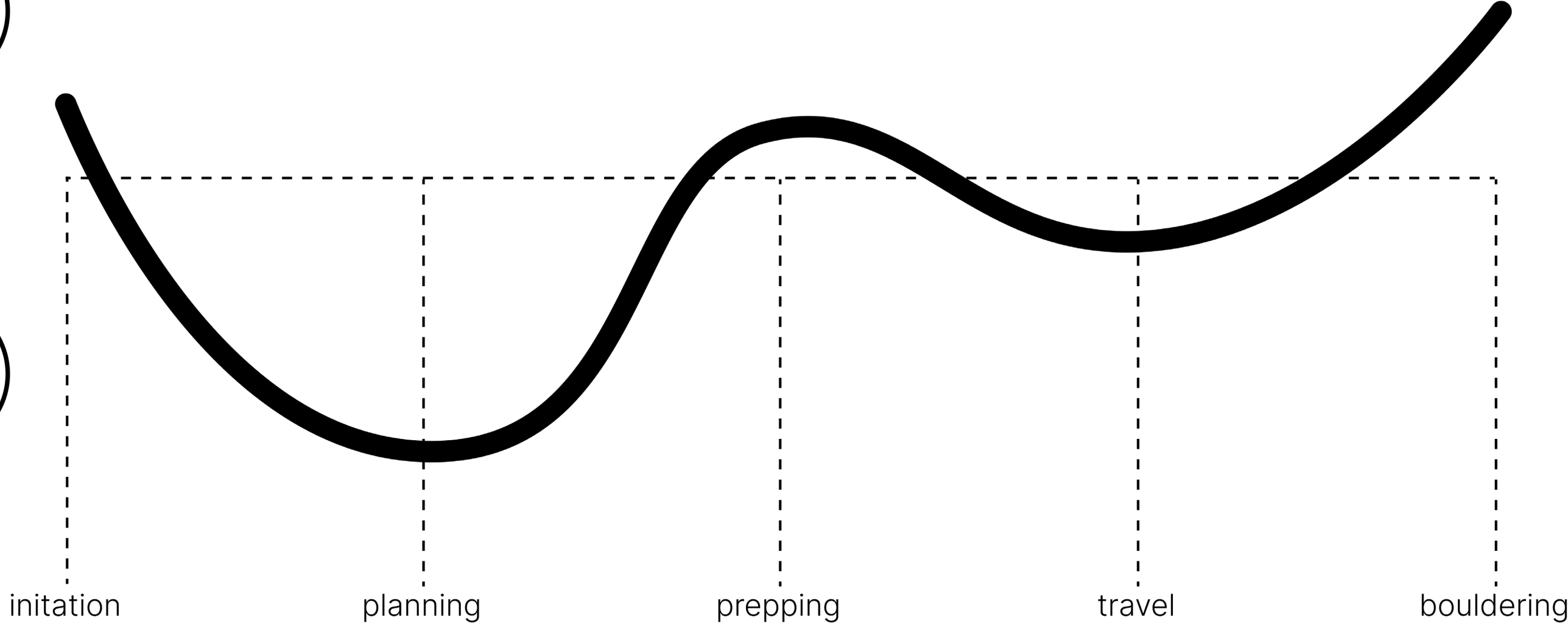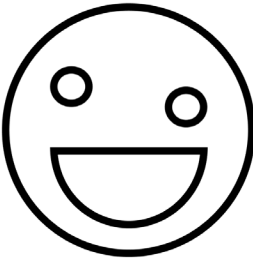
Planning

In the offline survey, the most frequently cited reason for not engaging in outdoor climbing was a lack of knowledge regarding suitable locations. Similarly, in the online survey, 30% of respondents identified not knowing where to climb as a barrier to bouldering outdoors.

Despite the availability of numerous climbing apps, websites, and books offering extensive information on bouldering routes, selecting a destination proves challenging. The process is intricate and time-consuming due to the complexity of choosing a location that suits the climber's needs, such as their skill level, travel distance, and the type of environment in which they will be climbing.

To extract the necessary information from these resources, individuals must navigate through multiple pages, making the selection process demanding. These climbing apps, websites, and books often have a substantial financial cost to purchase or subscribe too, making them inaccessible to some climbers.

In the workshops, I relied on recommendations as the process of choosing a location was too time-consuming. This often resulted in selecting climbing areas that did not align with the climbers' skill levels, even though the recommendations were based on skill level.
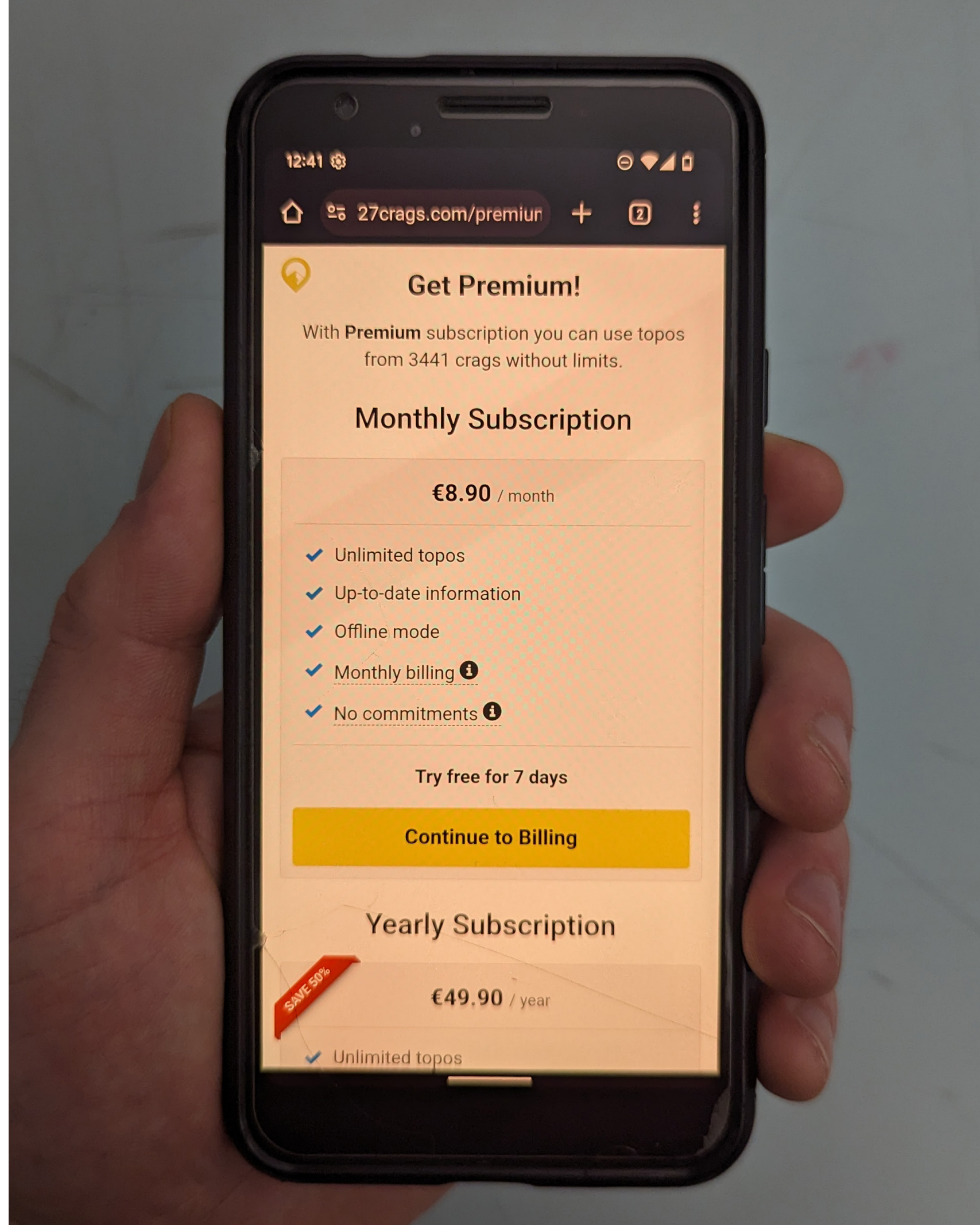
Equipment

There are three main pieces of climbing equipment needed to boulder outside: chalk, a crash pad, and climbing shoes. Without these three pieces of equipment, it is really difficult and unsafe to climb outdoors.

Initially, I discovered an issue with equipment when I received feedback from the online survey, revealing that 49% of climbers identified the lack of equipment as a barrier.

I investigated into climbing shoes, I found that all climbing centers in Oslo did not rent out shoes for outdoor bouldering, despite renting shoes for indoor climbing and crash pads. When interviewing industry experts, they claimed that there was no need to rent out shoes as climbers typically purchase them before heading outdoors. However, participants in the workshop mentioned that their friends wanted to join but couldn't because they lacked climbing shoes.

I found crash pads to be expensive in climbing stores and centers, with prices starting around 3000 NOK. In contrast, online, you can find crash pads for a third of the price in stores. Renting a climbing crash pad online can be challenging through websites like FINN and Hyggio, with users often not responding to requests. Climbing centers do offer pad rentals, although they are less advertised; however, they provide a open and long time windows for collection and drop off compared to other organisation like BUA and OSI Klatring.

Safety

Safety is an essential skill that climbers need to acquire before going outdoor bouldering. Understanding safety techniques ensures the climber's and climbing partners well-being but also gives the climber confidence, making them feel more self-assured and capable of climbing outdoors.

According to the online survey, 23% of climbers identified safety concerns as a barrier to climbing. In the offline survey, the most common reason cited for not going outdoor bouldering was a lack of experience. To overcome this, beginner climbers must learn safety techniques to gain the necessary skills and confidence.

When interviewing new climbers whose first outdoor climbing experience is through the workshops I used for my research, they expressed a need for an in-person safety introduction to outdoor bouldering, if i was to do the workshop again. While indoor-to-outdoor climbing workshops are available, they can be costly and need to be booked well in advance.

Ideation

Design methods

I employed a diverse range of design methods for this project, including

- Ideation workshops
- Design workshops
- Usability testing
- Card sorting
- Workshop run-throughs
- Shadow testing
- Design sprints
- Field testing

The reason why I chose these design methods was to generate and validate ideas. As I was creating mutiple concepts for this project, using different design methods was essential for the development. Using these design methods, I was able to make design decisions on which ideas to further develop into potential concepts.

Ideation workshop

I organized an ideation workshop at the bar where I work, Fyre Huest. I invited AHO klatring members , OSI Klatre members, and fellow UX designers with bouldering experience. In total, six climbers attended – five from OSI Klatre and one UX designer. Four of the participants had no prior outdoor bouldering experience. During the workshop, I prompted participants to generate ideas related to the four themes using post-it notes. I then placed the notes on the wall and the climbers voted for their favourite concepts.

The purpose of conducting this workshop was to generate ideas that matched with climbers preferences. The goal was to identify concepts for potential for further development. Collectively the through the process we managed to generate 154 ideas from the workshop.

The ideas I decided to take forward were:

- Car sharing just with pads instead
- Having a course inside and then bringing them ouside
- Make a vdieo tutorial to wacth before hand
- Well publicized & curated used maket (like Tize but better)

A MIX OF EASY AND CHALLANGING CLIMBS

Making it fun with social dinners, beers etc.

CAR-SHARING JUST WITH PADS INSTEAD

~~A place~~ Find a place where cars can drive all the way (so you don't need to walk)

TYPE 2 FUN IN THE MOUNTAINS WITH A GOOD COMPANY

~~Get a discount~~ discount

Well publicized & curated used market (like Tize idk) → but better

CRAG-TO-CRAG PARTY CRAGCRAWL

SHOW THEM A LOT OF ACCIDENTS (VIDEOS) :)

MAKE A VIDEO TUTORIAL TO WATCH BEFOREHAND

CLIMBS ARE COLOURED BY ABILITY ON MAP!!

Having more people to carry it?

Having a course inside first and then bring them outside

TALK ABOUT CLOSE ENCOUNTERS AND ACCIDENTS

Social activities in addition to climbing ex bonfire

Mind mapping

I decided to do more ideation, choosing to create mind maps for each theme to generate more ideas. I used A3 pieces of paper, labeling each idea within the middle of the mind map.

I decided to do further ideation because I believed there were additional ideas to explore beyond the first initial ideation workshop.

Through this extended ideation process, I generated a number of additional ideas to supplement those from the workshop. I identified the most viable ideas.

