TimeEdit

Källbom, Anton   Ishak, Andy   Dyrssen, Gustav

Lundeqvist, Elias   Åholm, Niklas

February 6, 2015

Abstract

TimeEdit is the system students at Uppsala University uses for booking of rooms at the different university campuses around Uppsala. TimeEdit also provides schedules and booking of equipment, but none of these is studied in this report. The goal with this report is to gather and analyse data of flaws in design and usability of the booking system.

Contents

1 Introduction

TimeEdit is a system for the students at Uppsala University which lets them book personal meeting rooms for studies. TimeEdit is available in both Swedish and English and lets you book by an available time or by available rooms, with the bookings taking place on its website.

1.1 System Context

The system is used by many universities around Sweden, but this project focuses mainly on the system used by students at Uppsala University for bookings. TimeEdit also takes care of the schedules for all students which is extremely helpful. Whether you are studying history at one campus or economy at another, TimeEdit provides schedules for everyone. But, as already mentioned, this report analyses the booking system.

1.2 User Groups

The system is only available to the users that are students at Uppsala university. The main goal is for the students to be able to book personal meeting rooms in the available facilities. With this being said, the purpose and the needs for the users gets narrowed down quite a bit, due to the fact that the system itself only focuses on that particular goal.

Because of the system being used by only one type of users, with the main purpose of booking a personal meeting room, our studies of the users focuses mainly on that scenario.

We wanted to make sure we had different kind of students for our study, which included users with different kind of computer experience, Swedish speaking users, non-Swedish speaking users and users with different previous experiences of the booking system.

This is because we wanted to see if there were any major differences between users with different backgrounds performing the task of booking a room. We also wanted to make sure that the English version of the booking system was fully understandable for a non-Swedish speaker as well.

1.3 Delimitations

We decided to work on the bigger picture right from the start. This is because of the system being hard to split up into smaller pieces without losing the whole concept of it. We think the important part of the system is to make sure the users are fully able to go through a booking and being able to do so without any confusion or major problems.

Fortunately, the system is not very big which leads to the possibility of analyzing and evaluating all the important parts, which in our case was the whole booking system, without having to leave any loose ends.

There is also room for analysis of the mobile platform, which we also see as an important part of the system. The mobile platform has become widely used by the system's users, and is also worth looking into. However, we decided to not analyze the mobile platform due to our time limit with the project, and instead focusing fully on the full website TimeEdit provides.

2   Method

In order to be evaluating and being able to improve the system, we gathered data from the field by interviewing 25 students from Uppsala University with different educations. By doing this, we got the user inputs to be as wide and qualitative as possible, which would represent a more realistic usage of the system.

We observed the students as they were booking a personal meeting room, and interviewed them afterwards to get their personal opinions. In addition to that, we presented rating scales to the participants, letting them give a rating for different aspects of the system, which made it possible for us to represent the results as diagrams, which can be shown in the section for our results later in the report.

During the interviews we observed the participants, wrote down notes during the booking process in case there was anything worth mentioning, such as major difficulties with certain parts of the website or if the users did any major mistakes which could led them astray when going through the booking process. In those cases, we gave the participants advice to help them continue with the booking, as well as writing down notes about the problem that occurred.

The interview template we used to perform our field study is attached as a separate document, making it possible to view and use it for future observations.

2.1   Users

Our participants in this study were mainly students at the Information Technology Center (ITC), but also students studying in other areas. For a better demographic study, we could have interviewed a larger amount of students from more campuses belonging to Uppsala University, which would have increased our diversity. However, the deadline made us limit our survey to only 25 students. Our participants was not random because we wanted to get people with different backgrounds and experiences. TimeEdit is available in both Swedish and English, so it was important for us to find non-Swedish speakers as well to get more realistic scenarios and perhaps some different inputs, regarding the English version of the website.

The user's experience with TimeEdit differed and we had some participants who had never even used it before the interview and others who had used it more frequently. The users' computer experiences differed as well, with a majority of participants having at least somewhat good to a great computer experience.

2.2 Study Context

The interviews took place in the interviewees campuses, which is the typical environment for where the students usually use the system. The participants got to choose whether they wanted to use the booking system on their own computer or borrow one of our laptops.
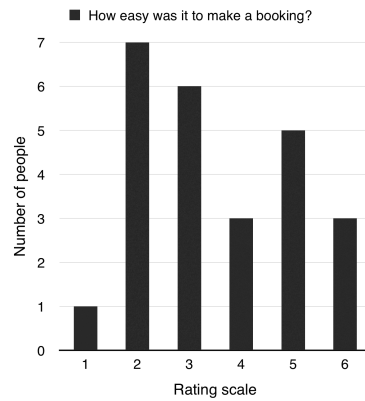
3 Results

Figure 1: *The result of how the participants rated the difficulty of the booking system.*

The results show that with a total of 25 users interviewed, a majority of 14 participants thought it was a little to very hard to book a room through TimeEdit's booking system, which can be shown in *Figure 1* above.

