

Designing Interactive Systems I

DIA Cycle, Observing Users, Brainstorming, Storyboards, and Sketching

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Review

- What are different phases of the technology lifecycle?
- What were the key advances of
 - Put That There?
 - Apple Knowledge Navigator?
 - Starfire?
- What were the lessons learned from producing the Starfire video?
- What were different device classes of PARC's Ubicomp?

Ubicomp vs. PC, VR ... Continued

- Ubicomp = disappearing computer = augmented reality = calm computing
- Goal is to activate the world, putting computers into everything
- “PC” is just a transition towards real potential of computing, which will focus on human environment
 - Carrying a super-laptop is like owning just one very important book. Even customizing or having millions of it doesn't unleash literacy.
 - Multimedia as used today makes machines even more attention-grabbing, not disappearing
 - Psychological reasons for disappearing technology: Heidegger's hammer, compiling
- ≠VR: VR lets you explore unreachable worlds but tries to simulate infinite variety of reality instead of augmenting it.

Ubicomp Predictions

- Small displays, faster CPUs: correct
- Battery prediction too optimistic (days of use at 1000x800)
- Memory underestimated
- High-resolution walls (80+dpi, 10s of Mpix) over several feet: Achieved recently with 8K screens
- OSs today assume fixed hardware configuration, but in Ubicomp, devices come and go
- Window systems assume fixed base computer
- Ubicomp diversity of input devices not being dealt with well
- Network: Bluetooth LE, problem of multiple connections

The Wrong Way:

