PhoneLab Participant Agreement

August 10, 2012

1 Overview

PhoneLab is an open-access, large-scale, participatory smartphone testbed operated by the PhoneLab team ("we") in the Computer Science and Engineering Department at the University at Buffalo, The State University of New York. It consists of smartphones, participants that use the smartphones, and control software. It is designed to be open-access, meaning that researchers inside and outside of UB will conduct research studies using PhoneLab. It provides realism by having participants use the smartphones in real life; this will allow research experiments to be put under realistic conditions.

This document contains terms and conditions that each and every participant ("you") should be aware of and agreed upon before receiving a smartphone from us.

2 Unlimited Plan from Sprint

The smartphone service plan we provide to you is an unlimited plan from Sprint. Our plan includes: Unlimited Texting, Unlimited Data, Unlimited Mobile to Mobile calling, and 300 minutes to landlines. We do not cover international roaming charges. We will pay for your service plan from August 2012 through July 2013. After July 2013, you will be responsible for the monthly bill. The monthly price we negotiated with Sprint is $44.23/month.

3 Duration of Participation

If you decide to stop participating in PhoneLab, you can do so after July, 2013. At that point of time, you will need to return the smartphone back to us.

4 Research Participation

The academic year 2012-2013 will be our first year of operation. Because of this, we expect different kinds of participation from the Fall to the Spring Semester. The following participation is required; if you fail to participate, we will communicate with you to reach a resolution, which may result in getting your phone returned back to us.

4.1 Fall, 2012

In the Fall 2012 semester, we will mostly focus on refining the website and software running on the phones. Accordingly, the participation from you should be the following:

- You should use the participant's phone as the primary phone. This is the most basic level of participation because the testbed's goal of realism depends on this model of usage.

- Your participation will be largely transparent. Most of the time in the Fall 2012 semester, you will just need to use your phone.

- A few times a month, we will communicate with you through email for important updates related to the operation. Some of these updates might require you torespond and react accordingly.

- We will also ask you to use the PhoneLab app and website to evaluate new features.

- We will be pushing out software updates regularly to your phone. This is an automatic process, but will need your confirmation by asking you to touch a button we display on your phone. If you confirm, then your phone will reboot itself automatically and update the software. The whole process will take around a minute of your time.

- For rare occasions when a phone behaves erroneously, we will provide instructions on how to restart or reset the phone. In the worst case, you might have to come to Davis Hall so we can fix it.

4.2   Spring, 2013

In Spring 2013, we will start conducting research experiments with you and your phone. The team will continue updating the software and push out new updates to your phone, but the frequency of the updates will be reduced significantly. There are two types of experiments we will conduct, which differ in the level of participation.

- Background experiments: We will conduct research experiments that do not require any attention from you. One example in this category is the network performance measurement study, where we collect WiFi, 3G, and 4G network performance numbers; this information gathering does not require any attention from you, and your participation is transparent—just using your phone normally as your primary phone.

- Interactive Experiments: We will also conduct research experiments that require you to actually use an application. This will involve downloading an app and using it regularly while the experiment is taking place. Your participation should model similar to this:

  - Downloading an app from our website and installing it,
  - Following the instructions on how to participate in the experiment,
  - Optionally giving feedback to the researchers via our website or the app itself.

Some interactive apps might just ask you to participate in a survey or visit a website; other apps might ask to perform some specific tasks. A good example of this kind is the Core Sample project (`http://www.terirueb.net/core_sample`) by Teri Rueb at UB Media Study, where a participant uses the app for 15 - 20 minutes while visiting certain locations. Since these interactive experiments require time and attention from you, we will limit this type of participation to a few hours a month.

4.3   Later Years

After the academic year 2012-2013, we will be thoroughly reviewing the progress. We will point out our strong and weak points and address them. We will also review the participation policies and update them as necessary.

5 Data Collection

Distributing smartphones to real people as part of our research involves collecting information from your phone, which sometimes involves information considered private. Thus, it is critical that you understand what data is collected and how it is used.

5.1 Data Collection Overview

- Protecting you is one of our priorities. PhoneLab is a *participatory* testbed; this means that without participants like you, PhoneLab cannot exist. Because of this reason, from the inception of PhoneLab, participant protection has been one of the priorities in our decision making process.

- The operation of PhoneLab will be transparent. This means that at any point of time, if you want to know what information has been collected, how it is used, or even where it is stored, you will be able to review it.

- Research studies will require IRB (Institutional Review Board) approval. Getting IRB approval is common in the fileds of medicines and psychology, where research studies involve human subjects. The approval process requires each experiment to be reviewed by a group of experts to ensure that the experiment protects the rights of the participants and is safe. This process is per-institution; for example, UB has a website (`http://www.research.buffalo.edu/rsp/default.cfm`) that explains UB's procedure. Each of the PhoneLab research experiments will require the approval of IRB as part of the PhoneLab's protection mechanism for participants.

5.2 Types of Information Collected

There are two types of information collected from your phone.

- Information for PhoneLab Operations: The first purpose of collecting phoneinformation is to operate PhoneLab. The following information will be collected:

  - Phone status: We will periodically check if the phone is operating properly since knowing the health of each phone is obviously crucial for the operation of PhoneLab.

  - Phone location: We will periodically record where the phone is based on its GPS and WiFi information. This information will be used strictly for operational reasons, e.g., to locate a phone when it is lost or stolen. This will not be released to anybody outside of the PhoneLab team.

  - Phone battery level: It is important to minimize any potential disruption that PhoneLab software might cause for normal phone usage. For this purpose, we will monitor the battery level of your phone to avoid performing any task that can potentially drain much battery.

  - Application logs: Each smartphone app usually generates information (called *logs*) for trouble shooting. As part of the effort to ensure that your phone operates properly, we will collect these logs to use them for trouble shooting.

- Research Studies: The second purpose of collecting phone information is toconduct research. Since PhoneLab is an open-access testbed that researchers inside and outside of UB can conduct their research with, it is difficult to foresee all information that future research will need to collect. Due to this reason, we will communicate with you regarding what information each experiment will collect and ask your permission per experiment. Before you agree to participate in an experiment, you will have

an opportunity to review it and decline participation if you are not comfortable with the information collected by the experiment.

6   Broken/Lost/Stolen Phones

It is your responsibility to manage and maintain your phone just as you would with any normal phone. Our service provider, Sprint, has a policy to provide a replacement for a $100 fee. If, for some reason, your phone gets broken, lost, or stolen, you will be responsible for this fee to get a replacement.