

UNIVERSITY OF TARTU

Institute of Computer Science

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**Applying participatory design to improve the UX of  
an events listing website**

**Bachelor's Thesis (9 ECTS)**

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# **Applying participatory design to improve the UX of an events listing website**

## **Abstract:**

The objective of this bachelor thesis was to improve the user experience of a nightlife events-listing website Kluub. The website is targeted towards young adults aged 18-25. The improvement was done by hosting a co-design workshop utilizing potential users of the application. The bachelor thesis contains an overview about Kluub, some methods used during this thesis, thoughts on planning this workshop, workshop findings, redesign and some final notes and reflection.

**Keywords:** participatory design, workshop, user experience, web application, Figma

**CERCS:** T120

# **Koosdisaini rakendamine ürituste veebilehe kasutajakogemuse parandamiseks**

## **Lühikokkuvõte:**

Selle bakalaureusetöö eesmärk oli edasi arendada ööelu ürituste sirvimise veebilehe Kluub kasutajakogemust. Veebileht on suunatud 18-25-aastaste noorte täiskasvanute poole. Veebilehe arendus tehti läbi koosdisaini töötoa läbiviimisega potentsiaalsete kasutajate seas. See bakalaureusetöö sisaldab ülevaadet Kluubist, meetodid mida selle töö jooksul kasutati, kuidas toimus töötoa planeerimine, leiud töötoast, parandatud disain ning lõpumõtted.

**Võtmesõnad:** koosdisain, töötuba, kasutajakogemus, veebirakendus, Figma

**CERCS:** T120

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# 1. Introduction

Young adults often enjoy spending their weekend nights by going to different clubs, bars, pubs and other nightlife events (Calafat et al, 2009). This way of spending time is a very important way for people to socialize and make new friends and acquaintances. In the past, people relied on posters or word-of-mouth to find information about such events. With the popularization of the internet, the act of finding these events has largely moved online (Eventbrite, 2016). In order to find nightlife events online, there are different platforms. For example Facebook Events (Meta, n.d.) for all kinds of events worldwide, Resident Advisor (Resident Advisor, n.d.) for searching by city/country for mostly alternative music nightlife events, Shotgun (Shotgun, n.d.) for finding music events by country, Tartu Kultuuriaken (Tartu Kultuuriaken, n.d.) for different events happening in Tartu.

Each website presented its own set of challenges, such as unclear focus, difficult usage or unpopularity in the region or outdated content. The author of this thesis decided, in collaboration with others, to develop their own website, Kluub. The website should be easy to use and targeted towards a younger demographic.

As the team is based in Tartu, it made sense to initially plan the launch of the website there. This decision was driven both by our immediate surroundings and by a clear need among Tartu's student population. Known as Estonia's "student city" due to its several high-ranking universities, Tartu provides a broad target audience for improving upon the platform.

Achieving good usability and appealing design is essential, particularly when targeting a younger demographic. It should be up-to-date and very eye-catching from the first view. The current user interface has already been developed with great user experience in mind. However, it is very important to actually interact with users in order to find better insight. The focus of this thesis would be to evaluate and improve upon the website's design through user feedback using methods such as participatory design and the workshop to better involve potential users in the process.

The goal of this thesis is to get an appraisal for the quality of an already developed web page, then change the design as necessary. Within the frames of this thesis a participatory design workshop was hosted, utilizing human-centered design. It had the focus of gathering feedback to the UI of the current website. The feedback informed the creation of revised user interfaces prototypes using Figma. The process follows an iterative design process consisting

of assessment, redesign and re-evaluation with the aim of continuously improving the user experience.

The Bachelor's thesis is divided into nine chapters, the introduction being the first one. Second one is an overlook of some of the abbreviations used in this thesis. Third one contains a literature review about the topics handled in the thesis. Fourth chapter is an overview of the ideas, functionalities and design behind the Klub website. The fifth chapter is an overview of the methodology used. The sixth chapter describes the planning and conduction of the workshop. Seventh chapter contains the findings of the conducted workshop. The eighth chapter contains an overview about the design changes that were conducted in this thesis. Ninth and final chapter is a discussion of some limitations of the thesis, what has been done and a conclusion.

## **2. Terminology**

(G)UI - (Graphical) User Interface

UX - User Experience

### **3. Literature Review**

This section will overlook some of the theoretical ideas behind the work of this thesis. These include the person-centered approach, co-design and prototyping.

#### **3.1 Person-centered Approach**

A commercially-oriented events listing website targeted towards a younger, social group of people has a very important role in design. In order to get people to become users, the user experience needs to be good, comfortable and the website should look aesthetically pleasing, in order to make users visit it again. As Norman emphasizes, great design should make functionality obvious and interaction effortless. (Norman, D. A., 2013).

Bannon concentrates on the fact that users should not be thought of as machines, who behave unpredictably and should be optimised. Much rather, one should consider the particularity of the person, design and make sure of an intuitive user interface (Bannon, L. J., 1991). A person should not be forced into a frame, but the frame should be created human-like. Person's reactions and emotions don't just appear out of nowhere, they come from somewhere. It is entirely possible that the designer of the website thinks that the user would want to do something, but in reality the feature is implemented in a way that is not comfortable to access. Bannon also notices that when conducting studies about the ease-of-use of a product, often just the initial experience is recorded. However, when a product is made to be used indefinitely, it is at least equally important to think how a user would look at the product after the initial familiarization has been done (Bannon, L. J., 1991).

We have the privilege to be working on user experience during a time where computers are not new, so decades of expertise and improvement has been accumulated. Widely used frameworks such as Nielsen's usability heuristics (Nielsen, J., 1994a) and Web Content Accessibility Guidelines (W3C, 2018) provide us a solid foundation for creating efficient user-friendly interfaces.

Relying on industry practices - even without getting acquainted with them first - is often the correct direction to the solution. However, only copying others' work leaves no room for innovation. It is important to find a balance between a well-polished user interface and a captivating design (Attakorah, S. 2021).

## 3.2 Collaborative Design

When designing a commercial website it is very important that in addition for the designer, the end users have good experience when using the application. This means that a high priority should be on usability, accessibility and clarity during the entire duration of the visit. This makes for a more likely revisit. In this condition, it is a good idea to include a potential user into the process of design. Spinuzzi claims that users also have prejudices and thoughts that are difficult to formulate, so called "tacit knowledge" (Spinuzzi, C., 2005). One practical way to understand how tacit knowledge influences user experience is through direct user interaction and observation. For example, one can use the methods of collaborative design in designing the prototype of a product. This is exactly what is described in this thesis. Spinuzzi also says that while there may be minor differences between projects applying the co-design methodology, the three main stages of co-design implementation are usually present. The stages are: the initial exploration of work, discovery processes and prototyping.

By Spinuzzi, the initial exploration of the work consists of the designer meeting and getting acquainted with the subjects. This includes getting to know the technologies, methodologies that will be used.

The discovery processes part is where the actual "work" happens. This usually takes place in a conference room of some sorts, where using the methods from previous steps are used in a workshop.

Spinuzzi's last stage, prototyping, consists of using said work from the previous phase to implement it into some product, or a part of it.

These three stages can and should be conducted with multiple iterations. There are also several limitations in regards to the use of the aforementioned methodology. Mainly, that it requires active participation by a lot of people. When co-design groups are too big and require for everyone to appear at the same time, it may get difficult to get a timeframe that would suit everyone (Spinuzzi, C., 2005).

### 3.3 Prototyping

Prototyping is the process of creating preliminary, non-final versions of a product to explore different ideas, functionalities and gather feedback, before committing with a specific set of ideas and functionalities.

Floyd talks about prototyping as consisting of four different stages: the stages are as follows: functional selection, construction, evaluation and further use. Floyd describes a prototype with fewer functions as the final product, because if it weren't, there would be no difference between a prototype and final product.

Hence when a selection needs to be made on prototypable functionalities, they suggest to either take a small sample of different functions (by their words: "vertical prototyping"), or to use functionalities not yet implemented, implemented poorly or just with lesser extent than desired (called "horizontal prototyping").

With the construction part Floyd refers to the actual construction of the prototype. The effort should go towards the feature(s) desired for testing and overlooking. For example if a prototype needs to be made on authentication and performance, the prettiness of the GUI is not of utmost importance.

