**Whom to Contact about this study:**

Principal Investigator(s): Dr. Stacy Branham, Dr. Ravi Kuber

Department: Information Systems

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***Title: Investigating Indoor Navigation Application Development for Individuals with Diverse Abilities***

1. **INTRODUCTION/PURPOSE:**

The purpose of this study is to (i) identify the experience of mobility of individuals with disabilities as they get around on a daily basis (e.g., to work, the grocery store) to better understand the factors that determine which routes they take, and design for these types of solution, and (ii) examine ways in which collaborator TRX’s NEON application programming interface (API) can be used by developers so that their applications are accessible to people with disabilities.   Findings from the study may be used to help inform the design of future navigation and day trip planning technologies. About 30 persons will be invited to participate.

I am being asked to participate in this research study because I am a member of a population that may have unique mobility needs (e.g., older adults, guide dog users, wheelchair users). I may alternatively or additionally have experience as a software developer of Java and/or Android Studio. My involvement in this study will begin when I agree to participate.

1. **PROCEDURES:**

As a participant in this study, I may be asked to take part in one or two workshops that may last between 1.5 and 3 hours. One workshop will focus on designing a mobile system that helps people plan day trips. Another workshop will involve developing a computer application for planning day trips as part of a hackathon-type competition. If I choose to participate in the second workshop, I will meet with the researchers in advance to ensure I have the proper software tools (e.g., Java, Android Studio or Eclipse) loaded and set-up on my computer. During any of these sessions, I may be asked to take part in short interviews to share my experience with planning day trips and wayfinding, with developing designs and code, and to present my developed application to other participants. The sessions will be audio recorded and notes will be taken by researchers throughout the study sessions. The study will be held at a mutually-agreed upon venue (e.g., the UMBC campus, the National Federation of the Blind).

1. **RISKS AND BENEFITS:**

My participation in this study does not involve any significant risks and I have been informed that my participation in this research will not benefit me personally, but will contribute to a better understanding of the potential impact of technology design on different user populations.

1. **CONFIDENTIALITY:**

Any information learned and collected from this study in which I might be identified will remain confidential and will be disclosed ONLY if I give permission. The investigator (s) will attempt to keep my personal information confidential.  To help protect my confidentiality, all information collected in this study will be stored on a secure computer server (approved by UMBC’s Institutional Review Board). All information collected will be kept confidential using arbitrary participant numbers. Only the researchers will be able to link data to my identity. Only the investigator and members of the research team will have access to these records. The research team is subject to change. If information learned from this study is published, I will not be identified by name. By signing this form, however, I allow the research study investigator(s) to make my records available to the University of Maryland Baltimore County (UMBC) Institutional Review Board (IRB) and regulatory agencies as required to do so by law.

Consenting to participate in this research also indicates my agreement that all information collected from me individually may be used by current and future researchers in such a fashion that my personal identity will be protected. Such use will include sharing anonymous information with other researchers for checking the accuracy of study findings and for future approved research that has the potential for improving human knowledge.

1. **COMPENSATION/COSTS:**

My participation in this study will involve no cost to me. If I am asked to participate in an interview during my session, I will be compensated at a rate of $20/hour. Interviews will not last more than about 90 minutes. If I am asked to take part in the programming competition session, depending on my rank in the competition, I may receive a $150, $100, or $50 team prize based on the outcome of the hackathon. My reasonable local commuting costs to the location of the study will also be paid, at a maximum flat rate of $20 per session.

1. **CONTACTS AND QUESTIONS:**

The principal investigator(s), Dr. Stacy Branham and/or Dr. Ravi Kuber have offered to and have answered any and all questions regarding my participation in this research study. If I have any further questions, I can contact Dr. Stacy Branham (sbranham@uci.edu) and Dr. Ravi Kuber (rkuber@umbc.edu).

If I have any questions about my rights as a participant in this research study, contact the Office of Research Protections and Compliance at (410) 455-2737 or

[compliance@umbc.edu](mailto:compliance@umbc.edu).

1. **VOLUNTARY PARTICIPATION**

I have been informed that my participation in this research study is voluntary and that I am free to withdraw or discontinue participation at any time. I have been informed that data collected for this study will be retained by the investigator and analyzed even if I choose to withdraw from the research. If I do choose to withdraw, the investigator and I have discussed my withdrawal and the investigator may use my information up to the time I decide to withdraw.

1. **SIGNATURE FOR CONSENT**

I have read the entire consent form and all of my questions have been adequately addressed.

☐ I **agree** for my voice to be recorded

☐ I **do not agree** for my voice to be recorded

The above-named investigator has answered my questions and I agree to be a research participant in this study.

Participant’s Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Participant’s Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Investigator's Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. If consent is sought **via phone**, the researcher will fill out the following information immediately after asking the participant if they have received this form and, if so, whether they have any questions. If they have not received or read the form, the researcher will read the form in its entirety over the phone before taking questions and asking for consent:

☐ The participant **agreed** to participate in this study.

☐ The participant **did not agree** to participate in this study.

Participant’s Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date and Time of call: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Phone #: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Investigator's Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_