The ideas I decided to take forward were:

• Weather forecast for climbing conditions
• Shoe and equipment donations
• Subscription plan for climbing equipment
• Bouldering truck that rents out climbing equipment near the climbing area
• A box where you can pick up equipment near the climbing area
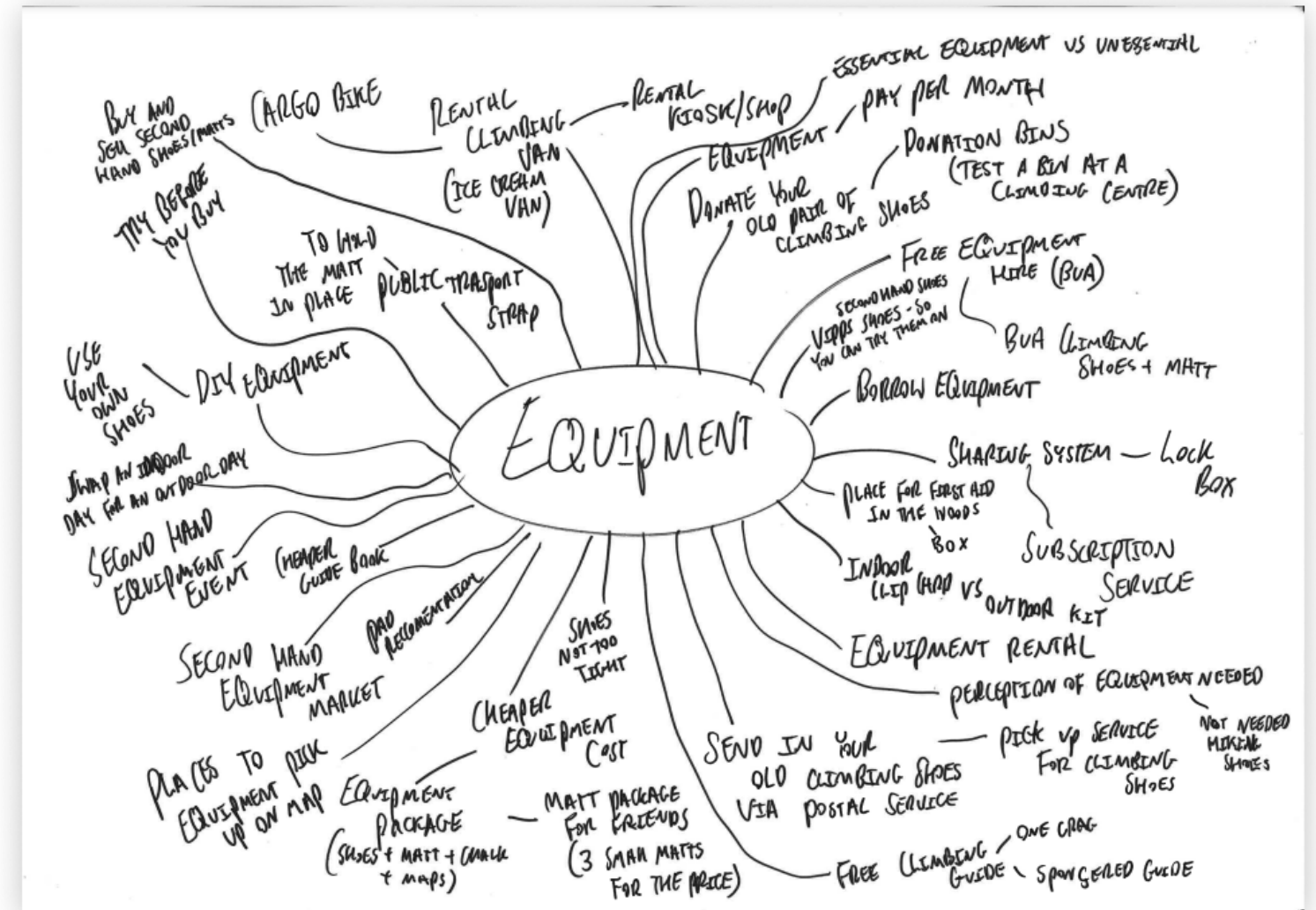
A beer with Hakon

I decided to meet with former AHO student Hakon L'orange, who had developed a similar project on surfing for his diploma. We sat down for a beer to discussed the ideas and concepts I had generated for my project.

During this meeting I wanted to receive feedback and draw inspiration from Hakon who had already completed his diploma project.

Hakon gave me valuable advice suggesting that :

- I reach out to organizations and businesses able to framing the concepts and ideas, similar to how he collaborated with the Norwegian Surfing Association for his project.

Brand collaboration

Concepts to communicate with collaborators

BOLD MAP

Detailed map to understand area

The bold map presents a more detailed version compared to existing maps. It incorporates isometric imagery along with 2D visuals to provide users with a more immersive sense of the area's appearance.

Additionally, the boulder is labeled, highlighting its full area and the pathways leading to it.
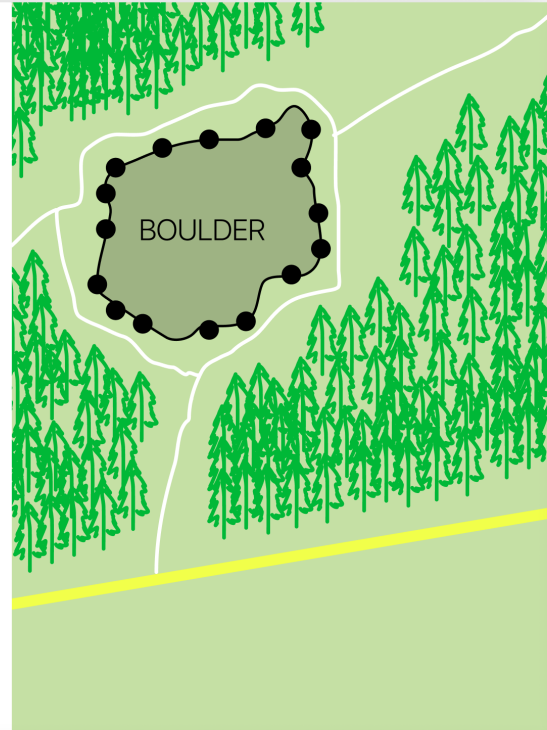
BOULDER

WEATHER TO CLIMB

Weather forecasting for outdoor bouldering

The weather forecast when climbing is crucial because you aim to choose a dry day. Climbing on wet rock is not feasible.

Weather forecasting for climbing addresses this issue by predicting whether the weather conditions are dry, moist, or wet. This information aids the climber in determining whether it is suitable to climb on a particular day.

MONDAY

DRY

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
DRY	DRY	WET	MOIST	DRY

COLOUR GRADES

Colour grades from indoors to out

Climbing grades are presented in distinct ways for indoor and outdoor climbing. Indoor climbing grades are represented by colors, while outdoor climbing grades are expressed through numbers.

Introducing color to outdoor bouldering can facilitate the transition for climbers new to this environment, especially those accustomed to indoor bouldering.

BEGINNER (3 - 4)

INTERMEDIATE (4+ - 5+)

ADVANCED (6A - 6C+)

EXPERT (7A+ >)

LOCATION LOCATION LOCATION

Choosing bouldering locations

Currently, boulder selection involves choosing individual routes, which can be time-consuming, especially when routes are located far apart.

By prioritising location or area as the primary selection factor, rather than individual routes, it becomes quicker and easier to decide where to go for bouldering. This is akin to choosing a climbing centre based on its overall location rather than selecting individual routes within the centre.

OSLO

Old Farm House Field

The Barren Cliff

The Dark Forest

Jungle Jungle

Hilltop Valley

Pinewood Hills
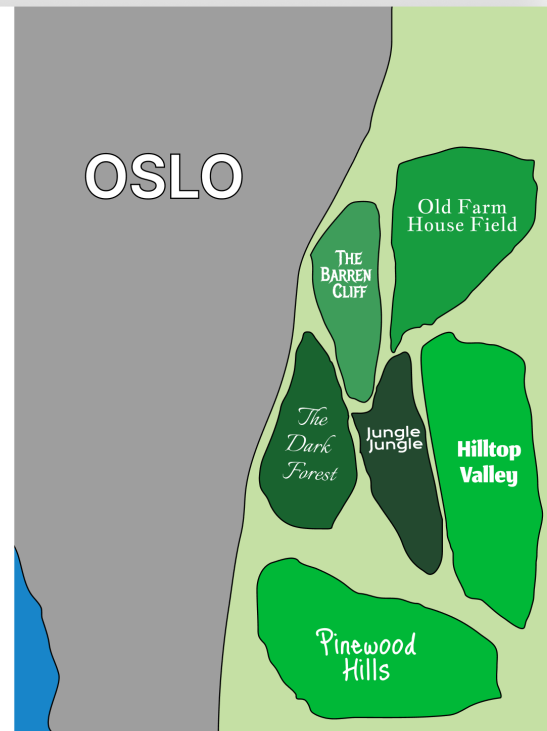
TRAVEL TIME

Travel time getting to a bouldering location

Travel time is a crucial factor for climbers to consider when heading to a bouldering spot, as extended travel durations may decrease the likelihood of choosing that location for bouldering.

By displaying the travel time, climbers can make informed decisions about where to travel, streamlining the process compared to having users search for each travel time individually, which can be time-consuming.

APPROXIMATE TRAVEL TIME
FROM YOUR CURRENT LOCATION

OSTMARKA – TRAVEL TIME **45** MINUTES

TOKERUD – TRAVEL TIME **50** MINUTES

NORDMARKA – TRAVEL TIME **80** MINUTES
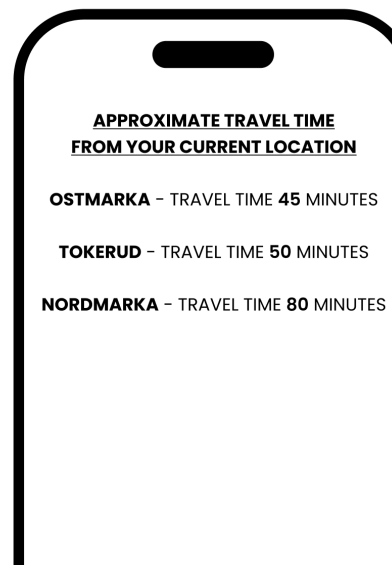
STOPS AND SPOTS

Showing tram stops and camp spots

Climbers want to know how to get to a location and what activities they can engage in once they arrive.

By highlighting these locations, for instance, on a map or in a list, climbers can access more information to help them choose a suitable climbing area.

NEAREST PARKING

NEAREST BUS STOP

NEAREST TRAM

NEAREST T BANE

GRILL

CAMPING

SWIMMING

PICNIC BENCH

DNT collaboration

I reached out to the outdoor organization DNT and connected with Dag Olav Brækkan, responsible for outdoor and nature management at DNT Oslo og Omegen. I arranged an in-person meeting with him, during which we discussed DNT's influence on the climbing community. We also delved into their mapping application, 'UT,' designed to pinpoint various points of interest for the outdoor community. Our conversation centered around the possibility of incorporating bouldering spots on the map and creating a specific bouldering symbol. We explored the potential integration of GPS tracking within UT to highlight paths not present on the map, improving wayfinding.

The purpose of reaching out to DNT was to explore potential collaboration for the project and to present and gather feedback on the concepts I had developed.

While it seemed feasible to collaborate with DNT on enhancing the 'UT' application as a boulder planning tool, I decided against it.

The decision was influenced by:

• The realization that DNT lacked the flexibility to modify existing functions, and I preferred a more flexiable approach beyond the constraints of their framework.

Gryttr collaboration

I reconnected with Tina Jørgensen, who is founded and runs the guidebook and website Gryttr. We met for coffee to discuss my various concepts. During our conversation, we evaluated which ideas were feasible for development and identified those that wouldn't be viable due to the organization's voluntary status, restricting financial investment.

I reached out to Tina as a potential collaborator for the project, aiming to receive guidance on narrowing down my concepts and receiving feedback within a specific scope.

The meeting went well, making Gryttr a good choice as a collaborator on the project.

We explored three concepts, each with potential for further development and testing:

• The primary concept involved creating a new website as an extension of Gryttr, tailored specifically for beginner outdoor climbers in Oslo.
• The platform would include safety information for beginners as a second concept
• The platform would also have branding campaign to impove communication as the third concept.

Concepts to communicate with collaborators

SUBSCRIBE
A subscription service for climbing gear

A new subscription service for outdoor climbing equipment rental could be established, featuring a fixed monthly fee for subscribers. Climbers would have the flexibility to rent equipment as needed and potentially return it within a week.

This service not only provides Klaterverket with a steady and predictable stream of revenue but also offers climbers a cost-effective solution for accessing quality equipment on a temporary basis.

Choose your plan
Switch or cancel* anytime

KLATREVERKET
Basic
✓ Climbing Matt Rental, Climbing shoe rental.

