Idea Bits: A Tangible Design Tool for Tangible Interaction Design Novices

Study participants wanted. Participant will be paid $25.

Get paid for trying out a tangible design tool!

Who? Student at SFU
When? July 2019
Where? SIAT, SFU Surrey

For more information please contact Uddipana Baishya at ubaishya@sfu.ca
INFORMED CONSENT BY STUDENT

Title: Idea Bits: A Tangible Design Tool for Tangible Interaction Design Novices
Principal Investigator: Uddipana Baishya (ubaishya@sfu.ca, 604-704-9792)
Senior Supervisor: Alissa N. Antle (aantle@sfu.ca)
Investigator Department: School of Interactive Arts & Technology (SIAT)

Purpose and Goals of Study: The study you have been asked to participate in is part of the Master’s thesis project of an M.Sc student at SIAT (Uddipana Baishya). The researcher is investigating how Tangible Interaction Design (TIxD) novices use a tangible design tool to generate, select and detail ideas for tangible systems, along with planning the technical implementation of these ideas. Uddipana, under the supervision of Prof. Alissa Antle from SIAT SFU, developed an exploratory prototype of such a tool, Idea Bits, which consists of interactive physical artifacts that enable users to experience a set of input actions for tangible systems. These artifacts are coupled with digital examples of tangible systems and technical implementation guidance, shown on a laptop display, to help users understand how to implement the input actions. The study will involve about 1.5 to 2 hours long session, including interview, conducted individually in a SIAT lab. You will use Idea Bits to come up with design solutions for a given design problem. You will represent your ideas using typical design representations methods such as notes, annotated paper sketches and physical 3D models.

Ethical Conduct: The University and those conducting this study subscribe to the ethical conduct of research and to the protection at all times of the interests, comfort, and safety of participants. This form and the information it contains are given to you for your own protection and to ensure your full understanding of the procedures and benefits described below.

Potential Risks of the Study: There are no expected risks associated with participation.

Voluntary Participation: Participation is voluntary and you may withdraw at any time. If you do not participate or quit the study, it will not impact your grades or status at the university in any way.

Potential Benefits of Study: You may benefit from this study by learning how to better generate ideas for tangible systems, while also learning about a set of input actions for tangible systems. This research project will contribute to the development of tangible design tools which will aid TIxD novices to better generate ideas for input actions for tangible systems.

Study Procedures: The study will be about 1.5 to 2 hours long and will be scheduled based on your convenience and availability. The study will be conducted individually in SIAT research labs at SFU Surrey. In the session you will be briefed about some TIxD and idea generation concepts, shown how to use Idea Bits and asked to use Idea Bits to conceptualise design solution ideas for a given design problem. You will be asked to represent the ideas using typical design
representations methods such as notes, annotated paper sketches and physical 3D models. You will also be asked to verbally explain your design ideas. You will be asked some interview questions during and following the session about your experiences. For example, we might ask in an interview question “What did you like about generating ideas using Idea Bits?” or “What were the issues you faced while using Idea Bits?” You will not be assessed for marks on any aspect of your performance in this study. You will fill a questionnaire for collection of demographic data such as age, gender etc. You can choose whether we can re-contact you as part of the study or after the study (see check boxes below).

**Use of Participant Data and Study Results:** The data gathered in this study will be used to understand how TIxD novices use IdeaBits. We will video tape the sessions and interviews, do screen recordings of the laptop used as display, and collect your notes, annotated paper sketches and physical 3D models you created to represent your design solutions so that we will have this information for later use and can focus on working with your during the sessions. The data gathered during the study sessions will only be viewed by the primary investigator (Uddipana Baishya), her supervisor (Dr. Alissa N. Antle), and other research assistants in Dr. Antle’s lab. The results of this study, including video which may be used for illustrative purposes, may be shared with the faculty and graduate students at SFU and may also be included in graduate student thesis work, published academic research papers, uploaded to a project website and/or presented at academic conferences.

**Confidentiality:** All data will be indexed by a numeric identifier for session and participant. Personally identifiable information such as your first and last names will never be used to refer to your data under any circumstances. All digital data will be kept on a password protected external hard drive in a secure cabinet in Dr. Antle’s research lab at SFU, or on a secure server at SFU. All physical data will be kept in a secure cabinet in Dr. Antle’s research lab at SFU. All data will be kept for at least two years and will be destroyed, if unused, after seven years. You have to be videotaped, as a part of the study recording, to participate in study (see check boxes below). However, you can opt out with another checkbox below if you don’t want to appear in pictures or video clips used in a published thesis, journal, conference paper, presentation or promotional video (e.g. for grant applications).

**Remuneration:** You will be paid $25 on completion of the study session and the interviews.

**Withdrawing Consent:** You can withdraw from the study at any time and it will not affect your grades or status at the university in any way. Any data collected will be destroyed. You shall receive the remuneration.

**Complaints:** If you have any concerns about your rights as a research participant and/or your experiences while participating in this study, you may contact Dr. Jeffrey Toward, Director, Office of Research Ethics at jtorward@sfu.ca or 778-782-6593.

**Contact:** If you have any questions about this study or you would like to obtain copies of the results of this study, you can do so by contacting the principal investigator named above.
Your signature on this form will signify that you have received this document which describes the possible risks, benefits and procedures of this research study, that you have received an adequate opportunity to consider the information in the document, and that you agree to participate in the study.

Participant’s first and last name

☐ I give consent to be photographed and video (including audio) recorded as a part of the study recording.

☐ I give consent to appear in photographs and video segments (includes audio) in academic publications, presentations, or promotions. (optional)

☐ I give consent to be re-contacted as part of the study or after the study. (optional)

Signature of participant

Date

Email Contact (Optional)