University of Zurich UZH

Human Aspects of Software Engineering

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Consent Form – "Gstell" Study

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Purpose

In recent years, knowledge work continuously shifted towards the web, with knowledge workers spending a big part of their time in the web browser, finding, navigating, or editing information relevant to their work tasks. The growing usage of the web browser for the various tasks, and the frequent task switching in the workplace, often results in knowledge worker having many web browser tabs and windows open. As a result, knowledge workers spend a significant amount of time navigating through the tabs and windows to (re)find relevant information, impacting their attention, increasing cognitive load, and reducing productivity.

The aim of this study is to examine an approach we developed to support knowledge workers in their organization of web resources and evaluate whether it can help to improve their experience and focus at work.

Study Procedure

Overall, the study spans 15-20 workdays and consists of the following steps and phases:

Setup Session: After completing an eligibility survey and signing this consent form, you will be asked to fill in a pre-study questionnaire with questions on demographics and online browsing habits. After the completion of the questionnaire, the research team will introduce you to the study and help you install the approach (a browser extension and a native application) on your system. This session should take **no longer than 30 minutes** of your time (including the questionnaire).

Baseline Phase: For the first 5-7 workdays, you will be asked to just work as usual. During this period, the approach will collect information on your browsing behavior in the background on your machine in a privacy-preserving manner (for more details, see chapters on "Data Collection" and "Data Storage"). This phase will **not require any extra time commitment** from your end.

Mid-Study Session: After the Baseline Phase, we will introduce you to our approach, called *Gstell*, by giving you a short demo of the approach and its features. This session will take **no longer than 30 minutes**.

Intervention Phase: After the introduction to Gstell, you will be asked to continue your regular work and online browsing for 5-10 workdays. During this time, we encourage you to actively manage your browser tabs using Gstell. Several times a day, our approach will also prompt you with a questionnaire on your usage of Gstell and your web browsing, taking about 1 minute each time and **no longer than 5 minutes a day**. Your responses will help us to learn about the usefulness and impact of the approach.

Post-Study Session and Wrap-Up: After the intervention phase, you will be asked to participate either in a follow-up interview or an online questionnaire to better understand your experiences with Gstell. After the interview or the questionnaire, we will show you how you can review your anonymized and obfuscated data and ask you to share it with us (if you consent) via a secure university server. This last part, including the interview or questionnaire will take **no longer than 60 minutes.**

Benefits and Risks

By participating in this study, you will have the chance to learn more about your personal browsing behavior and potentially explore a novel approach to better manage the web pages you use for your work. For participating in this research project and finishing the study, we will donate CHF 10 to a non-profit organization and you can chose to be entered into a raffle to win one of several CHF/USD 100 gift cards. You may also learn more about your behavior using the web browser and benefit from better tooling and support to manage your personal information in the browser and beyond.

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 3 hours over the 15-20 workdays. We are mitigating 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.

Data Collection

During the study, our approach collects data about your online browsing and your usage of Gstell.

<u>Web Browsing Data:</u> Gstell collects and locally stores data about your web browsing, including URLs, favicons, and titles of web pages you visit during the study. This data remains local on your personal machine. This practice resembles Google Chrome and other browsers which save your browser history on your local system. At the end of the study, you are asked to provide us a privacy-preserving and reduced version (if you consent) of the local data which obfuscates URLs and does not comprise web page titles nor any other information that can be used to identify the web page you visited.

<u>Gstell Interaction Data:</u> To function, Gstell saves textual data that you enter or modify through its user interface, as well as any interaction data with the user interface itself. At the end of the study, we will ask you to share an obfuscated version of the interaction data (no plain text data).

Data Storage and Confidentiality

All data will be treated confidentially and only reside on machines of the university researchers. Your data will be used and seen only by researchers directly involved with this project. Interviews may be audio recorded (if you consent) and will be transcribed by a university-approved professional transcription service (if you consent). After the transcription is created, the audio recording will be deleted. In case there are any identifying information in the transcripts or any other collected data, the researchers will manually remove them before starting the data analysis.

In any case, raw data may not be stored for longer than one year. All identifying information will be kept strictly separate at all times from any other collected data and will be stored in a different location at the University of Zurich. Only the involved researchers will have access to this information. Furthermore, it will not be associated with the data after it has been analyzed. After the study is finished, your identifying

information will be permanently deleted. The anonymized, non-identifiable data produced from the study will be stored for five years, after which it will be permanently and irrevocably 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.

Contact for Information about the Study

If you have any questions or desire further information with respect to the study, you may contact Roy Rutishauser (roy.rutishauser@uzh.ch) or Prof. Dr. Thomas Fritz (fritz@ifi.uzh.ch).

Consent for extended Data Uses

With your explicit consent, you can allow the researchers to record web browsing activity (in a privacy-preserving manner):

❏ **I allow the privacy-preserving recording of my browser activity.**

With your explicit consent, you can allow the researchers to transcribe the audio recording of the interview using a university-approved transcription service:

❏ **I allow the use of a transcription service to transcribe my interview.**

With your explicit consent, you can allow the researchers to share the results or ask you to participate in future studies.

❏ **The researchers might contact me in the future inform me about further studies.**

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 in this study, unless you request otherwise.

With your signature on 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.

_____

Participant's name

_____   _____

Location, Date   Participant's signature