149.99 /month

SELECT

KLATREVERKET
Premium
✓ Climbing Matt Rental, Climbing shoe rental, Topo guides, store discounts.

199.99 /month

SELECT

DROP OFF
donated climbing shoes

Climbers have mentioned that they often have one or two pairs of climbing shoes lying around at home. These climbing shoes could be donated to a drop box and made available for free borrowing during outdoor climbing trips.

Additionally, lost property shoes could be utilized if they remain unclaimed after an extended period. This approach would enable climbers to experience outdoor climbing without incurring the expense of purchasing a new pair of shoes.

BULDERINGBILEN
Second hand market for climbing gear

Bulderingbilen is a mobile truck that journeys to various bouldering locations, akin to an ice cream truck or 'isbilen' but tailored for climbing enthusiasts. You can easily locate the truck on a digital map or listen for the distinctive 'Bulderingbilen' song.

The truck offers the convenience of renting climbing mats, shoes, and other equipment, allowing individuals to engage in bouldering without the need to invest in their own gear. Additionally, climbers can purchase food and drinks for their climbing excursion. The truck is available for free parking in a car park throughout the day.

DON'T HOLD ON
Second hand market for climbing gear

Climbers can bring their second-hand gear to Klatterverket to sell at the climbing gym. Klatterverket will take a cut of the second-hand equipment for sale, and this transaction can be facilitated using the payment service Vipps.

This service has an advantage over Finn because there is a higher commitment to meeting someone in person and discovering that the shoes do not fit during the in-person encounter. In contrast, our service allows individuals to try on various climbing shoes in one convenient location.

TRIPKORT
Klippkort for climbing matt hire

A "tripkort" is similar to a "klippkort" but designed specifically for renting outdoor climbing equipment. Each "klipp" provides access to climbing equipment at a reduced rate compared to the standard rental cost.

The borrowed equipment can be returned to any of the four different climbing centers, providing climbers with the chance to engage in outdoor climbing more frequently and at a more affordable expense.

KLATREBOKS
A shared storage box for climbing equipment

"Klatreboks" is an equipment storage box allowing climbers to rent equipment conveniently. These boxes are strategically placed near climbing sites such as Ostmarka or Torkrud.

Climbers can access the equipment by opening the box and making payment through the Klatreboks app. Upon completion of their climbing session, they return the equipment to the box and receive a refund of the equipment deposit.

Having the box closer to the boulder locations means the equipment is accessible, and climbers don't have to travel with large and heavy climbing gear.

Klatreverket collaboration

I reached out to Dag Cappelen Papazian, the manager overseeing all Klatreverket centers across Norway. I arranged a meeting with him to present my concepts, I discussed the feasibility of each concept. We touched upon the framing of the concepts, with the focus on outdoor bouldering. Dag mentioned that while Klatreverket was not highly interested in outdoor bouldering due to its lower financial gains compared to indoor climbing, however he recognized the importance of offering the opportunity to their customers and employees. Limited financial resources were allocated to outdoor climbing, this constraioghted allowed us to choose the right concepts for Klatreverket.

My objective was to explore the potential collaboration with Klatreverket for the project and to receive feedback on the viability of my concepts.

From our discussion, we identified three most feasible ideas:

- A prepaid card for equipment rental to provide lower prices.
- A second-hand climbing equipment event
- The option to rent already available indoor climbing shoes for outdoor use.

After conducting quick research after the meeting, I discovered that a prepaid card would be financially impractical, costing the same as a small climbing crash pad. I also learned that other climbing centers already hosted second-hand equipment events. So I decided to set aside both of those ideas and focus on the option of renting climbing shoes for outdoor use at the climbing centre.

Developing a planning tool

Design sprint

A design sprint for the design diploma students was arranged, providing an opportunity for us to develop our concepts for project. For the design sprint, I selected the planning bouldering website as my topic. Throughout the day, we engaged in the entire design process, with each us generating sketches that were to a collectively voted on. The chosen idea underwent testing by interaction design students.

This approach I was able to generate ideas for the planning website and sped up the decision-making process.

As a result, I created a planning website centered around selecting various filters . These filters provided users with options for choosing a specific climbing area.

Multiple Grades Selection

Steepness

Public Transport Option

Danger Level

Area Size of Boulders

Single Grade Selection

Grade Color

Type of Transport

Short Descriptions

Location Map

Public Transport Times

Area weather

Type of Public Transport Available

Distance from Current Location

Area of Boulders

Equipment Rental Availability

User Reviews

Long Descriptions

Location Names

Chosen Grades Only

Terrain Type

Nearby Activities

Driving Times

Individual Boulders

User Ratings

Location Names

Parking options

Crowd Level

Photographs

Number of Routes

Prioritisation cards

I created prioritization cards for participant testing, consisting of 15 search cards and 3 additional empty search cards for participants to suggest their own options. I prepared 24 results cards, with 3 empty slots for participants to input their own responses. I visited Klatreverket Lokka in Grunerløkka, where I engaged with 15 climbers, including those who regularly climb outdoors to those who rarely climb outdoors, and those who have never climbed outdoors.

My aim was to determine the most crucial filters to incorporate into the planning application for searching and finding information about boulder locations.

Through this process, I identified the three key features that climbers felt where essential for selecting a location:

- User ratings.
- Public transportation travel time.
- The number of available routes.

Map reseach

I deconstructed three categories of maps, both physical and digital prints, which included existing maps of Oslo, unconventional maps, and climbing maps specific to Oslo. I garthed the physical maps from the Oslo tourist information center, printed unconventional and climbing maps from the internet. I fixed all these maps to a wooden board and deconstructing their features. I highlighted these features using a red pen and attached post-it notes to describe the key elements.

Considering the need for a map in the planning application to showcase the locations of boulders, I dived into map analysis to understand how current climbing maps could be improved upon for choosing bouldering locations.

During this process:
•   I observed that many maps utilized color coding system, for example ski maps.

This insight suggested that implementing color-coding in climbing maps could assist climbers in finding suitable areas based on their climbing ability level.
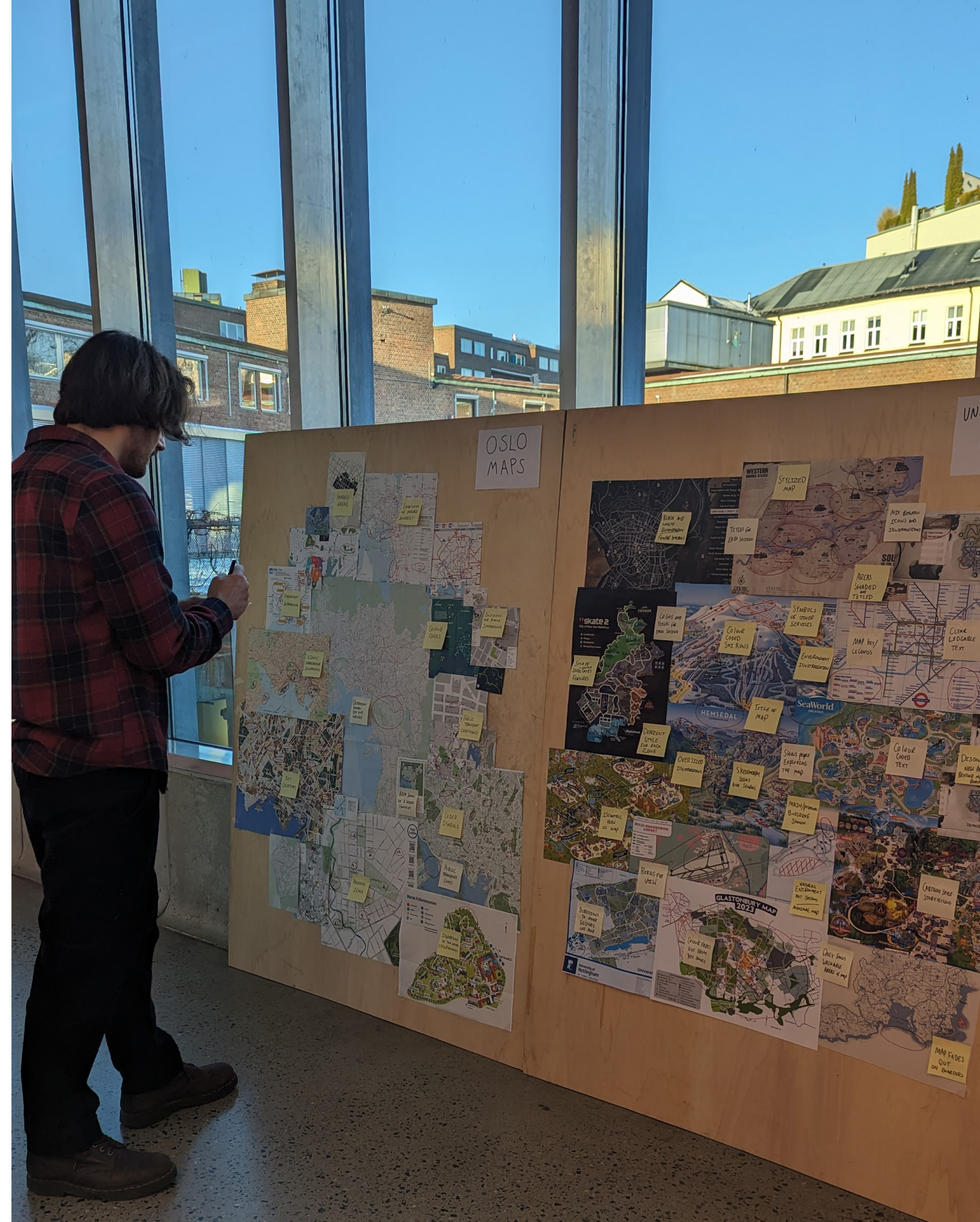
Web development

Using the earlier sketches from the design sprint, I recreated these concepts into the design program Figma, creating a clickable prototype. I incorporated photos from the climbing workshops as content for the website.

The objective was to produce a tangible prototype for testing with individuals. By transitioning from hand-drawn sketches to a clickable prototype on Figma, I aimed to provide a more realistic and believable representation of the website for testing purposes.
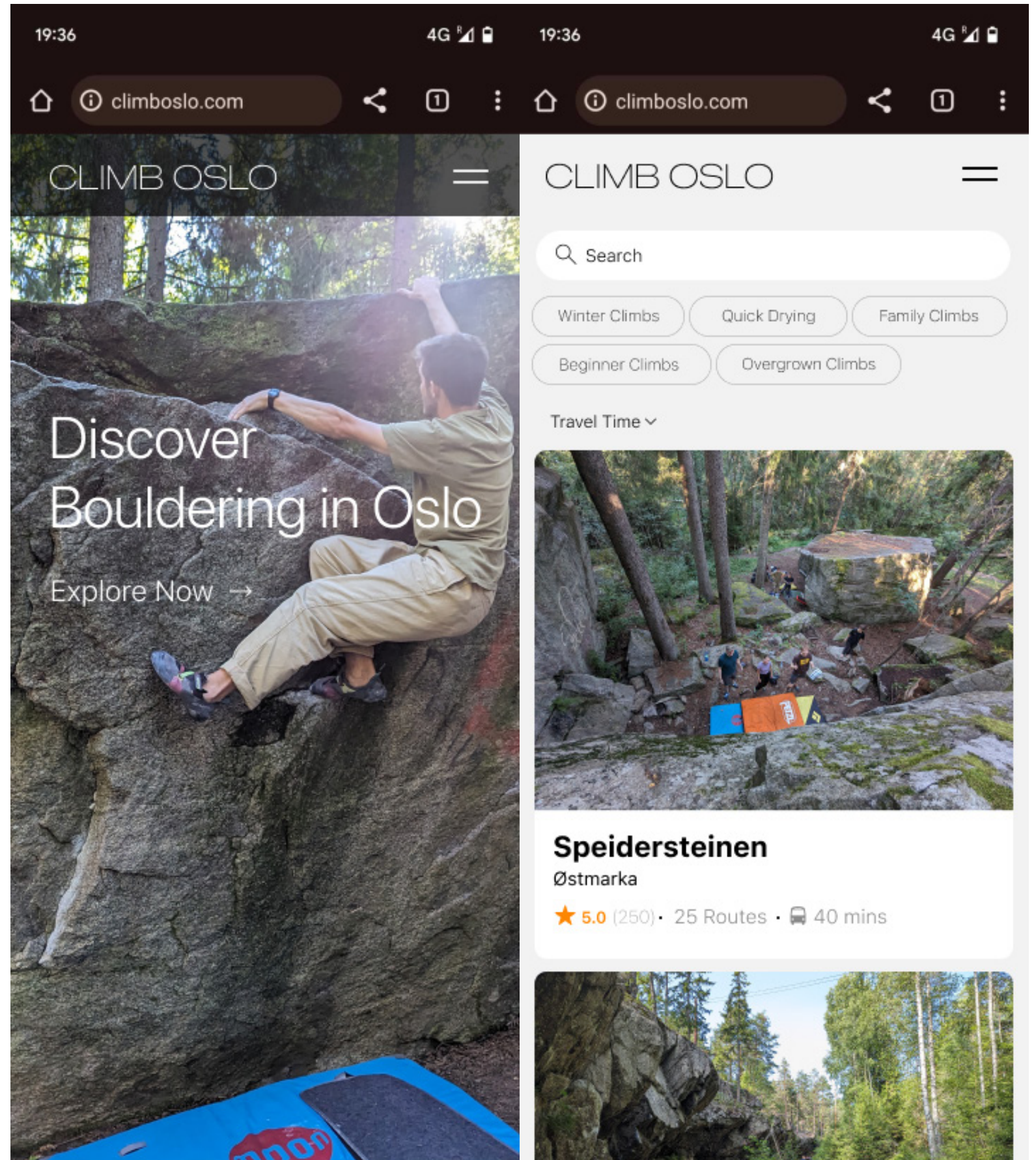
(early figma skecthes)

Useablity testing

I dedicated two full separate days at the climbing center, engaging in testing sessions for my clickable prototype. This involved gathering feedback from climbers, returning to my laptop, and making adjustments to the features and functions based on what feedback the climbers suggested. I tested the prototype with 5 fellow students at AHO and then during the two days at the climbing center including 12 climbers with a range of climbing experiences.

