

CNT5106 Fall 2008

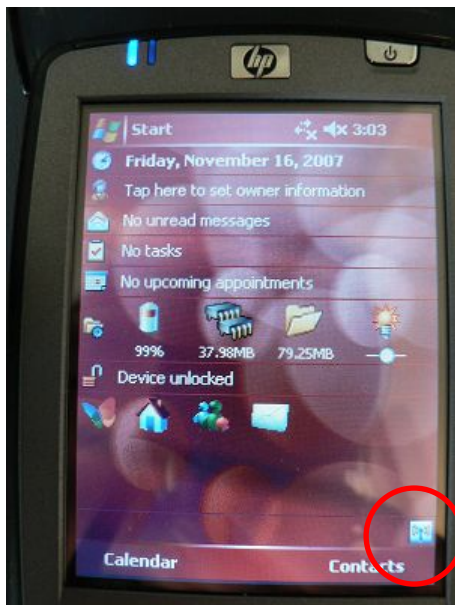
Prelude to Experiment – HP iPAQ

Before starting experiment 2, you are given the opportunity to collect some Bluetooth traces for your experiment. You are collecting data to prepare yourselves and also to have a richer set of data for the upcoming experiment. Following is the step-by-step instructions on how to collect data using the Bluechat program on the handheld devices you will be given.

This is not a difficult task – but you do have to remember to charge your device when the battery is running low and also keep an eye on whether your Bluetooth is up and running or whether your Bluechat program is working, etc. periodically since any time your trace collection is not working, you are losing important trace data.

Usage of the Bluechat program

0. Before starting, make sure the Bluetooth radio on the device is turned on and wifi is off (to minimize battery drainage).

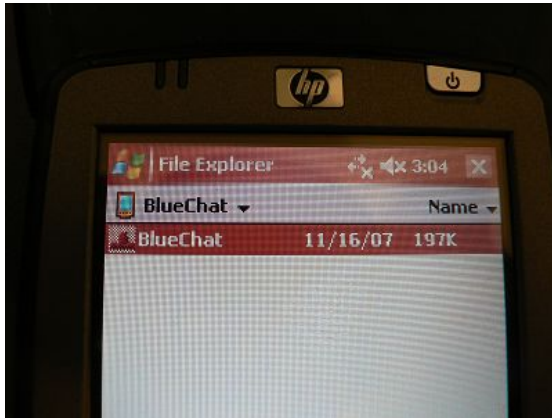


(Click on the wireless radio icon)



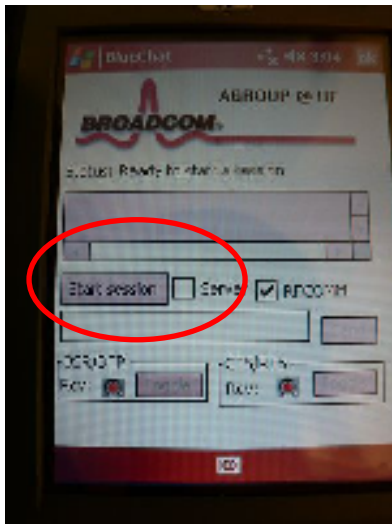
(make sure that Bluetooth is on (in green))

1. Start the program at “File explorer -> Program Files -> BlueChat”



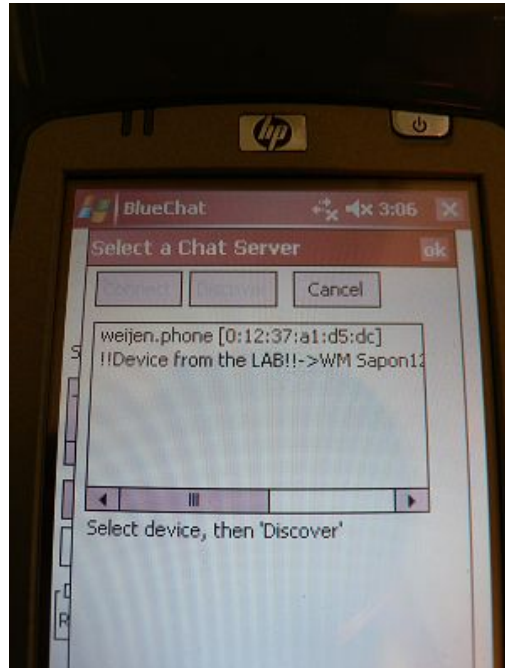
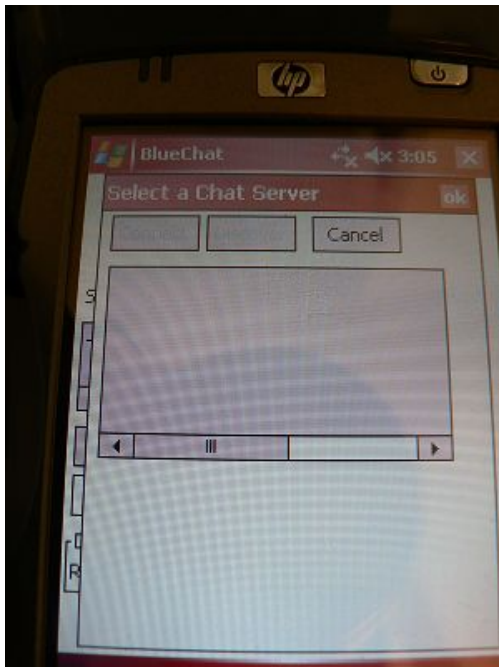
(Start Bluechat)

2. After you start the program, click on the button “start session”



Click on “Start Session”. The check box next to “server” is NOT checked, keep it that way.

3. A new window should pop up. The title of the window is “Select a Chat Server”
4. In the text box below, you will see the current neighbors (the other Bluetooth devices in communication range). All devices you see here are also logged in the file automatically. The list refreshes every 3 minutes (old devices are removed from the list). Every 30 seconds, the program attempts a new round of discovery.



(This is what you should see... After some time you will discover close-by Bluetooth devices. The tag “!!Device from the LAB!!” is to let you know someone from the class is around)

Caution: When you close this window, please click on the ‘Cancel’ button. Clicking on OK will create problems to re-start the scanning process from the main window, unless you quit the BlueChat program completely. (So, if you click on OK, just close the BlueChat program and restart it.)

5. Sometimes a round of discovery may fail and the message “Failed to start device inquiry” appears below the text box. You can ignore that message as another round of discovery will restart in just 30 seconds. Also, ignore the message “Select device, then ‘discover’”. It is not relevant to our experiment.
6. You may want to check the log file “EncounterTrace.txt” in the root directory (open “File explorer”, go all the way up until you cannot move up further) to make sure the encounters are logged and monitor your progress. Again, do not attempt to modify this file, as we are able to discover it, and manipulated data set makes the whole study meaningless.
7. The bluechat program appends the new encounters to the log file, so you can shut down the bluechat program any time and restart it if you want to do so. Note that the device runs on battery, so it takes about 12 hours for it to deplete the power if you run the discovery program continuously. (No panic though. A charger will be provided.)