The third part touches on evaluation, the overall assessment on the quality of the prototype, and by Floyd, the decisive step. It needs to be concrete and well documented so improvements on the prototype can be made. After a prototype has been developed, there are two possible options: either finalize and commit to the current prototype and proceed with development, or continue using the prototype as a tool of training or integrate it to the final solution.

Floyd also talks about how there are different ways to approach the action of prototyping. They say that the approaches are as follows: exploration, experimenting and evolution. Exploration, where the scope is new potential functions. Experimentation, where the focus is on the verification of the quality of the already developed functions (this is also probably the most similar to the traditional meaning of the word "prototyping"). Finally, evolutionary approach, where the focus is on the development of an already functioning application with taking regard to the changing clientele or environment (Floyd, C., 1984).

In the current context it is probably a good idea to approach prototyping with a compound of the two first approaches, meaning to get feedback for the development of some new potential functions and also the effectiveness or the quality of the current functions.

Mei et al. emphasize on quick, low quality prototypes. These allow for the continuous user feedback and rapid improvement on the design. This approach does not wait for the “final” version to come in a while, but rather encourages a constant cycle of testing, refinement and user feedback. This is very suitable in today’s agile development environments (Mei et al., 2021).

## **4. Kluub**

This chapter is an overview of the Kluub nightlife event listing website currently in active development. This is the website which the participatory design methodology will be applied on.

### **4.1 Background**

Despite other event listing websites such as Facebook Events, Resident Advisor, Shotgun, Tartu Kultuuriaken being available for use, each of them are presented with a set of challenges. Because of this, the author of this thesis in collaboration with others decided to develop a new platform. One specifically for nightlife event postings. This idea came from necessity. During our university time we felt that no platform does all of the following correctly:

- an events listing website targeted specifically towards nightlife
- simple to use (no clutter)
- aesthetic design with a younger audience in mind
- popular

These are the main non-functional requirements that were held in mind during the start of the development and currently as well.

The idea behind the website is that it should be very easy and efficient to use. Imagine that the potential user is already in the city and is thinking something along the lines of “Hey, I’m bored. I want to sing karaoke/listen to some drum and bass. How could I do that?” Then they open Kluub on their phone and have an answer to their question in 30 seconds, without registering or downloading any application, from their phone browser.

### **4.2 Website Layout**

The website consists of the following pages: the landing page, events page, single event page, about us page, login/authentication page and the personal page.

## 4.2.1 Landing Page

The landing page (Fig. 1) serves as the page of first contact by the user. It features a bold design, high in contrast with a thick font. Large navigation buttons to a city specific events page are very prominent. The landing page serves as the “welcome” screen, it should instantly tell what the website is going to be about and how to proceed (Krug, S., 2014). In the future a choice will be available to browse events in Tallinn, Tartu or Pärnu.

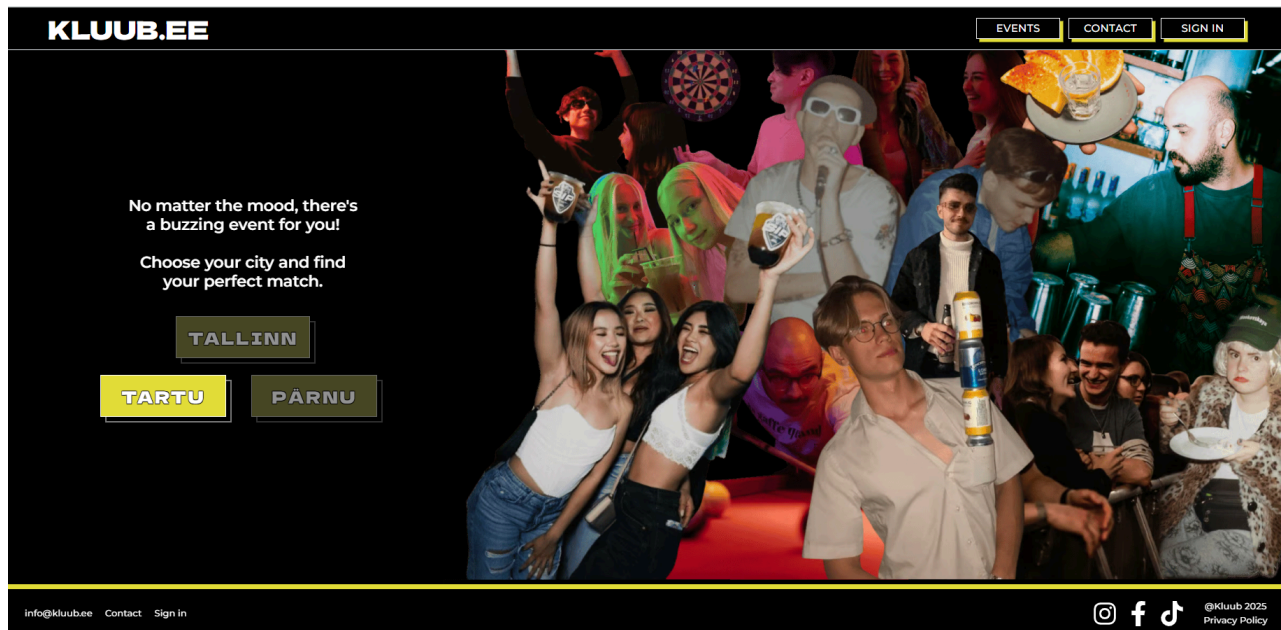


Figure 1. Landing page of Kluub website.

## 4.2.2 Events Page

The following page is the events page (Fig. 2). This is the “primary” page of the website, where the user can see events in chronological order. This feature makes it easy to find events happening right now or events that are happening today. It features a “TOP PICKS” events section, which would be our sponsors or best partners. This section is very visible and accessible. After that comes the filter/search bar, after which come all of the events in the form of boxes. The boxes contain:

- the title
- an illustrative picture
- introductory paragraph

- “quick information” section consists of: location, time open, ticket price, number of people going.
- “like” button and Facebook event button