My intention was to assess the functionality, features, and content of the website, with the goal of enhancing the design and user interaction on the platform.

Through this process, I identified several minor adjustments that were used to refine and improve the website further.

Field testing

I organized a outdoor climbing workshop to evaluate some of the designs I had developed. One of the designs I tested was a mockup map using the "My Maps" function on Google Maps. In this, I incorporated colored points to indicate the boulder locations and added corresponding photos from the 'gyrttr' website.

The purpose of this test was to simulate the functions of my website in a functional way. I wanted to test how the functionality translated to the context of outdoor bouldering.

The results indicated that using colored points on the maps made it easy for climbers to select a location and find routes suitable for their skill levels. The functionality proved effective for navigating and discovering boulders in an outdoor setting.
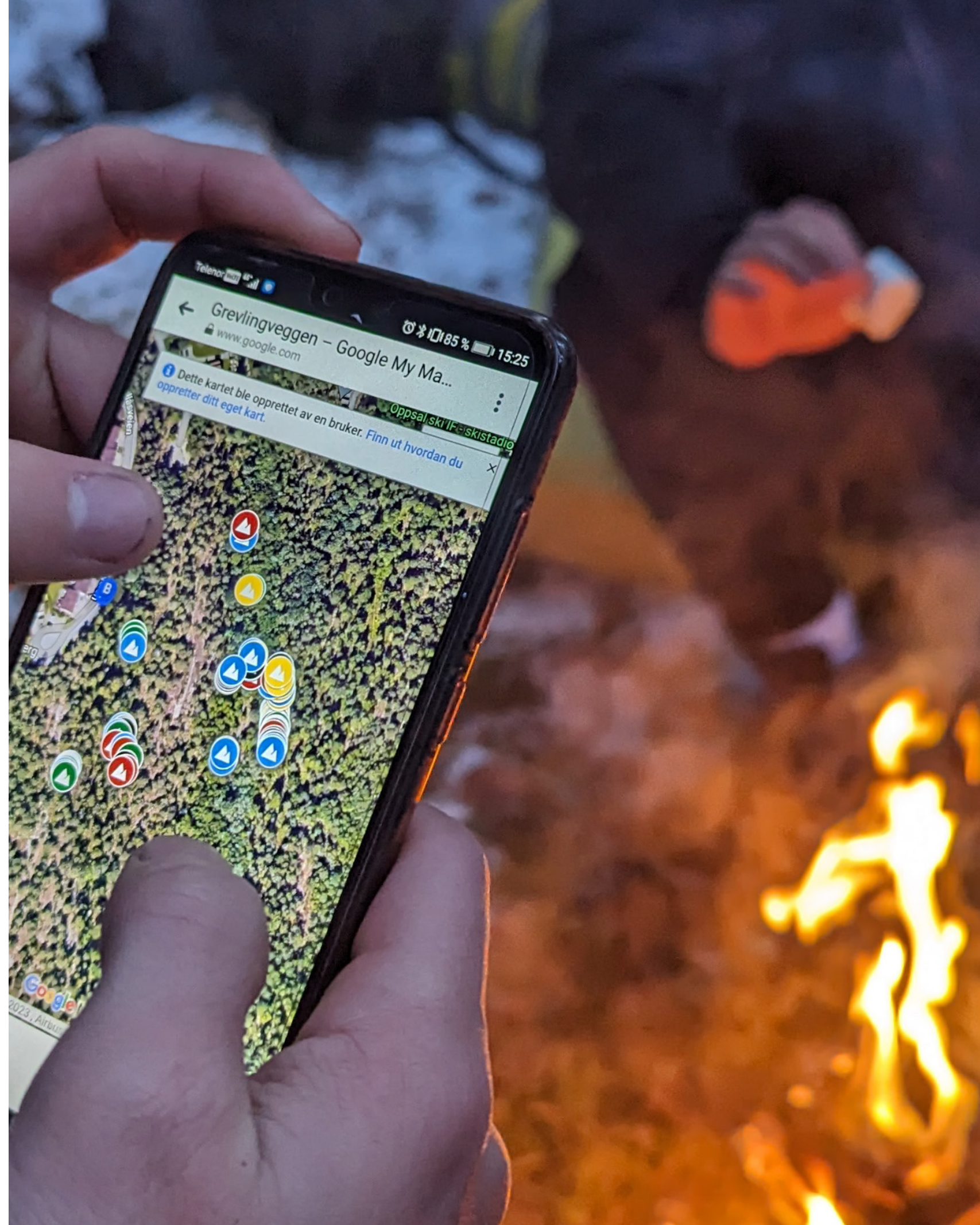
Developing a safety program

Beginners cards

I created 20 cards outlining the information climbers might require, drawing from previous research and online articles. I also formulated 16 cards focusing on how climbers preferred the communication of this information. Each set included 3 blank cards for participants to add extra insights. I tested these cards with 10 climbers who had no prior experience in outdoor bouldering.

The objective was to understand the specific information climbers needed for outdoor bouldering and how they preferred receiving this information. I created for cards because they where clear, quick and easy to understand.

The results revealed that the most frequently chosen information cards were:

- finding boulder locations, staying safe while climbing, emergency preparedness, positioning crash pads, spotting someone, and selecting an appropriate location.

The most frequent chosen cards from information communication were:

- Outdoor tutorials, learning from a friend, and interactive workshops.

Outdoor tutorials already exisited and learning from a friend, so I opted to focus on interactive workshops to develop.

Safety workshop

I designed an indoor interactive safety workshop specifically made for beginner climbers. The lesson plan for this workshop was developed based on insights gathered from previous research involving discussions with experts and desk research on available online information. I implemented this lesson plan by teaching it to a beginner climber, and the response was very positive when inviting them to participate. The session began with a review of key safety points, followed by hands-on practice of the techniques covered.

The intention behind this initiative was to explore a potentially more cost-effective alternative for learning outdoor climbing compared to traditional outdoor courses which cost over 700 nok. Additionally, it aimed to be less time-consuming and address the requests of beginner climbers.

The workshop proved effective, and the participant expressed confidence in applying the techniques and instructions learned during the session to outdoor climbing. However, the participant felt the need to validate and further test his skills in an outdoor setting.

Testing safety workshop

The indoor climber who participated in my safety workshop also joined my outdoor climbing workshop. I asked him to reconstruct the climbing workshop I taught him to two beginner climbers who had no prior outdoor climbing experience.

To assess the effectiveness of the previous indoor workshop, I aimed to determine if he could recall and apply the knowledge during the outdoor session.

He managed to apply the knowledge from the workshop, recalling the lessons I taught him in the indoor workshop, to instruct the two new beginner climbers. This indicated that the course could be effectively taught indoors, with the knowledge transfered to an outdoor context.

Developing the branding

Branding collage

I initiated a collage workshop, gathering various outdoor materials such as paper prints, natural elements like moss, and other items associated with the outdoors, such as matches and marshmallows. Nine climbers with varying levels of outdoor climbing experience participated, with the majority having never climbed outside before. I instructed them to create a collage reflecting their dream bouldering trip. Towards the end of the workshop, I asked participants to use post-it notes to describe the climbing trip .

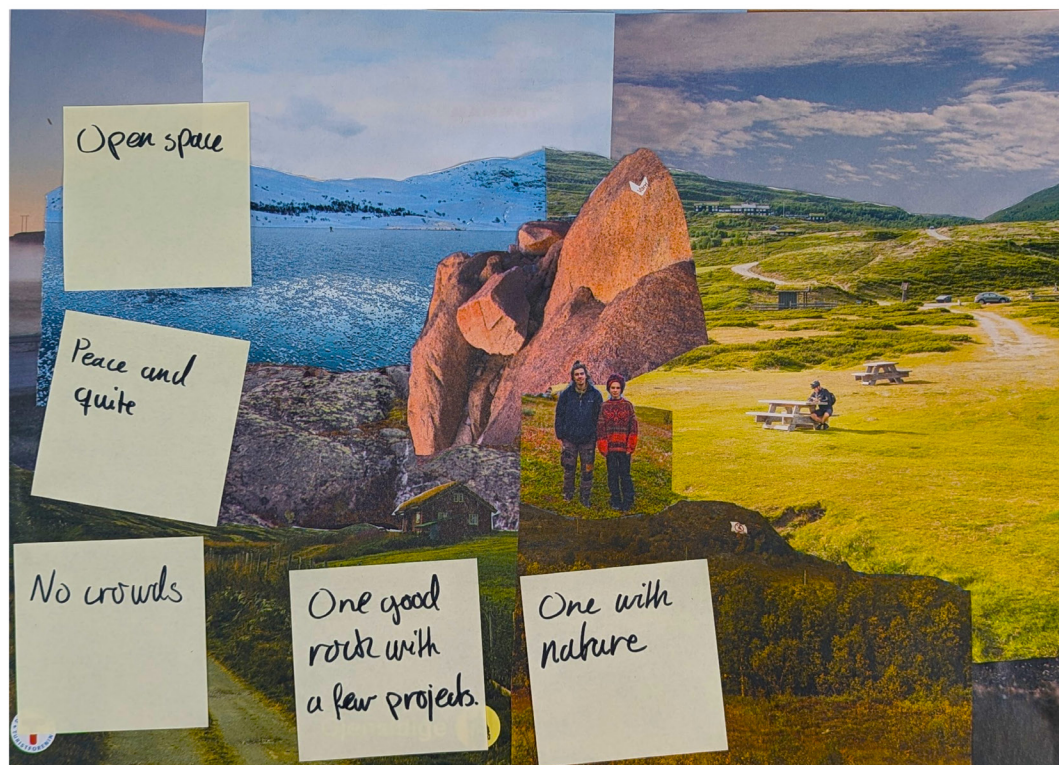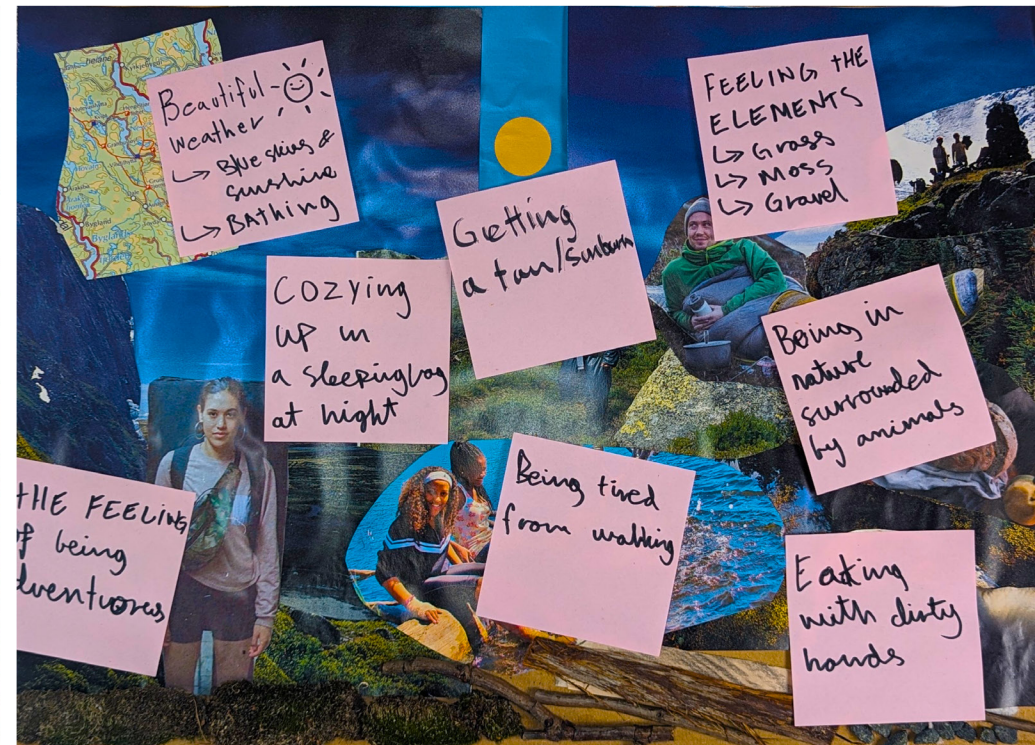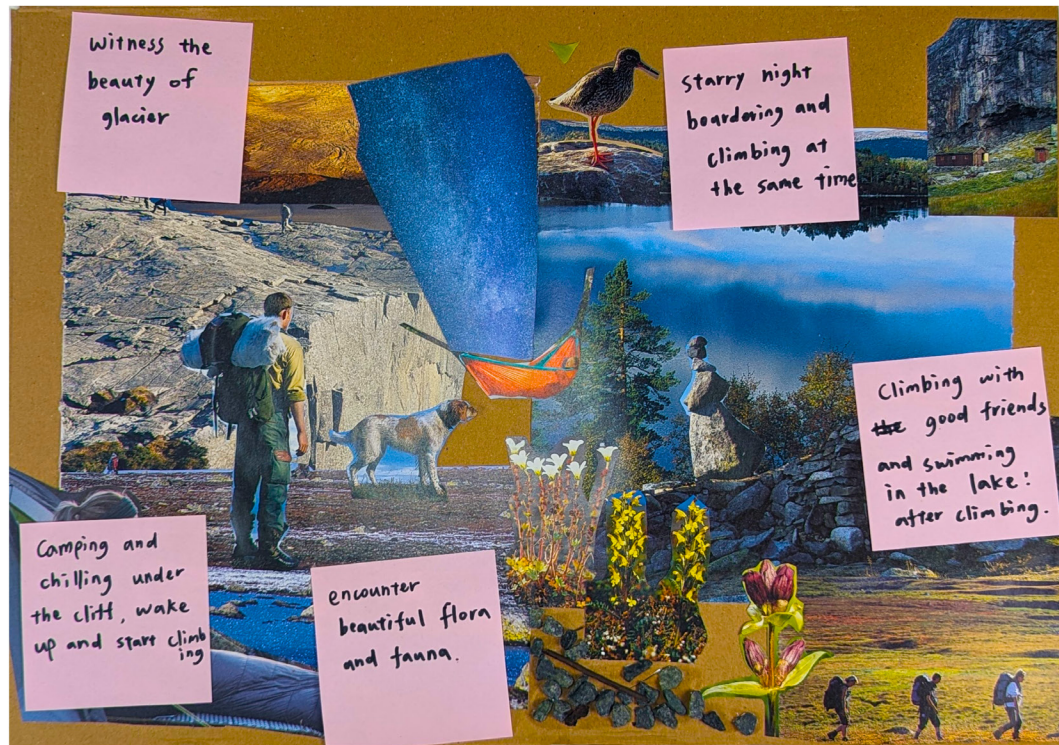The objective was to understand the brand values that should be conveyed in the print branding without directly asking climbers about their preferences.