During the interviews, several participants that had chosen to search by rooms mentioned that they got confused with "Client" as an option, and didn't know what it was used for. These were the participants that searched by available meeting rooms instead of by an available time. The reason for this seems to be because of it being an obligatory option that the user needs to select, which is not necessary when searching by an available time, because the selection which is the only one available already is selected.

In *Figure 2* below, we see the results of what the participants thought of the system's user friendliness, where the majority of the participants gave it a rating of 3 or less out of a total of 6.
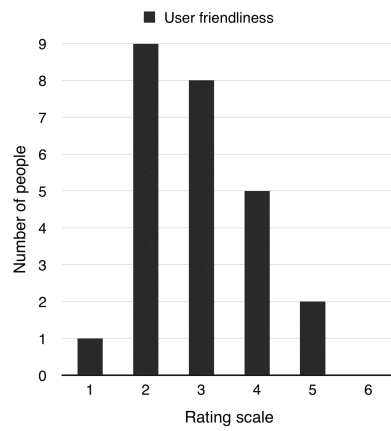
Figure 2: *The result of how the participants rated the user friendliness.*

In addition to that, we also let the participants rate the system's design, which is shown in *Figure 3* below. As we can see, the results were very similar to the results of the system's user friendliness.
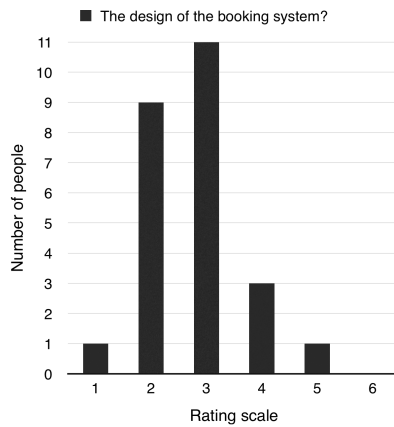

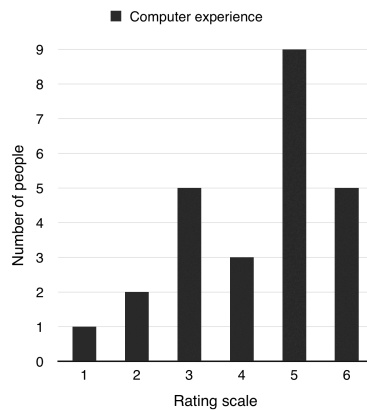Figure 3: *The result of how the participants rated the design.*

Figure 4: *The result of how the participants rated their own computer experience.*

7

We also had the participants give a rating of their own computer experience, which is shown in *Figure 4* above. This was to be able to see if there was any correlations between users with different computer experiences and their experience with the system.

Finally, we had the participants rate the current state of the system, which gives us a good overview of how they experience the system in general. Of the 25 participants interviewed, they gave an average rating of 2.68 out of 6, which can be shown in *Figure 5*.
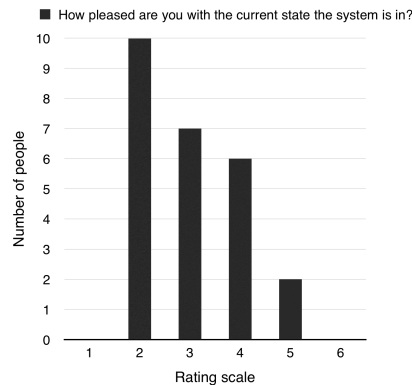

Figure 5: *The result of how pleased the participants were with the booking system.*

3.1   Users' Purposes and Goals

The students using the system have few purposes. This mainly consists of being able to book a personal meeting room at a specific time and in a specific place or manage an already existing booking. Because of it being such a simple system, the most important part of what the users wanted to achieve when using the booking system is for it to be easy manageable and swift. A system as such must be easy to use and to understand, and not to be dependent on a tutorial explaining the process, which it is some cases in its current state.

3.2   Use Context

Each situation is quite similar for each user. The users are able to use the service whenever they want, as long as a computer with an internet connection is available. This is one of the factors to why TimeEdit has become such a major importance to nearly every student's every day life, and why it should be as optimized as possible and adapted to its users, whether they are Swedish speakers or non-Swedish speakers.

