1. How did our servo (Lecture 21) know when it needed to rotate right or left to move to correct position?

2. Given that we have a goal for user interface (e.g., new user can accomplish task in 30s), how can we use a focus group to evaluate if the goal is met?

3. Steve Jobs used to motivate his engineers by noting how many lifetimes would be saved if they could shave another second off the boot time for the early Macintosh computers. Purely on simple cost-accounting grounds, how many computer instructions should we be willing to spend in order to save 1 second of human time? Assume:

   - $300K/year total compensation salary; 250, 8-hour workdays/year [compute cost per second]

   - energy cost dominates cost of computer purchase [so, we will ignore the cost of buying or depreciating the computer itself.] – assume each instruction executed costs 10^{-15} cents for energy.

   - (an alternate consideration might be renting computer time on a cloud, like the Amazon EC2 – that number would be higher as it would include depreciation, maintenance, and profits.)

   While there are many other considerations to really make here, this is an (overly simplified) bottom-line consideration for an employer or software developer: How should I tradeoff computer time and human time to reduce overall expenses?

4. How could availability of GPS information be used to make finding a relevant bus stop or bus schedule easier?