Following the workshop, I organized the post-it notes into categories, which included:

•   Friends, Camping, Climbing, Activities, Adventure, Nature, Comfort, Memories, Food, and Space.

I used these themes to formulate brand values for the project brand Climb Oslo.

Collage 1 (top left)

Witness the beauty of glacier

Starry night bouldering and climbing at the same time

Climbing with the good friends and swimming in the lake after climbing.

Camping and chilling under the cliff, wake up and start climbing

encounter beautiful flora and fauna.

Collage 2 (top middle)

Leder.

A well trained leader to make the trip safe and enjoyable.

WAFFLES

Perhaps building your own Route ?

Climbing the highest peak.
- Mountains
- Rocks
- Freedom

SAFETY !!!

Obv (easy) bouldering Climbing techniques!

The feeling of mastery! - mix of

MAYBE some history

Nice textures! Nature!

Collage 3 (top right)

Beautiful weather
↳ Blue skies & sunshine
↳ Bathing

FEELING THE ELEMENTS
↳ Grass
↳ Moss
↳ Gravel

Getting a tan/sunburn

COZYING up in a sleeping bag at night

Being in nature surrounded by animals

THE FEELING of being adventurous

Being tired from walking

Eating with dirty hands

Collage 4 (bottom left)

Open space

Peace and quite

No crowds

One good rock with a few projects.

One with nature

Collage 5 (bottom middle)

MIX between climbing utside trip (walk) and bouldering

different climbing routes

Climbing trip with camping

START

DAY 5

Collage 6 (bottom right)

Alone

NATURE

Rocks

Overcoming Pain

JAAA!

Feeling good

Fresh smells

Brand Values

Inclusive and welcoming.

Safe.

Fun.

Community driven.

Adventurous.

Comfortable and cosy.

Simple, easy and convenient.

Accessible.

Branding photography

Following the creation of the brand values, I used these values as a foundation for creating photographs. To capture these images, I organised a outdoor climbing workshop, during which I used my phone to take photos. The goal was to create a collection of images to review and select those that best aligned with the brand values.

The purpose of capturing these photos was to use them for print branding, intending to display them in climbing centers across Oslo as a means to attract boulders to venture outdoors.

From the collection, I identified four photos that I believed strongly reflected the brand values and could be used for the intended print branding.

Final Concepts

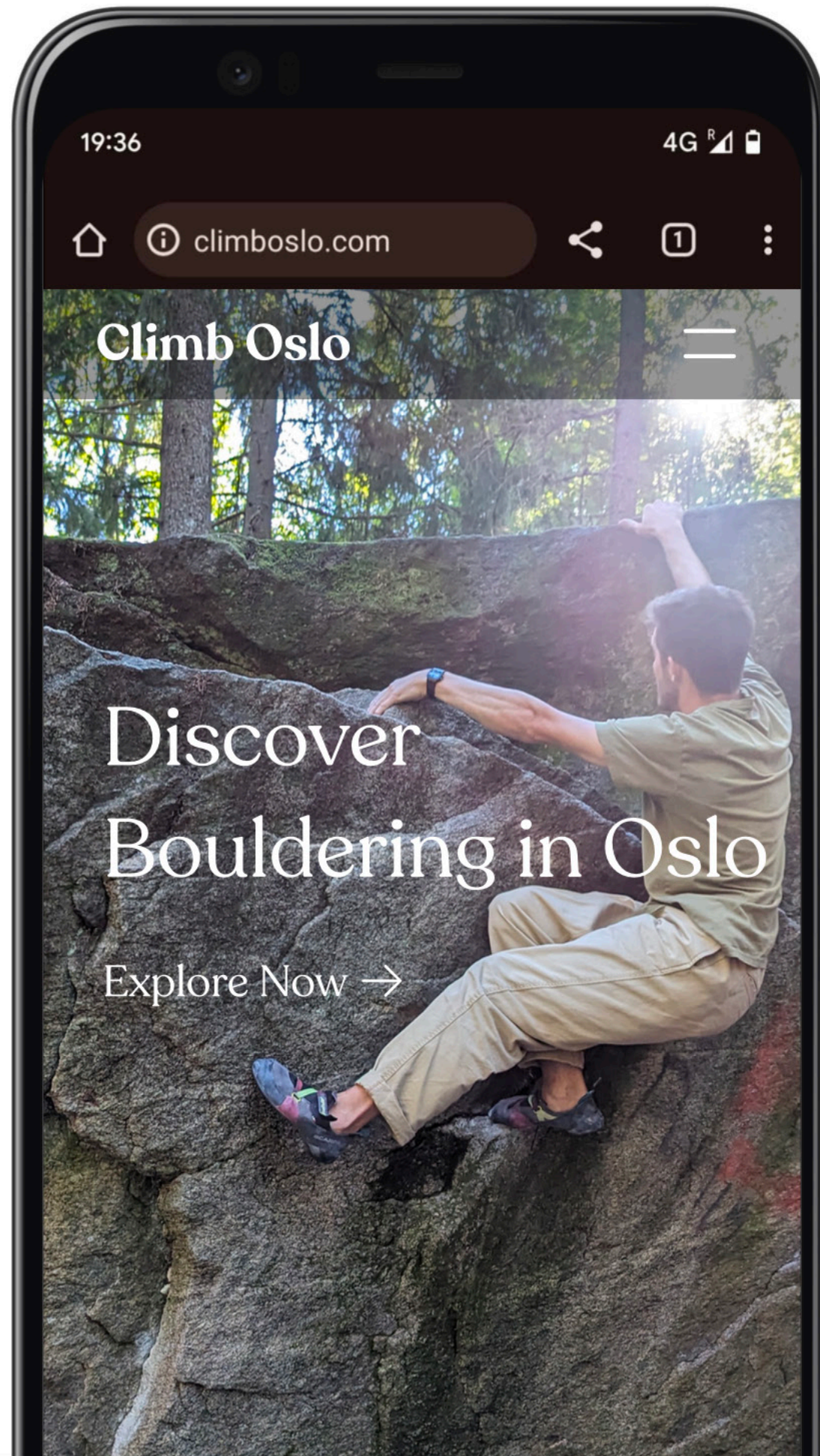# The four concepts

Prototype planning tool

Branding campaign
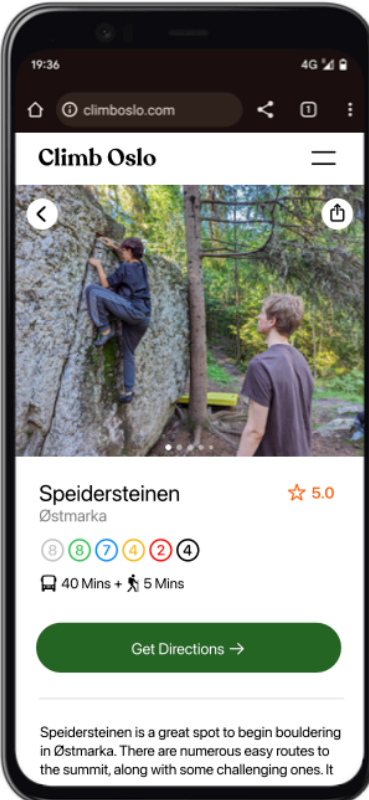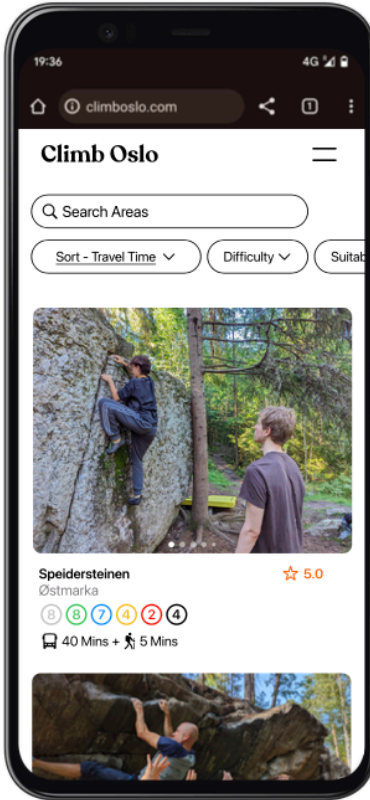

Indoor safety workshop

Equipment starter pack

Climb Oslo

A website to discover bouldering locations in Oslo, Norway.
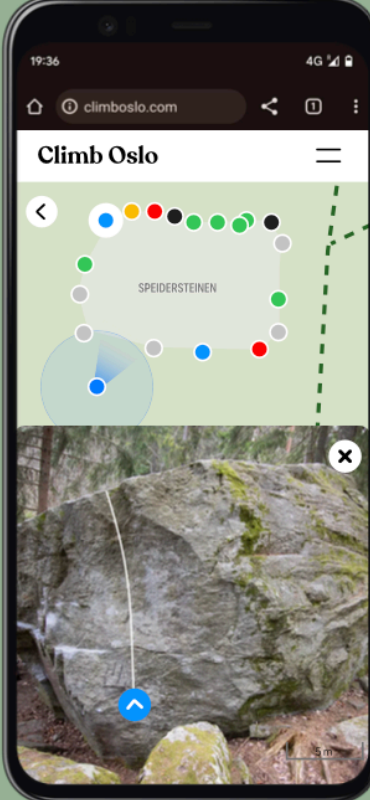
Overview of website