As students ourselves, we encounter numerous situations where working in a group is essential in order to work efficiently. A personal meeting room is, in these situations, a extremely beneficial resource that should be easily accessible for all the students at Uppsala University.

4 Discussion

4.1 Usability Problems

Our analysis of the results from the interviews gave us an understanding of that the participants only experienced a few major problems, such as important information not being displayed in English. Furthermore, the participants did not experience a great amount of cosmetic problems on the website.

On the contrary, the majority of the participants that were interviewed, felt that there was a large amount of minor problems, making it significantly harder to use TimeEdit's booking system.

4.1.1 Cosmetic problems

The main part of the design flaws on the website are mainly flaws that in some way affect the user in a way for it to become more of a usability problem. We did, however, experience some small issues with the alignment of the website.

As for now, everything on the website is left aligned. This is not a major issue for some users, but it might be better having some sort of balance on the website, focusing more on a centered layout, which is usually how website layouts are structured on different systems within the university.

4.1.2 Minor usability problems

Our summarization of the participants' feedback made us realize that people find the website design to be problematic because of the changes that occurs during the booking process. The design of the different sections varies a lot. Another problem the users found confusing was the differences in the layouts and graphical interfaces between the different search methods on the website.

All three sections of the website are reasonably pleasant for the eyes, regarding the color scheme and graphics in general, and there are no major problems with any of them. However, the fact that they constantly vary and shift in their layout and design during the booking process is something the users found irritating, confusing and unnecessary. When you observe a website, your mind unconsciously adapts to the style, familiarising it with the design as whole. When the main style of the website changes, your mind unconsciously needs to do extraneous work just to be able to understand the symmetry, design and the overall composition of the website. As these different pages vary and shift throughout the steps in the booking process, it might lead to the mind having to do more work than necessary.

We also recognized that the different search options overlap with each other. As discussed, we think that the two search options should be merged to one as both a room and a time always have to be considered when going through the booking system. Furthermore, the overall design could be augmented into something a bit more user friendly.

By looking at the low results for the overall user friendliness of the system,

it seems to be a contributory factor as for why a majority of the participants found it hard to use the system. When asked, the participants in general were not pleased about the current design, which included the system's layouts and interfaces. By analyzing the results, it seems to be causing the lack of user friendliness.

Our non-Swedish speaking participants mentioned that they found it strange that the front page was in Swedish. This is very strange due to the fact that the front page gives the user information about the client number and a link to a tutorial on how to use TimeEdit. As a result, the non-Swedish speakers might in some cases miss out on important information.

Many of our participants also mentioned that they were uncertain about the choices for "Room size" and "Client". Furthermore, the information provided about the room sizes are all set to zero and not in use, which is unfortunate due to it being a necessary function for some users. Many participants mentioned that they would rather be able to narrow down the results by how many people the room will fit rather than anything else.

"Client" is only a constant number which is the same for every user. The participants responded that it was confusing having to select this option manually. This is not a major problem for most of the users, but it easily confuses new users, making them unsure whether they have a correct value or not for "Client".

We also got feedback about the lack of information about the rooms. What the participants mentioned was that it would be appreciated to be able to view detailed information about the rooms, such as available equipment, board type and perhaps other important details.

Participants who searched by available rooms found it confusing having options for both having to choose a location and a building. The options for choosing a building already contain all the necessary information, which the options for choosing a location does not. This leads to the options for choosing a location to become unnecessary, but also a distraction for the user.

We also observed that a great majority of the participants considered themselves having a good amount of computer experience. When comparing these results with the previous ones showing the difficulty of using the system, it is hard to see any correlation between them. This shows that users might experience problems with the booking system, regardless of past computer experience.

4.1.3 Major usability problems

One major usability problem that we discovered during the interview with one of the participants was that some information was not displayed properly. When choosing the area to make a booking in, some options are not displayed right away. This forces the user to scroll down in order to see all available options.

This might not seem like a major problem, but the area on the site where the user has the choice of scrolling down for more alternatives does not indicate the user that more options exist. This is usually a common way to display options in a list and not a huge problem in general, but it is not obvious to the users, which makes them think the area is unavailable or not included in the system.

The biggest problem with the booking system that both we and the English speaking participants noticed, is the low quality of the English language presented on the English versions of the website. The main problem here is that it is not fully translated, which may cause major problems for some of the English users.

Important descriptions that needs to be seen by the user is fully written in Swedish. For example, there are rooms that are only accessible with a door code. This part of the description is not translated to English. Another example is the restrictions for some of the rooms. Some rooms are only available for certain students, which is also only written in Swedish.