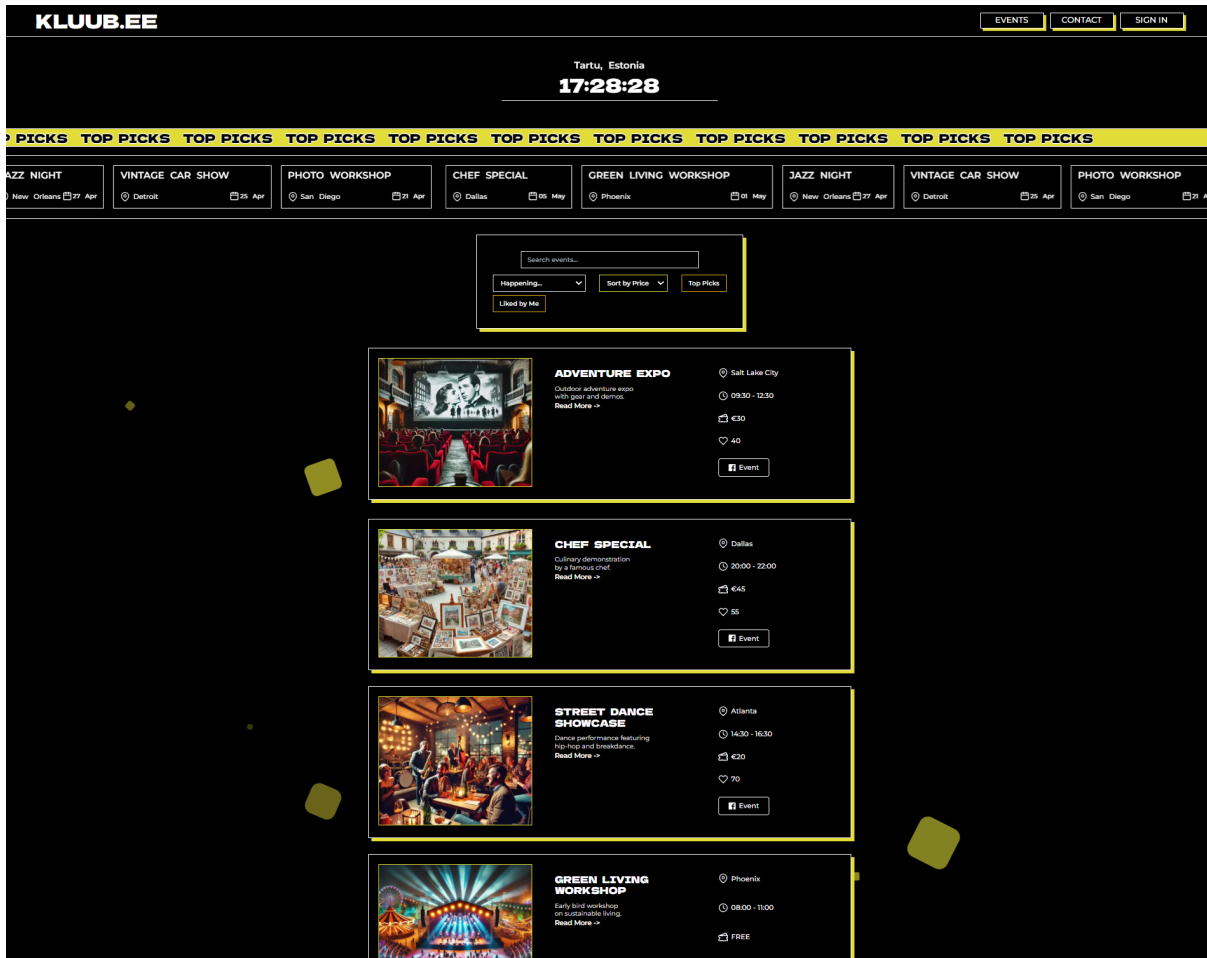


Figure 2. Events page of Kluub website.

### 4.2.3 Single Event Page

The single event page (Fig. 3) contains all of the same information as the event box, but with more text if available. This includes the illustrative event picture, title, descriptive text, and icons and numbers for the location, opening time, ticket price and Facebook event button.

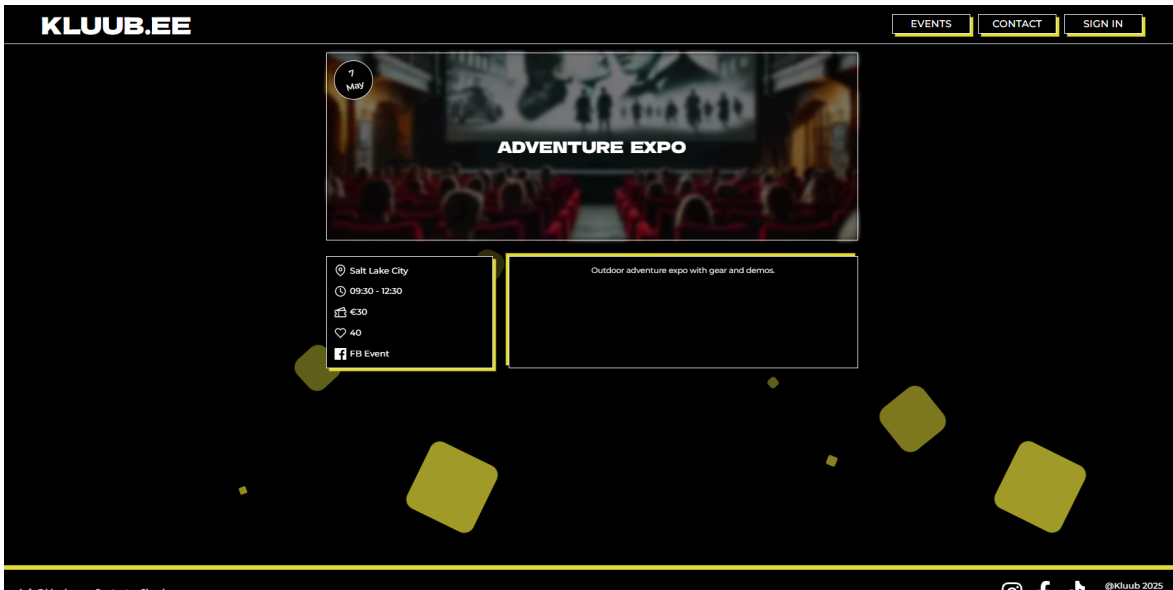


Figure 3. Single event page in Kluub website.

#### 4.2.4 About Us Page

The about us page (Fig. 4) features some information about the developers, the mission and vision statements and some contact information.



Figure 4. About us page in Kluub website.

## 4.2.5 Authentication Page

Authentication page (Fig. 5) offers registration and login using email or Google. Adding Google is very important, because it has become more popular and convenient during the last couple of years. After logging in the user has the liking/saving events functionality available to them, and can access those events from their own personal page. In the future a “friend” system is also planned, but that is outside of the scope of the current thesis.

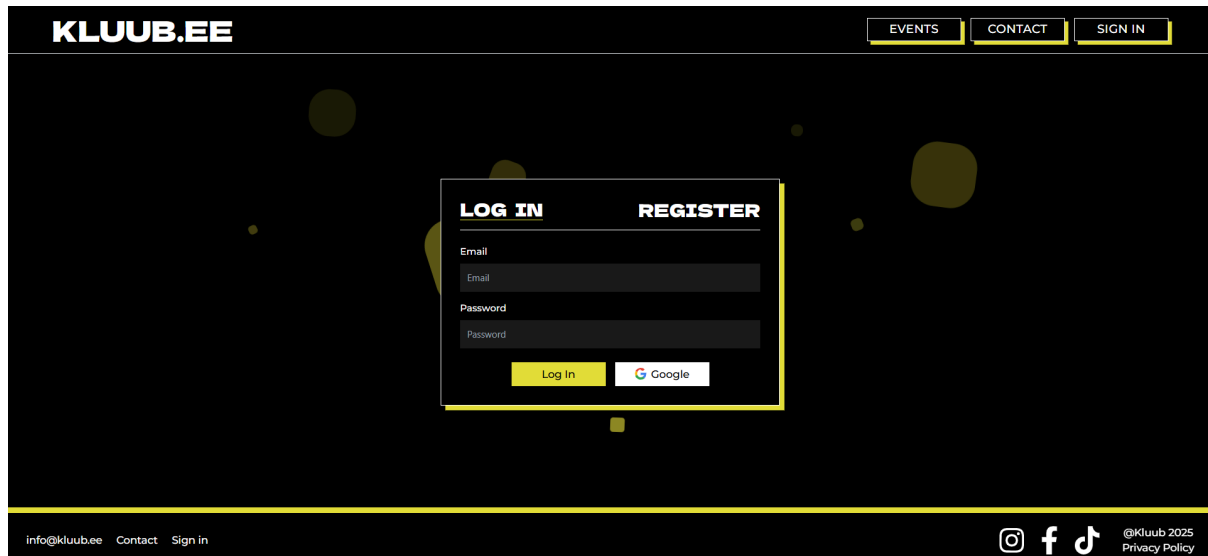


Figure 5. Authentication screen on Kluub website.

## 4.3 Event Uploading

Event uploading to the website will be done through a specific admin panel, which will be accessible to approved representatives of venues or promoters of event series. This admin panel will have the feature to post events, using a form with fields according to the event box fields (title, image, times open and so on). It will also have ways to update or remove events at will. These actions will require no approval from the website's part, as the representatives are pre-verified.

## **5. Methodology**

This section will be a brief overview on some theoretical aspects behind this thesis. The methods are participatory design, the workshop, Hick's law and heuristic evaluation including Nielsen's ten heuristics.

### **5.1 Participatory Design**

When being focused on a single detail for a while, one tends to get tunnel vision (Posavac, Kardes, & Brakus, 2010). That is why it is important to get another perspective into a project. While individuals without official training or experience may not have design expertise, they possess valuable insights from their everyday interactions with similar systems. Nielsen has stated that, even though users may not be best suited for designing something to their own needs, they can give more than good critique about them being not content with any solutions provided (Nielsen, J., 1994a). Hence a way to get feedback would be to use the technique of participatory design and involve the potential users into the final design of the application.

### **5.2 Workshop**

This thesis made use of participatory design in a workshop. A workshop session serves as a method for development, research and feedback. In the frames of this thesis it was used for research and more importantly, feedback.

The workshop involved six participants aged 18-19 years, actively engaged in nightlife. The workshop forced different perspectives and got feedback from potential users of the service, with simulation of the usage of the website and questions and topics meant to direct participants' attention.