Planning

Home   Explore   Information
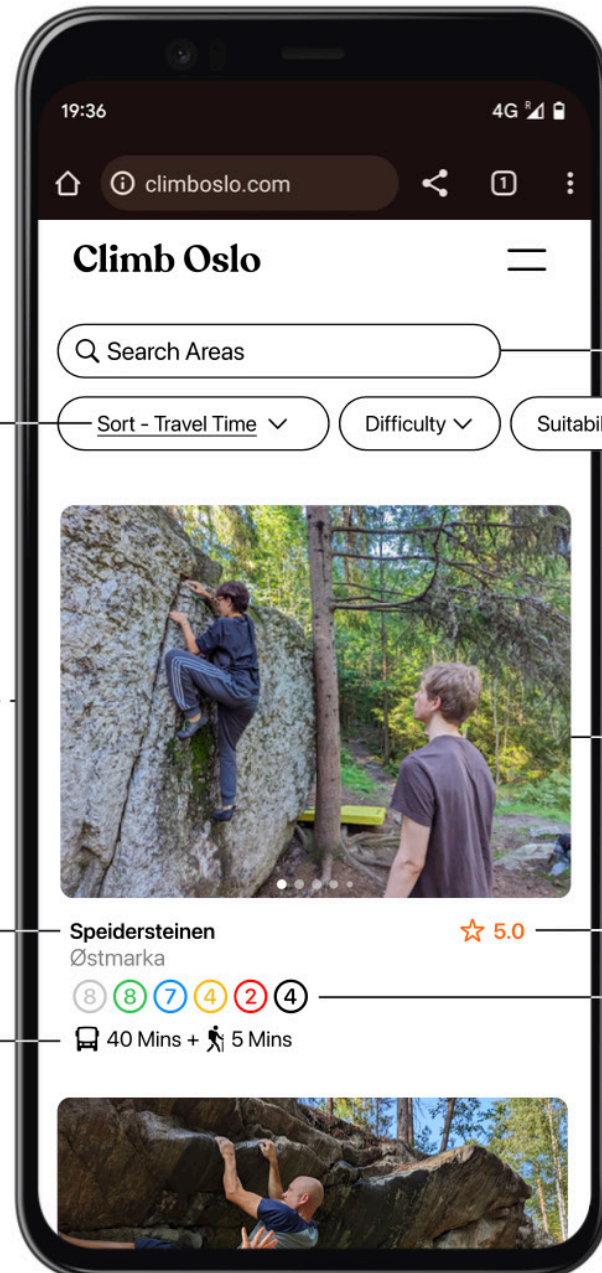

Climbing

Map   Boulder
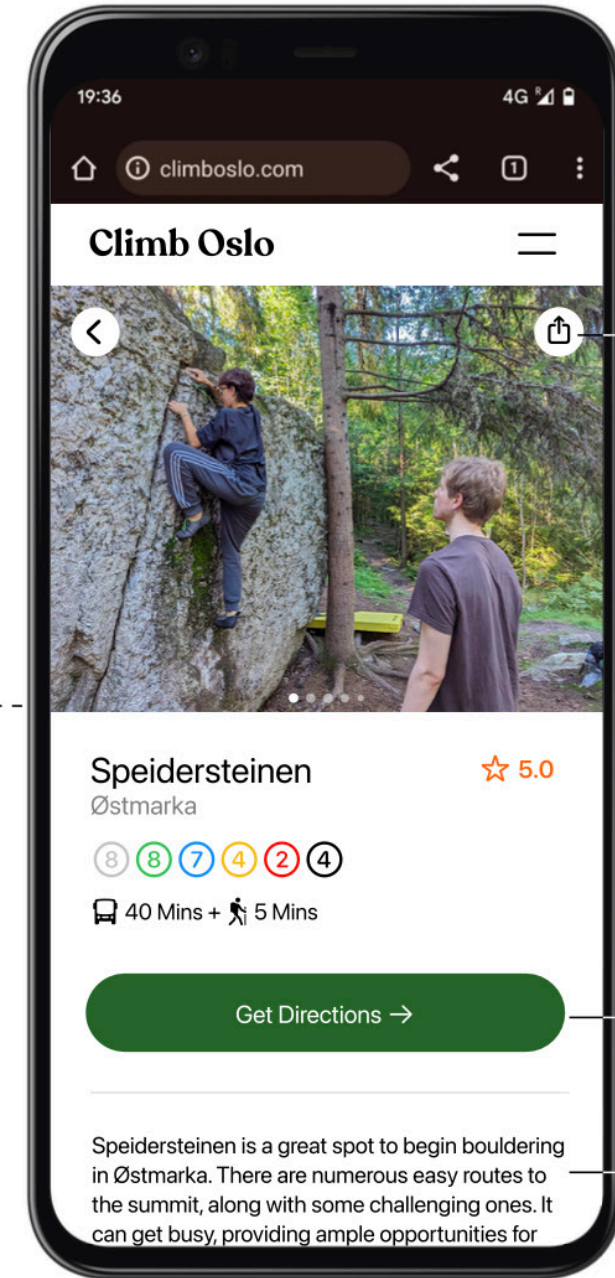
Explore features

(Planning Stage)

Sort by

Search

Search Filters

Area Photos

Area name

User Rating

Climbing area + grade

Travel time

Share Button

Direction link

Description

Tags

Map

Climb Oslo

Discover Bouldering in Oslo

Explore Now →

Search Areas

Sort - Travel Time ∨   Difficulty ∨   Suitability ∨   Conditions ∨   Attractions ∨

Speidersteinen ☆ 5.0
Østmarka
⑧ ⑧ ⑦ ④ ② ④
🚌 40 Mins + 🚶 5 Mins

Øst og Vestkanten ☆ 4.7
Tokerud
⓪ ③ ④ ⑧ ⑫ ㉒
🚌 50 Mins + 🚶 10 Mins

Speidersteinen ☆ 5.0
Østmarka
⑧ ⑧ ⑦ ④ ② ④
🚌 40 Mins + 🚶 5 Mins

Get Directions →

Speidersteinen is a great spot to begin bouldering in Østmarka. There are numerous easy routes to the summit, along with some challenging ones. It can get busy, providing ample opportunities for

Show more ⌄

Forest   Beginner Friendly   Drys Quick
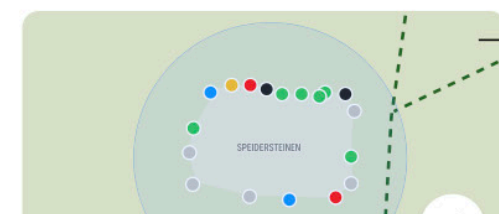
Map features

(Climbing Stage)

Boulder location + grade

Users position

Map path

Chosen route

Boulder area

Route Info

Boulder photo

Grade info

SPEIDERSTEINEN

Climb Oslo

climboslo.com

19:36

4G
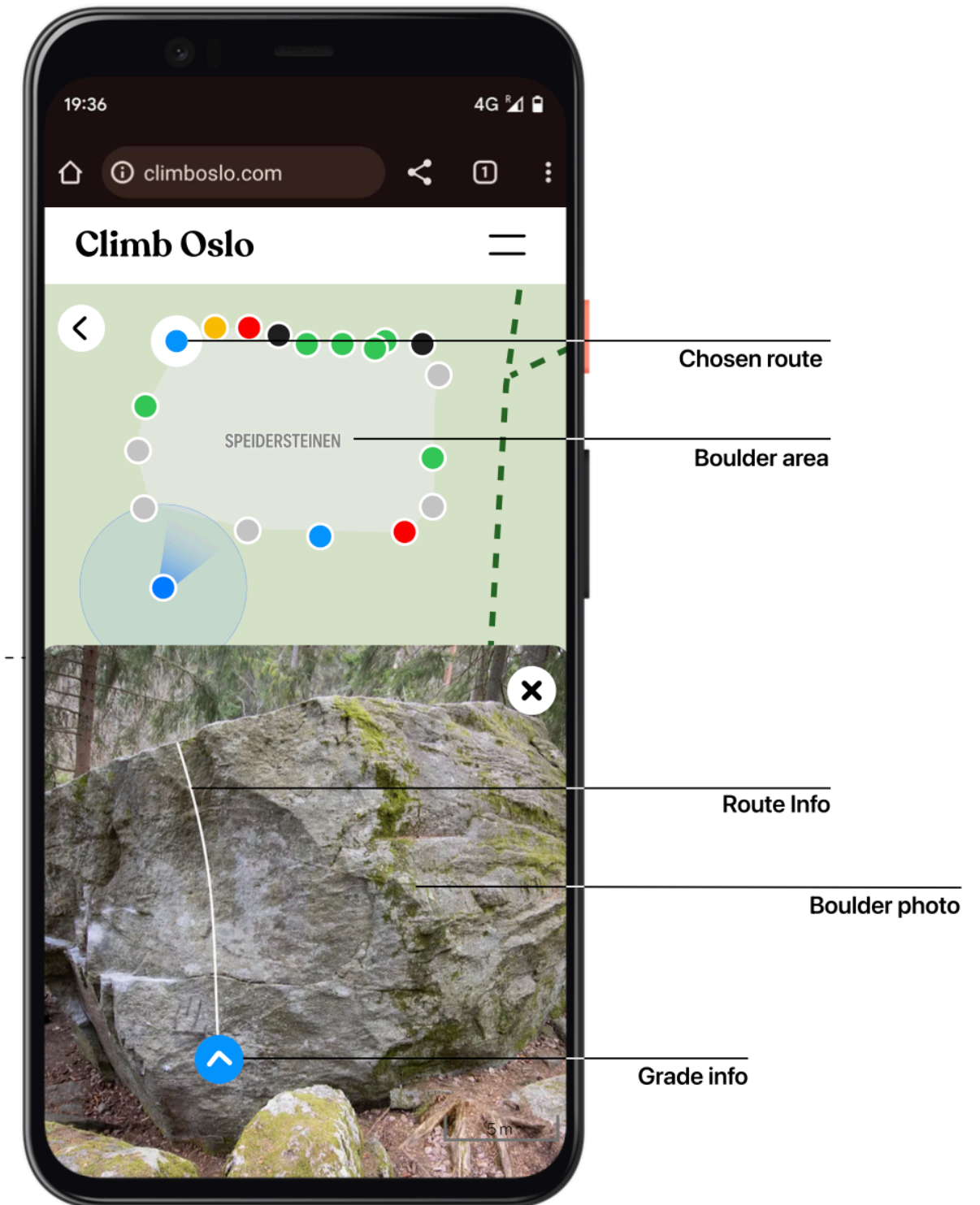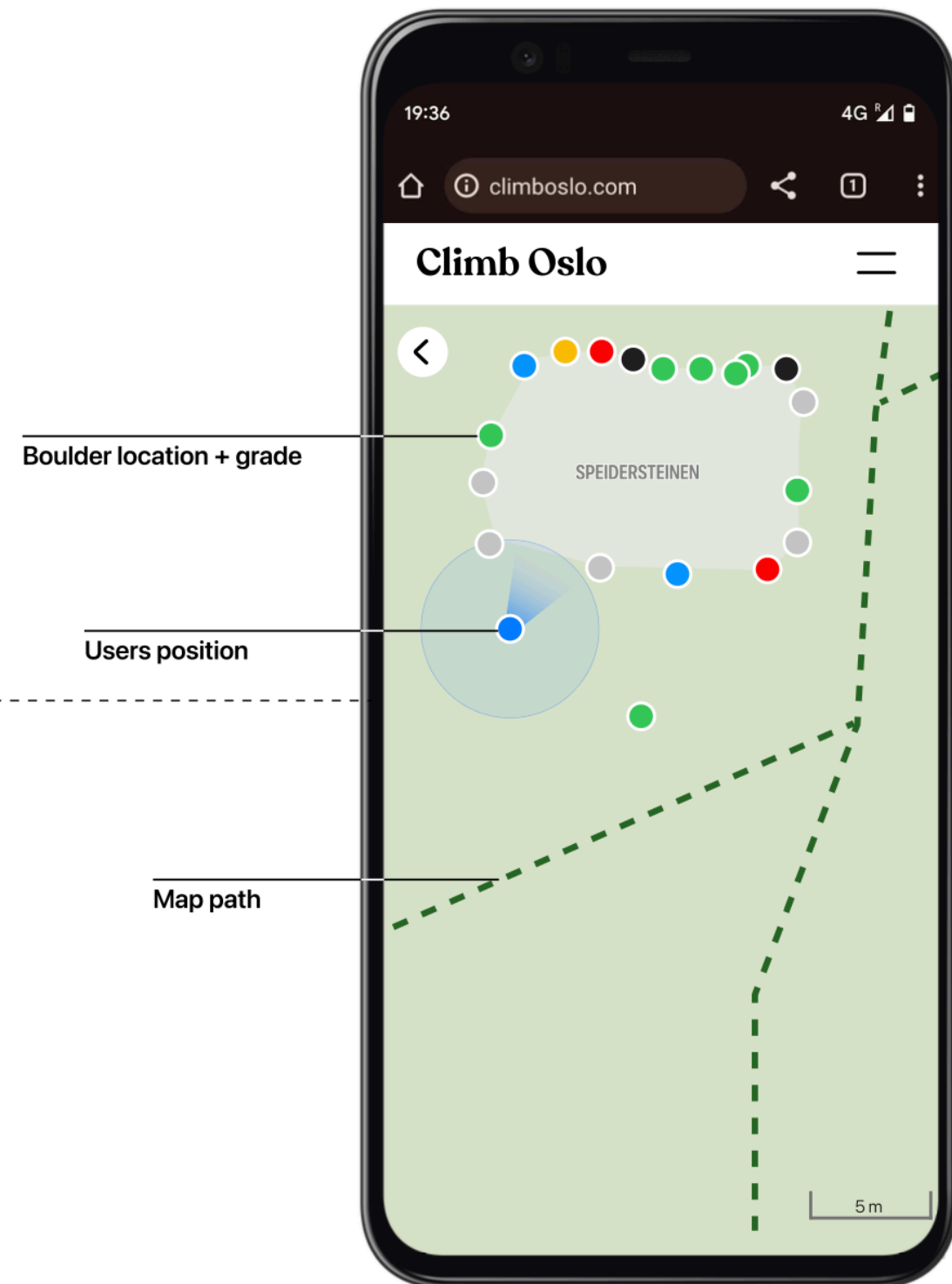
5 m

