Fourth meeting

22nd May; 11:30

Meeting begun

Discussed proposal, briefly

Tsu-Shiuan's section

Prof. Marsden had the following to say:

- We must realize that the internet is expensive.
    - Uncapped is becoming less common for wireless data plans
    - Price is higher in Africa; fewer device owners can afford to use data extensively.
- WE must also realize that devices are powerful, and increasingly affordable.
    - If cellphones can take the role of servers, then there is a possibility for local cloud computing; "Cloudlets"
    - Other ways of transferring large data without networks?

How do we do this?

After discussing Batman protocol, it was decided that batman should be abandoned. Set-backs that lead to the possibility of project failure too high in honours environment.

Rather considering things such as the following:

- Investigate Broadcast mode
- Investigate calling services
- Investigate fake broadcast mode
- Investigate an elitist selection mode

Important to consider Energy, latency, throughput with regards to the above.

Fake broadcast is possible

> Send a request to each device in sync.

Also dependant on the kind of input possible from Bryan's section.

Bryan's section

Device discovery, and the evaluation of different discovery methods is the main component of the section.

All methods must be evaluated on:

- Robustness
- Power consumption
- Latency
- Security

Need to think about how the list of available phones is stored and update.

- Distributed database?
    - Every device keeps track of every other device
- Most powerful phone keeps track of phones.
    - If that phone leaves, the network breaks
- Centralized cloud based registrar?

Must also think of how these lists will remain transmitting data backward and forward over phones.

- Bluethooth, wifi, or other architecture service

Sashen's section

Spoke about Asynchronous and synchronous file transfer interfaces

- Synchronous – both users must be present in order to initiate transfer
    - Simplest approach
- Asynchronous – can initiate transfer at any time, but transfer only begins when intended recipient is present.
    - More difficult to manage
    - Could still work
        - Drag file to person's tile
        - Begins transfer at next wifi connection with person.

Spoke about how to design this user interface. Considered participatory design, ethnographic methods, technology probes and expert interviews

Decided on:

- Technology probes
- Expert interviews

Suggest reading CCW(?) literature

Think about whether you are designing co-located devices, or whether your device is for co-located people; there is a difference.

Conclusion

Reviewed proposal presentation content. Suggested each student keeps it simple. Only talk about the parts we are certain of. Field all questions.