### **5.3 Usability Principles**

During the development of Kluub, the events listing website catered towards young adults between ages of 18-25, most of the functional requirements have been developed. This includes the landing page for the website, events listing page and the single event showcase page. This means that the main focus would be the verification of non-functional requirements and polishing the smoothness of use. This project is taking Hick's law and Nielsen's ten heuristics into account when developing the designs.

### **5.3.1 Hick's Law**

Hick's law states that the time for a person to come to a decision between different choices depends heavily on the amount of choices given to them (Hick, W. E., 1952). In the context of this thesis, it means that it is a good idea to keep the amount of choices an user has to a minimum. Not necessarily lose functionality, but at least keep secondary functionalities hidden from the user. It is a good idea to tuck away some options or buttons. This will make a webpage more readable and better to look at. If the user gets overwhelmed, they might be annoyed from using the service, have a bad experience and/or lose interest in the web page indefinitely.

### **5.3.2 Heuristic Evaluation**

Heuristic evaluation is a method designed for the validation of usability in UI design. It involves evaluators examining the website against different sentence-long guidelines. These guidelines help identify and understand potential usability issues early in the design process, allowing for intermediate improvements before doing actual testing. Jakob Nielsen's set of ten usability heuristics are very popular (Nielsen, J., 1994b). They are as follows:

1. Visibility of system status - meaning that a user should always be aware of what is happening in the background. This includes loading indicators, progress bars, or error messages.
2. Match between the system and the real world - when designing an application it is necessary for the user to see familiar language, interaction options etc. There is no point giving the error messages out to the user as is, but make it familiar to them instead.
3. User control and freedom - users should feel in control in what they're doing. This includes quickly accessible "undo" or "cancel" buttons.
4. Consistency in standards - when similar features have similar interaction options, people are more inclined to use them, and understand them quicker. A white "X" on a red background usually means "close".

5. Error prevention - error messages are important, but even better would be to avoid errors happening in the first place. This can be achieved by greying out “submit” buttons before all necessary fields are filled, or by instructing users in what to do.
6. Recognition rather than recall - if some information is necessary between screens, it should be accessible from all screens where it is required. Users should not be required to remember information themselves.
7. Flexibility and efficiency of use - interfaces should not be specific to one skill level. They should be easy to start using, but offer shortcuts and ease of use for experienced users as well.
8. Aesthetic and minimalist design - just like with Hick’s law, when there are too many options to choose from or concentrate upon, the time needed for making a decision goes up. This makes for a difficult user experience.
9. Help users recognize, diagnose and recover from errors - errors should be prevented, but when they happen they should be concise and logical, including help on how to fix the current issue.
10. Help and documentation - an user interface should be easy to use, but helpful comments and guidelines can improve user’s ease of use.

## **5.4 Data Collected**

The entire duration of the workshop was audio recorded. This was done for the subsequent analysis, in case the author did not recall everything, and needed to revisit some specific points and verify details.

During the workshop several questions were asked and discussion points thrown into the air. Before group thinking, every person wrote down their individual opinions and thoughts on sticky notes. Relying on these writings, discussions were held.

Finally, at the end, low fidelity mock-ups using participants’ own best understanding of how a website page should be were also drawn. These were made using A4 sheets of paper and pens.

All three of these types of data were collected and used for the writing of the analysis.

## **6. Workshop Planning and Structuration**

This chapter will describe the initial planning and some experiences encountered during the workshop. We will describe why some choices were made in a certain way and how it influenced the workshop.

### **6.1 Participant Profile and Recruitment**

A convenience sample was chosen for this research. Initially the planned number of people to bring into the workshop was 5, but one had to drop out due to illness, which meant the final number of participants was 4. All of them were males, aged between 18-19, currently studying, and active participants in Tartu's nightlife scene. At the time of the conduction of the workshop they were all pursuing secondary education in the 12th grade. They were also part of a single friend group, which was a thought-out idea, as it would reduce the initial warm-up time, because they were already acquainted with each other.

The participants gave informed consent (see Appendix 3, Consent Form) after reading the Project information (see Appendix 2) to participate in the workshop and have their data analysed in the frames of this thesis.

### **6.2 Overall Structure and Flow**

Since the participants were very active and engaged early on, the workshop proceeded smoothly. The workshop went according to the thought out plan (see Appendix 1, Workshop Session Schedule), with the researcher moderating the workshop. The workshop was conducted with the idea of keeping a calm, natural, social and an open environment, so all participants could say what they were thinking out loud and giving actual feedback the moment it came as an idea.

I had a set structure to plan my workshop according to. It included some initial activities to get the participants warmed up, introduce phone and desktop versions of the website, getting acquainted with similar websites and finally making an improvement themselves. Mostly the focus was getting hands on feedback from the participants, with an experimental design exercise at the end. The structure and decisions regarding it will be more accurately discussed in the following paragraphs. The complete workshop plan is included in Appendix 1. Pauses are not accounted for in the plan, but they were made when necessary. This was about every

40-60 minutes, during logical breaks between topics. Snacks were also offered to keep the participants energized.

Originally the duration of the workshop was planned to be 145 minutes, but in fact it came out to 200 minutes. The participants were very open and sociable during the entire duration of the workshop. Whenever a new idea was introduced, the participants responded well and showed enthusiasm. Due to fatigue, over time their level of engagement gradually decreased.

### **6.3 Warm-up Activities**

Although an already-acquainted group was chosen for the co-design workshop, it was still necessary to get them to warm up for the oncoming exercises. The warm up exercises were made to be as reflective of the workshop as possible. This means that they should make the workshop participant start thinking critically about design choices and about finding nightlife events. The following exercises were included:

- giving feedback to a website based on design
- direct questions for discussion based on the participants' previous experience
- creative exercise involving their activities and feelings while looking for nightlife events.

Feedback based on website design was given as a means to get the group to start thinking design-oriented and also to get landing page feedback for Kluub. Firstly, the workshop supervisor showed some different websites and then a discussion about the positives and negatives was held. Secondly the supervisor showed different websites' (news, event listing, streaming service websites) landing pages for three seconds each. After this, the workshop participants were asked based on those three seconds what the website's content is about.

The question section was more about getting to know the participants' experiences and habits with event finding.

The creative exercise was done by giving the participants sticky notes, where they wrote down what they are saying, doing, feeling and thinking while searching for nightlife events. This gave the supervisor an idea of their background and made them think in a workshop-directed matter.

## **6.4 Phone and Desktop Web Page Impressions**

In these parts of the workshop, we overlooked the qualities on both the phone website and desktop websites. It was important to firstly give feedback to the phone version of the website, as Kluub is meant to be a phone-based webpage foremost. The following exercises were done in this section:

- free exploration
- questions regarding usability

The section was divided into two parts, phone impression first and desktop impression second. The mobile phones were personal, and laptops were rented from the university for the duration of this workshop. First they had 5 minutes of free exploration time at their own tempo. Following this the supervisor asked them questions and feedback about their experience. The feedback was written on the sticky notes during the free exploration time. After this the workshop discussed based on the written-down thoughts.

## **6.5 Similar Websites and Mock-ups**

In the final parts the participants free explored some similar event listing websites to Kluub, namely Resident Advisor and Genialistide Klubi webpage, and brought out some positive and negative facts about them, in the context of how to apply those positives to Kluub and make sure not to implement any negative parts. Resident Advisor and Genialistide Klubi were chosen for this workshop, because they offer a product very similar to Kluub. Resident Advisor is for western audiences (Germany, The Netherlands, etc.) with a more intricate design and Genialistide Klubi is for the audience of Tartu with a very graspable design. Following this the workshop participants picked out a page from Kluub and drew their own renditions of the page. The following activities were in these sections:

- free exploration of Resident Advisor or Genialistide Klubi website
- feedback on those websites
- mock-up creation
- introduction of their design

The participants got some new insight on website design from similar websites like Resident Advisor and Genialistide Klubi. They freely explored their own website of choice for 5 minutes. During this time they wrote their thoughts on the website down on sticky notes. The workshop discussed each person's individual feedback.

When they had seen different webpages (Kluub, Resident Advisor, Genialistide Klubi), they were instructed to draw their own rendition on how a Kluub's page of their own choice should look like. These mock-ups were very low-fi, done using pen and paper only. After this, every person introduced their mock-ups and justified their design choices.