Feedback from climbers

"It's a really nice design; it's super clean. It's very nice that you immediately understand difficulty. It's definitely something that can be done. It would be great to get your ideas into the solution (Gryttr)" – Tina from "Gryttr"

"I love this, it's my dream bouldering app."

"I really like the photos and the colored routes; I find it hard with the current grading scale."

"The layout is intuitive; I like the color grading scheme. I think it's really good."

"I'd rather use this than other apps."

"I've been looking for something like this with a cleaner user interface and an easier way to find the boulders."

Starterpack equipment

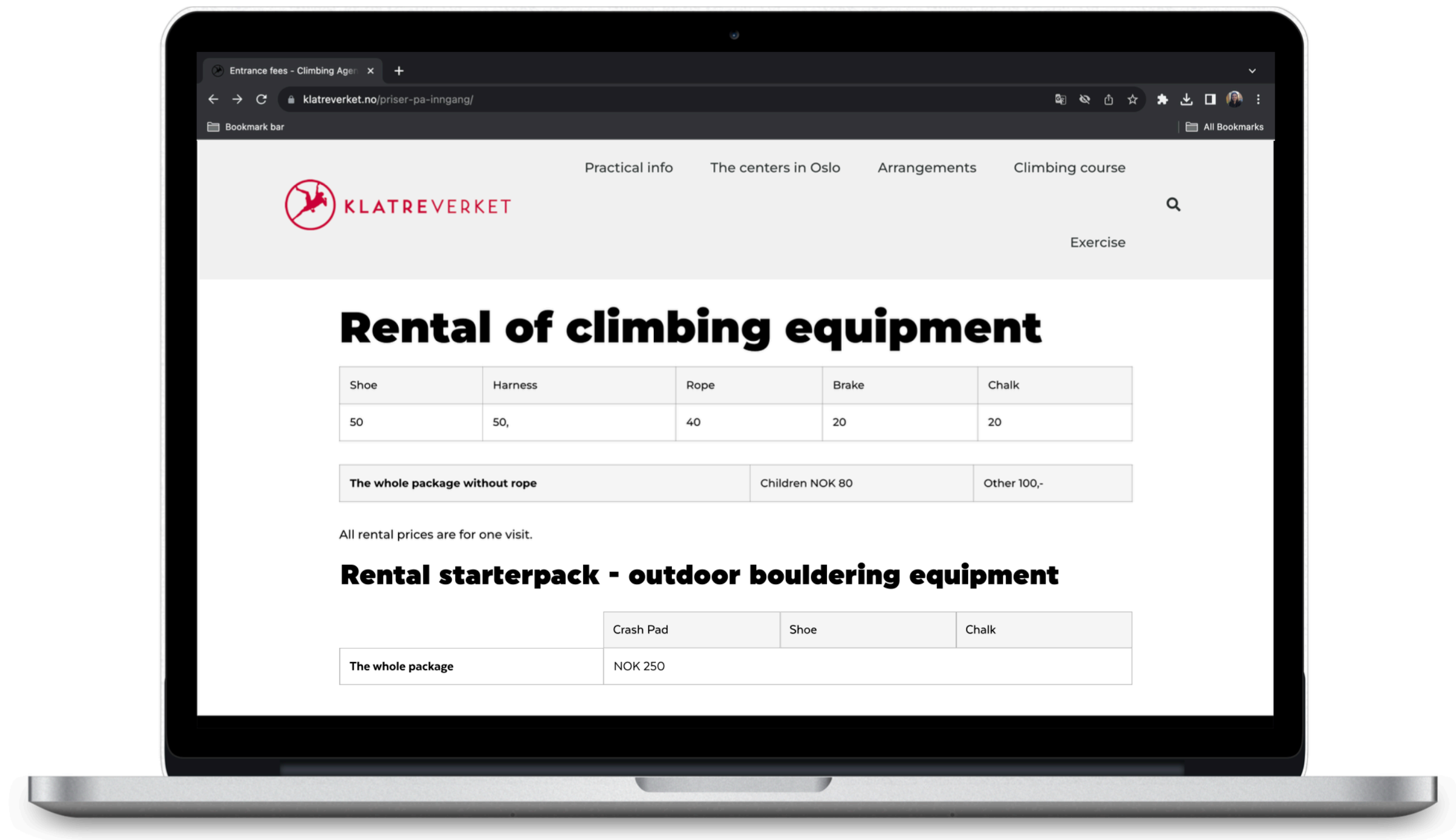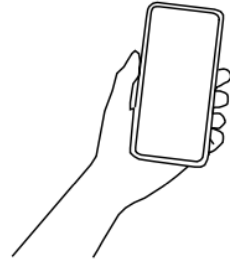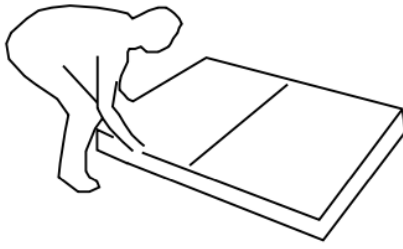The starterpack is designed for beginners to try out outdoor bouldering.

Chalk Bag

Crash Pad
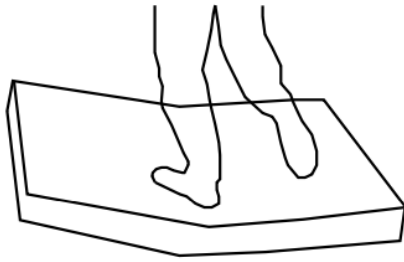
Climbing Shoes

Klatreverket website – Starterpack

Browser showing klatreverket.no/priser-pa-inngang/

Navigation: Practical info | The centers in Oslo | Arrangements | Climbing course | Exercise

KLATREVERKET

Rental of climbing equipment

Shoe	Harness	Rope	Brake	Chalk
50	50,	40	20	20

The whole package without rope	Children NOK 80	Other 100,-

All rental prices are for one visit.

Rental starterpack - outdoor bouldering equipment

	Crash Pad	Shoe	Chalk
The whole package	NOK 250		

Indoor Workshop Lesson Structure

|	Before	During		Interactive		
Timeframe		5 Mins **Introduction**	5 Mins **Crash Matt Placement**	5 Mins **Spotting**	15 Mins **Test and practice**	5 Mins **Wrapping up**
Touchpoints						
Description	**What:** The participant will find out about the indoor climbing workshop though the Klatreverket and Climb Oslo, through websites and social media platforms. **Why:** • The event can be shared with climbing groups through social media platforms and climbers can decide if they want to participate.	**What:** Introduction from the bouldering instructor about what is outdoor bouldering, the instructors own experience with outdoor bouldering, What they will get up to during the workshop and for the participants to share there level of outdoor climbing experience. **Why:** • To build trust between the participants and the intructor • Make sure the partipants have a basic understanding so they know why they are participating in this workshop. • knowing the level of experience of the group can help the instructor taylor workshop to the needs of the group.	**What:** The instructor will go through, why the crash pad is needed outdoors, the fall zone of the climber and where you should place the crash pad depending on the fall zone. **Why:** • The climbers needs to know why it is important to bring a crash pad out on a climbing trip. • They need to know how to correctly place the matt so that they can reduce the risk of injury for them selfs and other climbers.	**What:** The instructor will go through, why the crash pad it is important to spot the climber, and how safely spot the climber. **Why:** • The climber need to know why it is important to spot a climber. • They need to know how to correctly place the matt so that they can reduce the risk of injury for both the climber and the spotter.	**What:** The instructor will tell one climber to spot and one climber to climb. The instructor will correct the climbers technique until each climber is has a proficient technique. **Why:** • So that they have the right technique to be safe. • So that the participants can feel confident in there matt placement and spotting techniques.	**What:** The instructor will wrap up the course by explaining how to locate climbing holds outside, how to find appropriate locations to climb in Oslo and where to rent and buy equipment. Finally the instructor will ask the participants if they have any final questions. **Why:** • To show the climbers what to look out for when climbing outdoors. • So that the climbers can autonomously choose a location and rent climbing equipment without the aid of an instructor. • To make sure that climbers have all there questions answered through the course about outdoor bouldering safety and preparation.
Learning Outcomes		Know the differences between indoor and outdoor bouldering Awareness of what will be covered in the workshop	Undertstand why they need a crash pad Understand how to correctly use a crashpad	Undertstand why it is important to safely spot another climber. Undertstand How to spot another climber.	Good communication with climbing partner/s Practice the correct spotting technique Practice the correct crash pad placement	Know where to look for the climbing holds on a boulder Know where to find information on the boulders located in Oslo Know where to rent and buy climbing equipment from.

