Human Aspects of Software Engineering Lab

University of Zürich
Department of Informatics
Binzmühlestrasse 14
CH-8050 Zürich

Contact Person:
Prof. Dr. Thomas Fritz
Tel: +41 44 635 67 32
fritz@ifi.uzh.ch

Consent Form – AwarenessBar Study

Principal Investigators

Dr. André Meyer, Postdoc at the Department of Informatics, University of Zurich (ameyer@ifi.uzh.ch)

Prof. Dr. Thomas Fritz, Dept. of Informatics, University of Zurich, (fritz@ifi.uzh.ch)

Prof. Dr. Gail Murphy, Dept. of Computer Science, University of British Columbia, (murphy@cs.ubc.ca)

Collaborators

Sebastian Richner, University of Zurich, (sebastian.richner@uzh.ch)

Purpose

In today's digital age, knowledge workers face an ever-increasing number of tasks in their daily work and a high work fragmentation, constantly switching between different tasks and interruptions from co-workers and themselves. To cope with the increasing number of tasks and fragmentation at work, knowledge workers use various task management strategies and task list or to-do applications. Yet, keeping track of and making progress on the tasks can still be overwhelming and difficult.

The aim of this study is to explore an approach, called AwarenessBar, that supports the daily planning and awareness of selected tasks through an ambient display and the approach's effect on task progress and completion.

Study Procedure

Overall, the study spans three to four weeks and consists of the following steps:

Pre-Study Questionnaire and Setup (25 min): As a first step after the eligibility/registration survey, you will be asked to consent to this study and to fill in a preliminary questionnaire on demographics and current task management practices. At the end of the survey, you will be guided through the installation and setup of the AwarenessBar application.

Task Planning Phase (5 workdays, 4 min daily): After the setup, you will be asked to continue your regular work for 5 workdays. During this time, you will be asked (in the morning) to plan up to three of the tasks that are important to you and that you want to commit for the day. At the end of the day, you will be asked to briefly reflect on the tasks and fill in a short end-of-workday survey or end-of-workweek survey (after 5 workdays). We consider a workday as a day on which you plan at least one task and fill in the end-of-day survey.

Task Awareness Phase (10 workdays, 4 min daily): After completing 5 workdays, you will be asked to continue your regular work for 10 workdays. During this time, you will, again, be asked to plan up to three tasks for each workday, reflect on them at the end of the day and fill in a short end-of-workday survey. In addition, a task widget will be displayed visualizing your planned tasks, and you will be asked to track your time spent on the tasks you committed for in the morning.

Post-Intervention Phase (15 + 5 mins): After completing the task awareness phase, you will be asked to fill in a questionnaire asking you about your experience throughout the study and with the approach. After completing the survey, you will be asked to review, export and share the pseudonymized and obfuscated data collected (see more information below) with us. After completing the survey, you will be asked to continue your regular work for another 5 workdays without the task planning, task widget and surveys. At the end, you will be asked to fill in a final very short questionnaire and guided through the de-installation of the application (or re-enabling of the widget and planning if you want to continue using the application).

Potential Interview (15 – 30 min): At the end of the study, we will ask some participants, if they are willing to participate in a follow-up interview to learn more about your experience and gather feedback on the approach. The interview will take no longer than 30 minutes and will be conducted online using a video conferencing tool (e.g., Microsoft Teams). At the time of the interview and independent of this consent, we will ask you if you allow us to record and transcribe the interview using a third-party service.

Benefits and Risks

By participating in this study, you will have the chance to learn more about your task management behavior and explore a novel approach to plan and track the tasks important to you, as well as gain insights of your computer usage while working on your tasks.

The main risk is the loss of time required to participate in the study. The total amount of time for participating in the study will be approximately 2 hours over the three to four work weeks. We are trying to mitigate this risk by allowing you to determine a suitable time for the study participation as well as the sessions with the researchers. Furthermore, you are free to withdraw from participation at any point during the study, without the need to provide a reason.

In addition, once you complete the 15 end-of-day surveys and post-study questionnaire, you will receive a 30 CHF/USD gift card for Amazon, Starbucks, Digitec/Galaxus, or Orell Fuessli.

Personal Information

During the study, we will collect personal information about you such as your name, email, gender, and age. Your name as well as other identifying information will strictly be kept separate at all times and will be stored in a different location from any other information you provide. In addition, some of the data collected by AwarenessBar may contain personal information (e.g., the window titles of active applications/websites). For our research, we will only use your pseudonymized data and no identifying information will ever be shared outside of the research group and the confines of this study without your explicit permission. All data collected will be saved in password-protected storages. The identifiable data will only be stored for a maximum of 5 years before either being de-identified or deleted. Before sharing any data with us, you will be able to review and obfuscate it, as necessary.

Data Collected by AwarenessBar

During the study, AwarenessBar collects data about your computer and application usage, such as active window titles, process names, website URLs, and timestamps. This data is only stored locally on your computer. Additionally, you are asked to define up to three tasks that are important to you and that you want to commit to for each workday, track the time you spend on these tasks and reflect on your day. This is done through our application, which stores all your data locally on your computer.

At the end of the study, you will be asked to share the following data:

- Task data: title, description, duration, timestamps when you started and stopped the times for the tasks, task completion state;
- Self-reported data at the end of the day;
- Time spent working on the planned tasks versus active time on computer;
- Computer usage data: duration and timestamps when you were working on your computer, window and application switches, switches between the selected tasks as well as other work, time spent on certain types of applications, such as social media/news;
- Pseudononymized log data from using AwarenessBar.

No data is automatically shared with us. You will be guided through the process of exporting your data and given enough time to review the data and choose what you want to share with us. For this research, only your pseudonymized data will be used and no identifying information will ever be shared outside of the research group and the confines of this study without your explicit permission.

If you participate in the interview, we will collect the audio recording and transcript of the interview. After the transcription is revised and completed, the audio recording will be deleted.

Uses of the Study Data

The results of this study will potentially appear in both internal and external academic research presentations and publications, such as academic journals and conference proceedings. Whenever we will refer to our findings, we will ensure to publish only fully anonymized and fully de-identified information using pseudonyms (e.g. P09).

Contact for Information about the Study

If you have any questions or want further information with respect to the study, you may contact Dr. André Meyer and Prof. Dr. Thomas Fritz via email to awarenessbar@hasel.dev.

Consent for Study Participation

Your participation in this study is entirely voluntary. You are free to withdraw your participation at any point during the study, without giving any reason and without any negative consequence. Any information you contribute up to your withdrawal will be retained and used for this study, unless you request otherwise.

With your consent to this form, you confirm the following statements:
- I understand the goals and procedures of the study and the applicable conditions.
- I had the opportunity to ask questions. I understood the answers and accept them.
- I am at least 18 years old.
- I had enough time to make the decision to participate and I agree to the participation.

In no way does this waive your legal rights or release the investigators or involved institutions from their legal or professional responsibilities.

In case you participate in the follow-up interview, we will ask you at the time of the interview if you consent to use using a transcription service to transcribe the interview.