## 7. Findings

This section is an overview of the findings and analysis of the workshop results. This includes the data collected and some more prominent or recurring themes.

### 7.1 Data Collected

The data collected included audio recordings, written notes (which we used for discussion) and low fidelity mock-ups of the participants' understanding on how the design should look.

The entire recording spanned 195 minutes, after removing the pauses of the workshop and speaking-free segments, the audio recording was 165 minutes in length.

During the workshop participants responded to prompts such as “What is wrong with this UI?” or “If you could change one thing in this UI, what would it be?” by writing their individual opinion on sticky notes (Fig. 6). This method encouraged thinking alone before entering into discussion with others

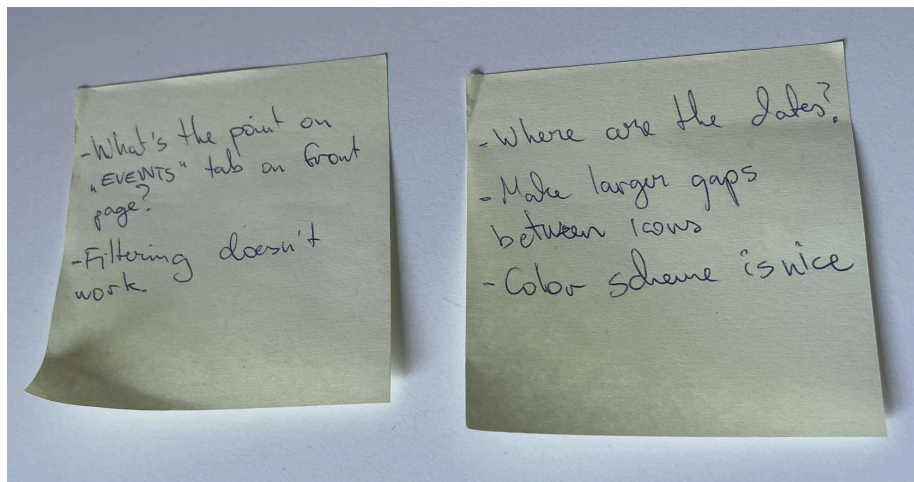


Figure 6. Similar post-it notes to those collected in the workshop.

Notes included specific feedback “Foo does not work.”, discussion points “What is the point of Bar?”, and some general suggestions the participants thought would be great “Foobar would be a great addition to the landing page!”

Finally, after getting acquainted with the phone website, desktop website and similar websites, they were asked to make their own rendition of a single page from the Kluub website, these mock-ups were made using a blank sheet of A4 paper and pens (Fig. 7).

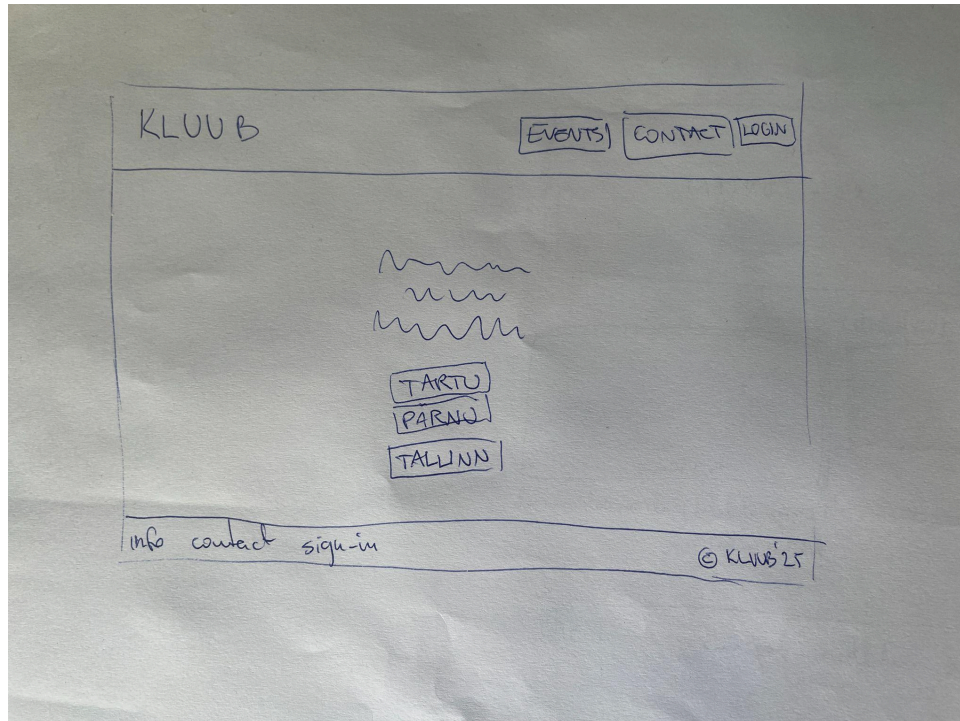


Figure 7. Similar low-fi mock-up to those created in the workshop.

## 7.2 Common Themes

The website was in a work-in-progress state when given out to the participants in the workshop. That was a deliberate choice as to keep the state of the application open and ready for changes. Because of this, feedback about imperfect implementation was expected. Expectedly, the exact situation happened. Common themes among negative criticism was the non-perfect implementation of:

- the search functionalities - they were faulty and did not work reliably in all cases.
- repeated information on buttons - some buttons doubled information that was already visible, adding clutter to the webpage
- visual inconsistencies - some buttons were implemented with a frame around them, others not, which deemed the UX a bit confusing
- minor visual additions - at some places, the lineup of icons was inconsistent

All of the previous was mentioned by at least two different participants. Everyone eventually encountered the problem of the webpage size. By default everything is a bit too large, while testing Kluub during the development usually a zoom of 80% was used, which meant the default 100% was not what we eventually thought people would use.

Common themes among positive criticism was the overall simplicity and highly intuitive UX, which goes well with our initial following of Hick's law during the design process. The simplicity was mainly brought out in contrast over other websites, including Ela and Resident Advisor. The participants brought out that the two similar websites had difficult and unintuitive UI. Also good critique was given to the visual appeal of the website's design. These were given by all four of the participants.

### 7.3 Summary of Positives and Negatives

This section will collect important pieces of feedback given. Most of the positive feedback is very general (the overall design is good, colors are aesthetically pleasing and the website does not look too busy). Because of this the focus here will mainly be on the negative aspects, specifically single features to add/remove/fix.

#### 7.3.1 Negative Feedback

When opening up a single event page, the format changes too much. On the "All events" page the layout is in the order of picture, text, quick information (Fig. 8). On the opened single event page (Fig. 9), the quick information tab moves to the left instead. On the single event page, also the "Go back" button is missing.

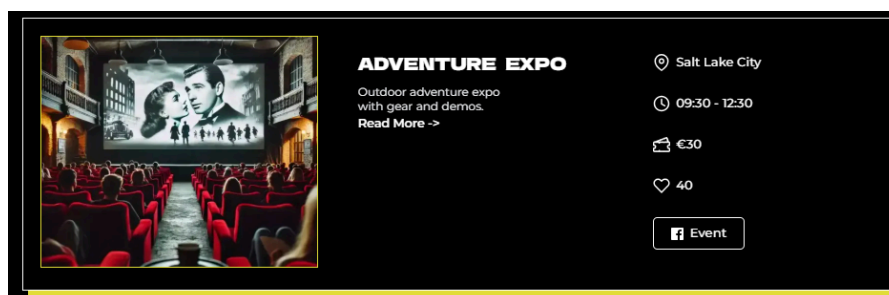


Figure 8. Single event box on the main "Events" page.