Brand Posters

Poster QR Codes
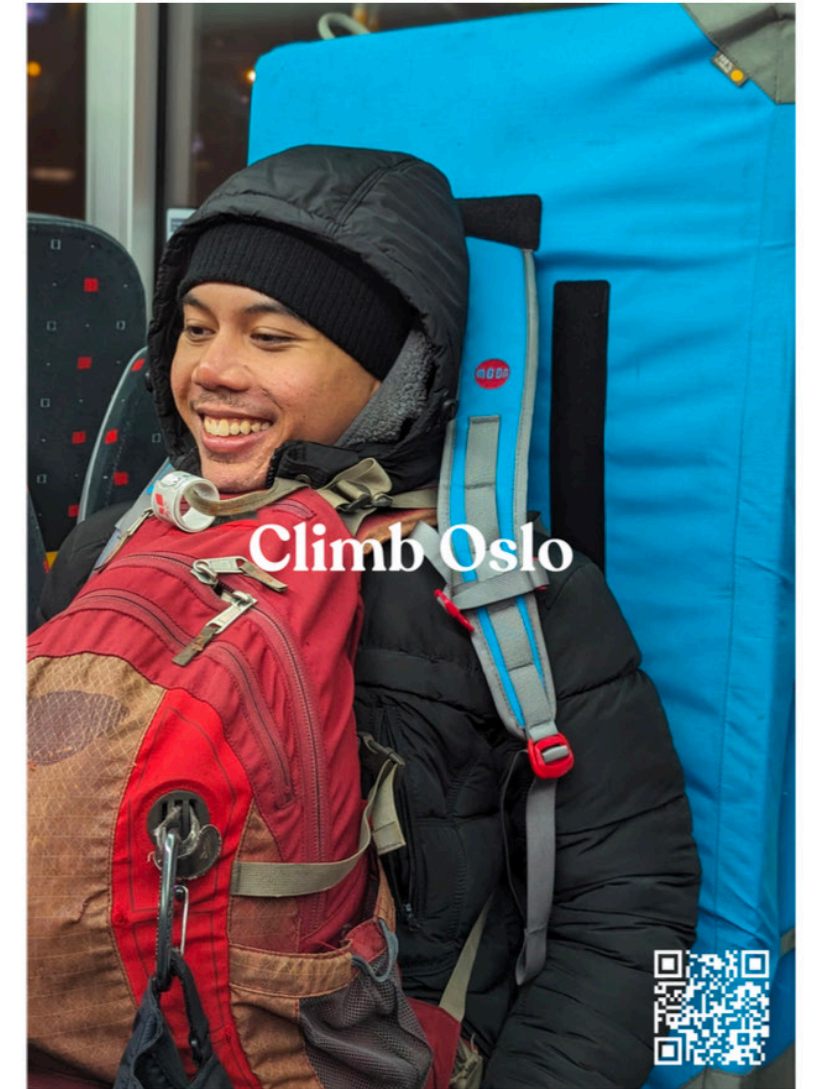
Web analytics

Mail subscription

Individual QR codes

QR code tracking
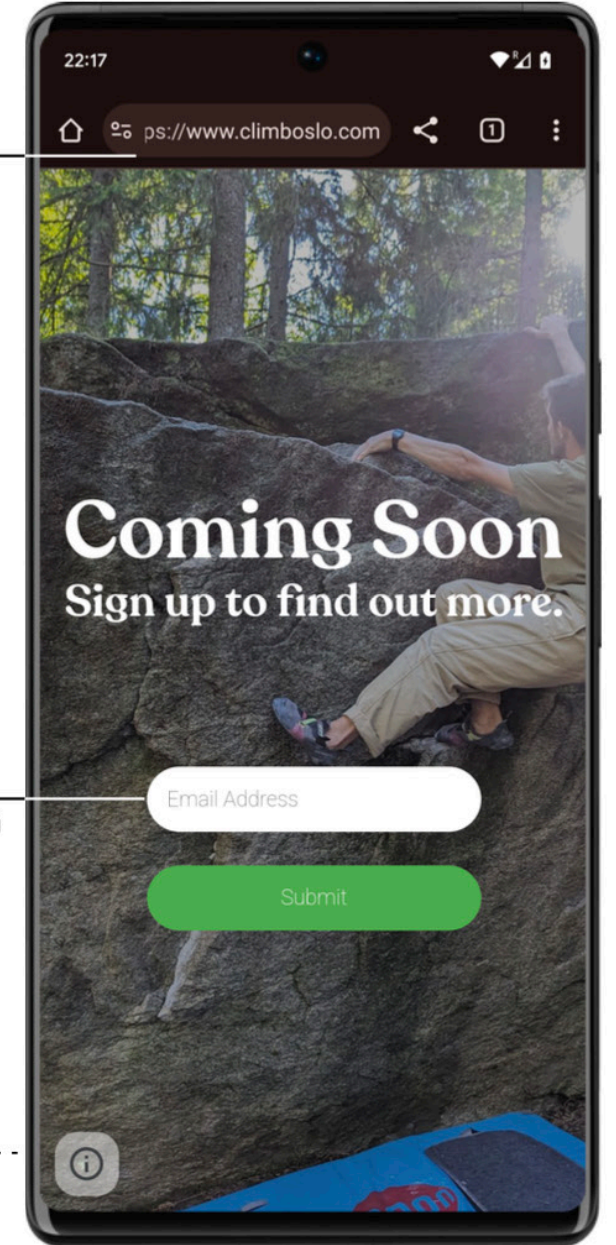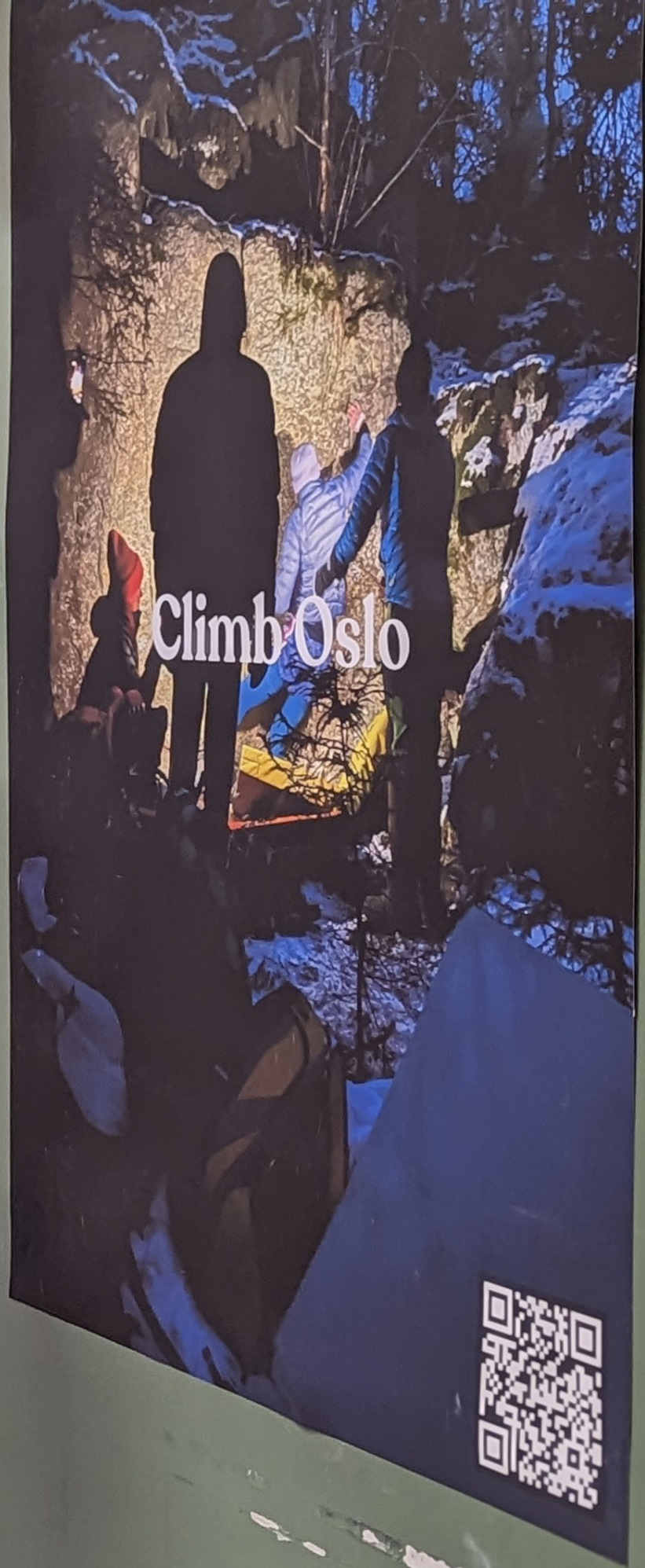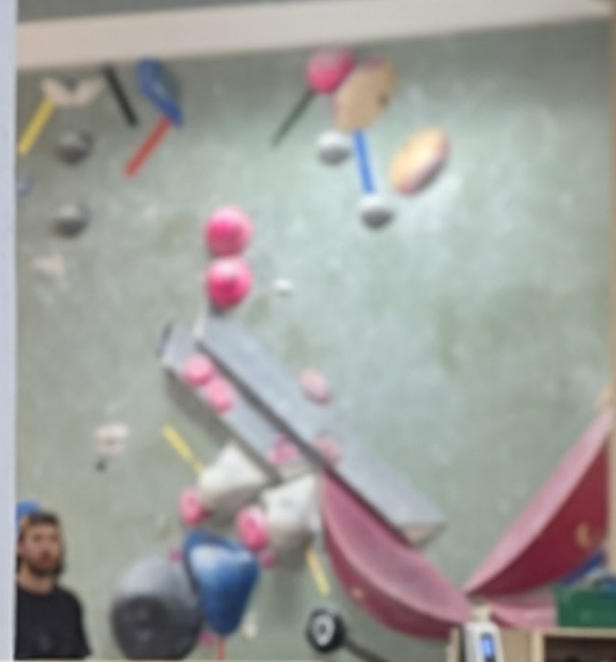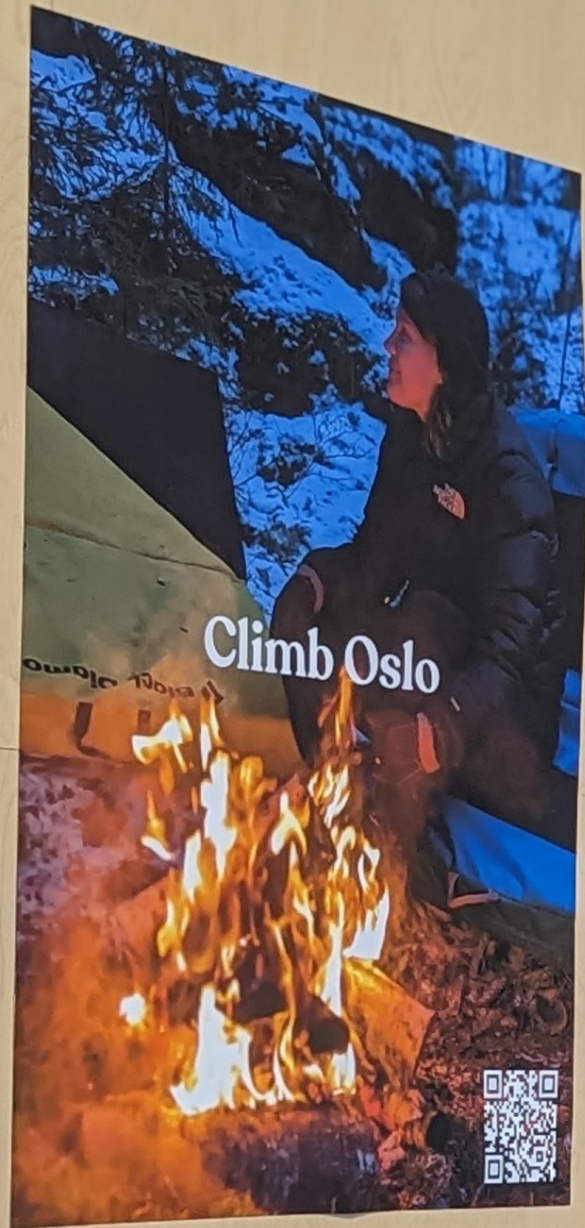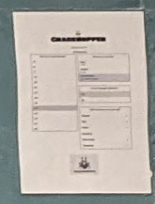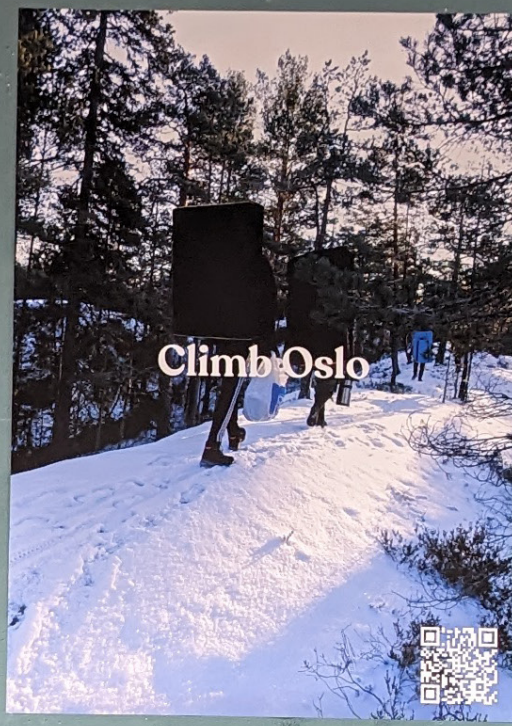
Reflections

Upon reflection, I thoroughly enjoyed this process and acquired a lot of new knowledge and skills. I explored innovative design methods, increasing my confidence as a designer. I think my execution of many research and design methods was a strength of the project.

However, I recognise that there are areas for improvement. I acknowledge that gaining a collaboration earlier in the process would have allowed me to frame my design quicker and the project's scope. This approach might have prevented the need to create so many designs, meaning I could have an earlier start to the development process and the designs may have been more refined. Given more time, I would have refined the planning tool further through testing and iteration and test the indoor workshop with a group of climbers for feedback.

Progress has already been made with the integration of a function into 'Gryttr.' the fuction displayed both the photo and map at the same time. We are scheduled to meet next year to explore other potential incorporations from the project. Dag from 'klatreverket' has started discussions on developing a starter pack for the climbing centre. Looking ahead, I would like to showcase my work to Norwegian climber Magnus Midtbø and plan to continue this project as a personal project next year.

Thank you!

Mosse, thank you for all the support and advice.

Kathi, for you always being there for me <3

Jim, you fueled this project.

Oscar, thanks for the fun adventures.

Carl, for reminding me to "trust the process."

Tina, thank you for supporting the project collaboration.

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