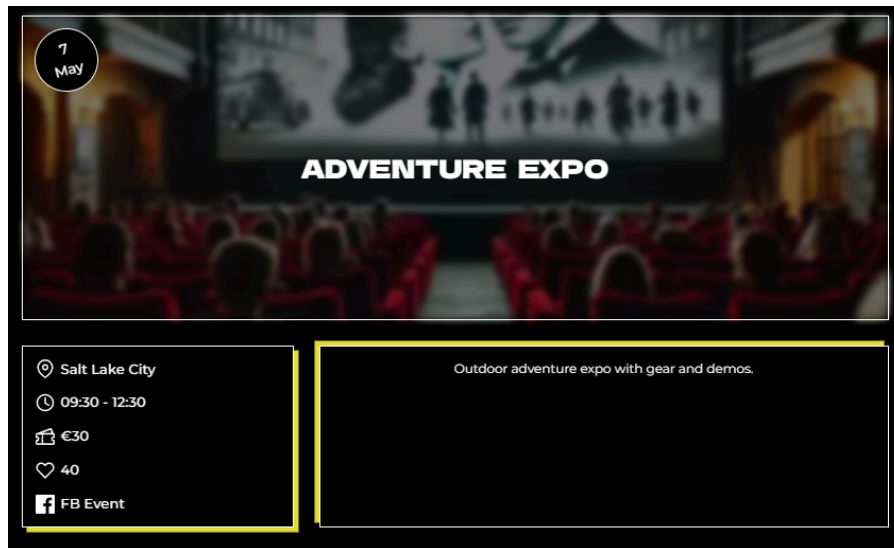


Figure 9. Separate single event page.

On Figure 10, the events page, there are two horizontal bars. The yellow one with “TOP PICKS” written on it in black and the one directly under that, with black rectangles running are marquee (so they are animated to run from right to left and left to right respectively).

One negative critique given was the fact that it would be easier to move if the text of the bottom marquee didn’t go towards the same side the reader is reading towards (so, away from the reader so they need to move their eyes more on the screen to get all of the information).

A critique towards the marquees is also that the participants of the lab thought they could “swipe” the marquee, when in reality it stops moving on hover.

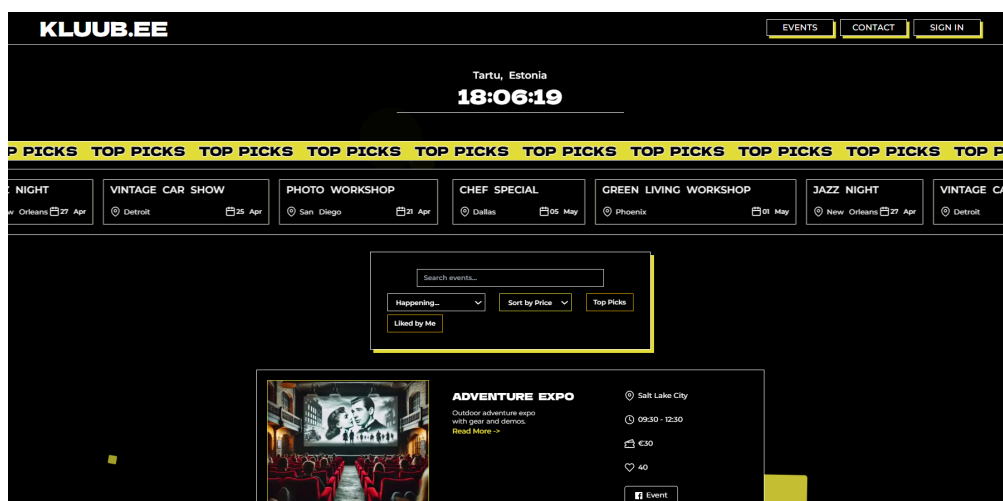


Figure 10. The events page of Kluub.

On the events page (Fig. 10) there are currently multiple bars (yellow “top picks” marquee, event boxes black marquee), extra information fields (city name, clock, search box) even before the events come up. Currently when the user visits the events page, about  $\frac{2}{3}$  of the screen is taken up by the header, clock, “Top Picks” marquees and search bar.

There are currently no visual date markers. These will be added.

The search functionalities were not finalized either. These would work sometimes, but not always.

One user also noticed some buttons look like buttons, with the intuitive Facebook logo and a border around it, others look like icons, like the “like” button. The like button is just a heart symbol with a number next to it.

### **7.3.2 Suggestions**

During the workshop some miscellaneous recommendations were also given. As the website is bicolored, one participant thought it would be a good idea to add a separate menu setting for the color scheme, so the user could personalize the website themselves..

An idea of implementing the website as a phone application is also present. In that case a participant thought it would be a great idea for a possibility for the user to change their notifications according to their own preferences, so when exactly and how often would they receive them.

## **8. Redesign**

This chapter will be an overlook on the redesign made after the workshop. This includes an overview on the more prominent issues encountered in the workshop, the thoughts behind those issues and finally the redesign with explanations.

### **8.1 Figma**

Figma (Figma, n.d.) is a collaborative web application made for interface design. It is very suitable to use in this project for the design and redesign of different elements or whole pages. It enables the creation of interactive high-fidelity mock-ups. The redesigns made in the frame of this thesis will utilize Figma because of its ease of use, intuitive interface and user friendliness.

### **8.2 Redesign Decisions Based on the Workshop Feedback**

One thing noticed by every workshop participant after getting acquainted with Kluub, is the absence of date markers of events. This feature was intentionally waited with as to understand how quickly the users would notice the absence of it. Dates are very important, so the absence of them was noticed very quickly. This needs to be redesigned, so the user would have full overview over the event's information

The structuration of the events page is visually busy (Fig. 10) - there are currently multiple marquees, the clock and the search box before the events come up. These features break the page up and take a lot of room. The events page layout needs a refactor to make it less complicated and visually secluded.

In the events page and the single event page, the button for liking events was not designed well. The button did not feel like a button and felt like an illustrative logo instead. Other buttons have a frame around them, and this button did not. This goes against Nielsen's heuristic number four: Consistency in standards. Having inconsistent features makes the user analyze the website for longer, making it energy consuming to use.

On the events page, on a single event box, the order of items in the box from left to right is the image, title with the flavour text and finally buttons and icons with information on the right. However, when opening the event up and going to the single event page, the order is turned around, with the image being in a box in the upper-center area, buttons and icons on

the left and flavour text on the right instead. This is inconsistent and goes against Nielsen's heuristic number four: Consistency in standards. Hence it should be remade to be consistent.

An interesting thing that was brought up in the workshop and was not seen by Kluub's development team is the marquee's scrolling direction. Marquee is a web design element, a bar that automatically scrolls from one end to the other. In Kluub it is horizontal and has text on it. The marquee is scrolling from left to right. This makes for the user's eye to need more physical movement, than the text is long, because it keeps scrolling away from the spot the user is currently looking at. Reversing the scroll direction - from right to left - would let each new word enter where the reader is already looking, making the marquee easier and quicker to read and understand.

### 8.3 Design After

Design wise, no major changes were needed. The largest change was made on the events page, which required some refactoring. The other page that required attention was the single event page.

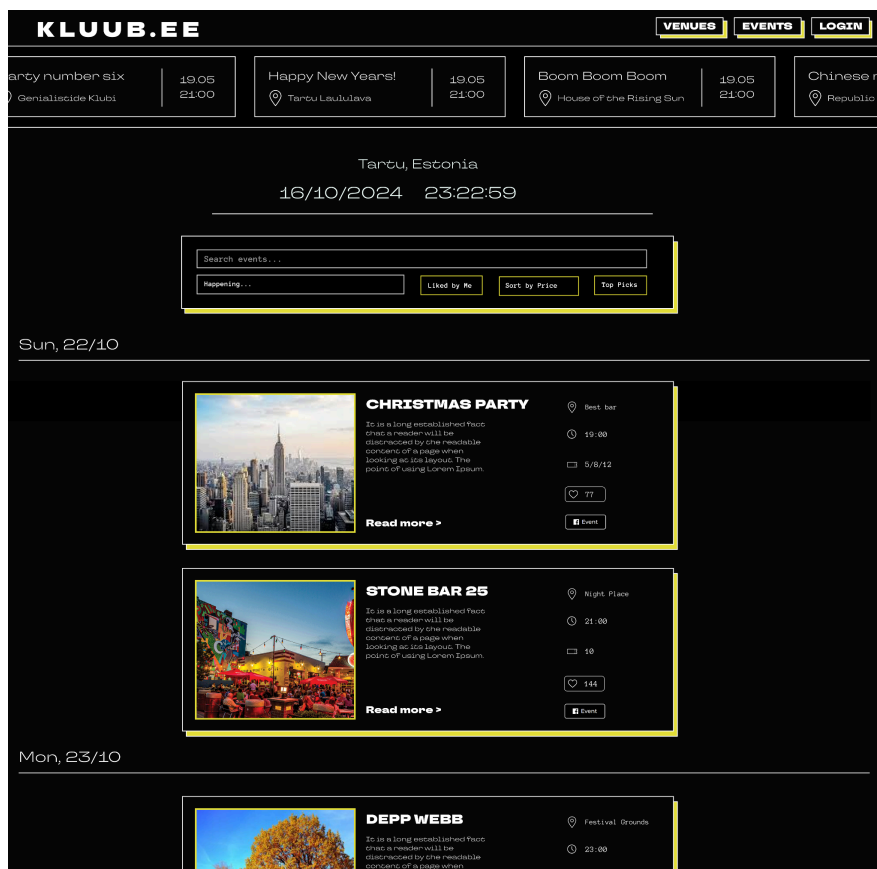


Figure 11. Events page after the redesign.

The changes made on the events page are small, but noticeable (Fig. 11). Firstly, the double scrolling marquee was visually busy, so the yellow marquee was removed and only the one with the information was kept. The scroll direction will also be changed on the actual website, so it will scroll from right to left. This change will render the marquee more easier to read, as the marquee text will scroll towards the spot the user is reading from.

Secondly, the date markers were added as well. There is one date marker for each date, which serves as a grouping element. This solution makes it visually easier to read and separate event boxes.

The specific event boxes had the “like” button styling changed as well to more resemble a button. This was achieved by adding a frame around it. Klub utilizes a frame as a way to make a difference between buttons and non-button symbols.

The largest change is the restructuring of the events page. The marquee section was lifted up, under the header. The clock and filtering box were changed to be together, and the filter box was restyled to resemble event containers. This change makes it more uniform and easier for the eye.

The second page that was changed was the single event page (Fig. 12). Very minor changes were implemented here.

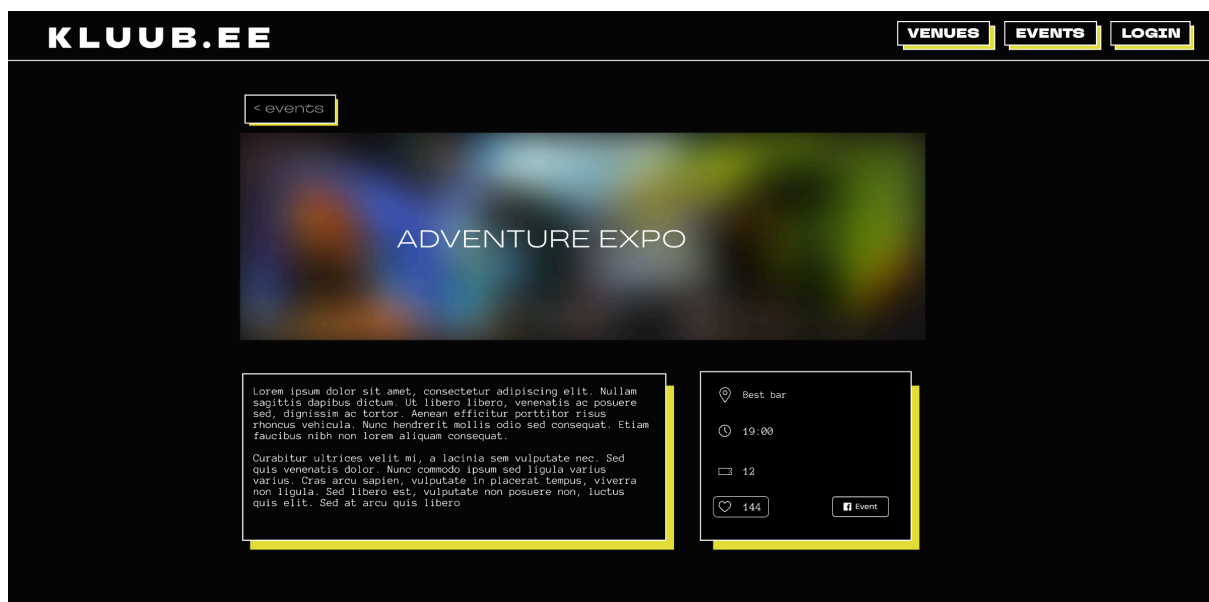


Figure 12. Single event page after the redesign.

One workshop participant noticed the inconsistencies between the single event page and the correlating event box on the single event page. On the event box the order is the following: image, text and icons with buttons. On the single event page, the order was different, the image was on top for illustration, with the icons on the left and text on the right. This was inconsistent and went against Nielsen's heuristic number 4, "Consistency and Standards".

Also a "Go back" button was missing. In the redesign, the "Go back" button was added that leads the user back to the events page, and the order of the two information boxes was lifted around. This kept the consistency. The "like" button styling was changed similarly to the events page layout. A frame was added, similarly to the Facebook

## **9. Discussion**

This chapter serves as the final chapter for the thesis. In here an overlook about the work done is given. This includes the workshop, redesign and some limitations that were encountered during the course of this thesis.

### **9.1 Limitations**

During and after the conduction of this lab several limitations were also noticed. The webpage is targeted towards a younger demographic (18-25), of all genders, but all four of the participants were males aged 18-19. It would have been more fair if some female participants and people a bit older were included, between the ages of 20-25. The workshop supervisor, however, did not notice any issues that would have been prevented with a wider range of participants.

As this was the first time the workshop supervisor hosted a workshop, the expected time of 145 minutes exceeded by almost an hour, with the actual amount of time for the workshop being 200 minutes. This rendered the participants (and the supervisor) more fatigued than expected, so the results may not have been as high-quality as previously thought out to be.

The website was in a work-in-progress state knowingly, so the feedback given would be easier to implement and will not remove too much progress. However it could have definitely been a bit more finalized when given to the workshop participants. Features like the search functionality or date system should have been finalized beforehand, in order to make the participants concentrate energy on less obvious shortages in design.

### **9.2 Conclusion**

The goal of this thesis was to improve the UX of a nightlife event listing website, Kluub, by applying participatory design techniques. The Kluub events listing website was a work-in-progress project with an already developed user interface before this thesis.

The final result of the thesis are new designs of the website made on Figma. To get the feedback for the new designs a workshop applying participatory design techniques was held. This participatory design workshop was based on standards proposed by respected figures in the field, such as Bannon, Spinuzzi and Nielsen.

The workshop was held with the idea of involving potential users in the design process. These potential users should be between the ages of 18-25 and active in the nightlife scene in Tartu.

During the workshop the participants discussed the quality of user experience of the Kluub website. This included leading questions and discussion by the workshop's supervisor and also features, bugs or misses in design noticed by participants individually. Recorded material included the entire workshop's audio recording, post-it notes for when participants noticed some features they did not like or when they wrote their thoughts down on some discussion points and finally low-fidelity pen-and-paper design mock-ups, providing a good set of qualitative data.

These feedback points provided enough information for me to create design mock-ups using Figma to base the next website designs on. These usability challenges included unclear navigation and inconsistent design across pages.

The participatory design approach proved to be highly effective. This method allowed potential users to state their opinion that may have not been discovered by designers. It also had the bonus of the final design being more aligned with potential users' views.

In summary, this thesis demonstrates how participatory design can successfully be applied to a digital product in the middle of active development. By involving the potential user in the development process, Kluub was able to move towards a better, more user-centered design.

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# Appendices

## 1. Workshop Session Schedule

### 1. INTRO - 20 min

- Welcoming words, intro (what the WS is about, the background, what will we do in here, pauses and duration, WS schedule)
- Consent forms
- Announce that we will be audio recording everything

### 2. GAMES / WARMUP - 25 min

- Project onto the following websites:  
<http://www.seiryu-kan.com/>  
<http://www.milliondollarhomepage.com/>
- Ask them feedback about the designs of the websites
- What are the webpages about, can you tell by design?
- When you go out Friday or Saturday, how do you know where to go? What are some channels you get your information from?
- Open up the landing page desktop version on the projector for 5 seconds, ask what it is about. See what they answer based upon. Why just that? (events listing websites, news websites, games websites )
- Put 4 different post-it notes on the wall, “Saying”, “Doing”, “Feeling”, “Thinking”. When they are looking for nightlife events (probably in a social context) they are acting on each element. Ask them to write down one word for each of the elements, put them on the wall

### 3. PHONE IMPRESSION - 25 min

- Give them the page URL, let each of them open it up on their phone. 5 minutes for free exploring, touching stuff. They are gonna check it each on their own, but should talk.
- What vibe does the website give you? Write your keywords onto the sticky notes
- Does the website feel optimized for phone usage?
- Based on your usage of other phone sites, how does it feel? Is everything placed as expected?

- Try to find an event for tonight and tomorrow night. Explain your thoughts while trying to find it.

#### **4. DESKTOP IMPRESSION - 15 min**

- Give each person in the WS a laptop and the link for the webpage. Let them interact with it and free explore.
- Does it feel well-designed? Would you change something?
- Does it feel optimized for desktop usage?

#### **5. LOOK AT COMPETITOR'S WEBSITES - 15 min**

- ra.co, genklubi.ee free explore on each website for some time (both desktop and phone versions)
- Ask feedback about the websites. What do they do better? What do they do worse?
- Something very critical that should be added/removed/fixed ASAP

#### **6. MOCK-UPS - 25 min**

- Give them a few minutes to sketch their own ideas of any screen they would like to improve upon (Landing page, events listing page, single event page, authentication page, about page)
- Let each person describe and introduce their design briefly

#### **7. SUMMARY - 10 min**

- What are your overall feelings towards the website Klub? Is the styling made with the audience in mind?
- What are some places for improvement?
- What are some places that are implemented well
- Thank you for coming, the design will be changed with your ideas in mind and hope you enjoyed etc.

## **2. Project Information**

# Project Information

**Date:** 2.04.2025

**If you have any questions about the project information sheet and/or are unsure what it means for you personally, please email Jan Erik Köst at [jan.erik.kost@ut.ee](mailto:jan.erik.kost@ut.ee).**

## Purpose of the Research

### **What is this research about?**

This research aims to improve the UI/UX design of an events listing website to better serve young adults (18-25) by making it more intuitive, visually appealing, and user-friendly.

### **Why you need to engage with people for this, and what for?**

Since the website is made for real users, their input is essential. By engaging with participants, it is easier to understand how they navigate the site, what they like, and what frustrates them. Using usability testing and a design workshop, direct feedback will be gathered to improve the website, making it more user-friendly and suited to their needs.

## Nature of Participation

### **What will happen during the study?**

**Taking part in this project is entirely voluntary.**

### **It involves:**

- I will be hosting a workshop, where you will:
  - encounter and get accustomed to a webpage and provide your opinion on it.
  - sketching your own renditions of the potential UI design
- The length of the workshop will be around 2-3 hours including breaks.

You can leave the study at any point, without the need to give a reason, by informing the main researcher via email at [jan.erik.kost@ut.ee](mailto:jan.erik.kost@ut.ee).

# Benefits of the Research

## What will I get out of it?

- **Supporting science!** You help to create new knowledge regarding UX design, collaborative design, using workshops to research ideas etc.
- Some snacks during the workshop
- Helping me (Jan Erik) finish my BSc.

# Risks of the Research

## What could go wrong?

- We will do our best to ensure your anonymity, but people who know you well might identify you based on quotes in publications from this project. This however, is very unlikely.
- Since the workshop will be recorded, the resulting data might get accessed and/or stolen by malicious third parties that are beyond our control (examples: computers get stolen, the university server gets hacked). University of Tartu has firm security and privacy policies in place to minimise this risk.

# Use of Your Data

## What happens to my data?

You can read in more detail about how we process your data in the Privacy Notice for this project. The following section gives a summarising overview.

## Data Processing

With your consent, data gathered for this project (audio recordings and schematics drawn) will be used to ...

... to discuss the project (between University of Tartu researchers and affiliate researchers).

... analysed and showcased in University of Tartu's research papers and presentations in academic spaces.

... analysed and showcased on websites and social media (reports, blog posts, twitter).

We will also anonymise you to the best of our ability by removing identifying information.

**We will never publish or share *raw* data, e.g., the recording file of the video call.**

### **Data Confidentiality**

All personal data collected during the study will be processed in compliance with the EU's General Data Protection Regulation (GDPR) and the data protection laws of Estonia.

Data will be anonymised, e.g., by assigning you a pseudonym and expunging identifying information, e.g., if you mention where you live.

### **Data Storage**

Your data will be stored on a hard drive on a University of Tartu's password-protected computer, and in a folder in Jan Erik's University OneDrive cloud storage.

**More information about how your data is handled, can be found in this project's privacy notice.**

## **Withdrawal from the Research**

### **How can I leave the study?**

You can withdraw from the study at any time and do not have to give reasons for why you no longer want to take part. If you wish to withdraw, please contact Jan Erik Kõst via email [jan.erik.kost@ut.ee](mailto:jan.erik.kost@ut.ee).

# Research Background and Funding Sources

This research study is undertaken as part of a Bachelor's degree thesis in Computer Science at the University of Tartu.

## Researcher Contact Details

**Main Researcher - Name:** Jan Erik Kõst, **Email:** [jan.erik.kost@ut.ee](mailto:jan.erik.kost@ut.ee)

Supervisor(s) –Name: Velvet Spors, Email: [velvet.spors@ut.ee](mailto:velvet.spors@ut.ee).

## Contact Details of the Ethics Committee

If you wish to file a complaint about this study or exercise your rights, you can contact University of Tartu's Ethics Committee at the following email address: [eetikakomitee@ut.ee](mailto:eetikakomitee@ut.ee)

### 3. Consent Form

## Consent Form

**Date:** 2.04.2025

**If you have any questions about the project information sheet and/or are unsure what it means for you personally, please email Jan Erik Kõst at [jan.erik.kost@ut.ee](mailto:jan.erik.kost@ut.ee).**

Thank you for wanting to take part in this research study. This consent form asks you questions to check that you are comfortable with the research and to confirm that ...

- 1) you are happy to participate in the workshop
- 2) the ways in which you would like to participate in the research.

**The form assumes that you have checked out the following study documents:**

- **Project Information:** This document describes the project in greater detail and explains what happens during the study.
- **Privacy Policy:** This document explains what happens to your data during the project, your rights and shows which tools and services we will use during the jam.

These documents make sense to you, and you do not have any questions. If you have any questions, please email [jan.erik.kost@ut.ee](mailto:jan.erik.kost@ut.ee).

Question	Your Answer
<b>What is your name?</b>	(please write)
<b>What is your email?</b>	(please write)
<b>I understand what the study is about.</b> I have read the project info sheet.	Yes / No  (please circle)

<p><b>I know that I can ask questions about the study before taking part</b> by emailing the main researcher at jan.erik.kost@ut.ee and all questions that I have asked, have been answered in detail.</p>	<p>Yes / No</p> <p>(please circle)</p>
<p><b>I understand that taking part in this study means creating data in the form of:</b></p> <ul style="list-style-type: none"> <li>- stating your opinion (verbally and in writing)</li> <li>- being in discussions</li> <li>- sketching your improvements on the website design</li> </ul>	<p>Yes / No</p> <p>(please circle)</p>
<p><b>I understand that the workshop will be audio recorded, transcribed, and analysed.</b></p> <p>The workshop will be audio recorded, the transcription will be used at times to recall what we talked about and an analysis will be made. Each person's name will be hidden, as will any personal information, which includes place of study, age, part of city where you are from etc.</p>	<p>Yes / No</p> <p>(please circle)</p>
<p><b>I agree with my data (e.g. what you say and discuss, write and draw) being used ...</b></p>	
<p><b>... to discuss the project (Jan Erik Kõst, Velvet Spors &amp; fellow researchers)</b></p>	<p>Yes / No</p> <p>(please circle)</p>
<p><b>... for research papers and presentations in academic spaces</b></p>	<p>Yes / No</p> <p>(please circle)</p>

<b>... on websites and social media (reports, blog posts, twitter/X)</b>	Yes / No  (please circle)
<b>I confirm that I have read the project's privacy notice which describes how my data is safe-guarded.</b>  I understand that safeguards will be put into place to protect my identity, and data are acceptable to me.	Yes / No  (please circle)
<b>I understand that no computer system is completely secure.</b>  I understand that there is always a risk that someone else might be able to get an unauthorised copy of my data, e.g. the university gets hacked etc.	Yes / No  (please circle)
<b>I give permission for data gathered during this project to be used, copied, excerpted, annotated, displayed and distributed for the purposes to which I have consented.</b>	Yes / No  (please circle)
<b>I agree to voluntarily take part in this study.</b>	Yes / No  (please circle)

**Date and signature:**

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