P3: More toys, more learning

The P3 project is a second design cycle, following the P2 skits. The topic continues to be toys for learning, and we would like you to start looking more broadly for inspiration and knowledge. Maybe try other public places like playgrounds, talk to educators, parents, and others with expertise, poke around the web, and of course feel free to go to some of the sites you heard about from the other teams.

The general goal of the observations is similar, but the emphasis is shifting (and will shift further with P4). At this point, you should have in the back of your mind both what you learned about the user needs from the presentations this week, and what you will be doing in actually building prototypes. As you come up with ideas, think about what it would mean to build a "real" prototype for the final project. This may not be a full working model, but it has to provide enough functioning to be useful in testing. In general, we will expect some working computer "stuff" including software and hardware. We will be introducing the hardware platforms we are making available next week. You will have the P4 round to really work this out, but the P3 you present this week should be a first cut at something that is *doable this quarter*.

For this course, we are bending one of the basic philosophies of user-centered design, which is to avoid starting with a technical solution and pushing it onto needs. However, for learning about interface design, we want you to evaluate potential projects based on having a rich potential for interaction (physical and electronic) that you can design. If you have a brilliant idea for solving a problem without people having to interact, or without using computers and electronics of any kind, that could be great for a startup, but not right for a HCI Design course. As we saw in P2, there are great possibilities for "hybrids" that combine some aspects of physical interaction with computer software, screens, etc.

The P3 deliverables

For P3, we are opening up a bit from the specific skit-based deliverable of P2, though you may decide that is the best for your purposes. P3 is still primarily at the idea-generation part of the design cycle, but we would like you to explore a bit of building – some kind of mockup, physical representation, etc. that you can use in your presentation. It may stand-alone or be a prop for a skit. Start thinking about its physicality and interactions.

Between now and the beginning of next week, you should go out and do further observations, recording them in your idea logs. Then go through the ideation process that Kristian outlined: Sharing stories, asking questions, shifting to a designer perspective (How might we…?), brainstorming ideas, choosing and focusing, bodystorming and further developing one idea, building the prototype.

Tues 1/20 Lecture on Toys and Learning by Hayes, work in your pairs, bring idea logs
Bring your idea logs for us to look at in class, flagging those places that show your main observations and insights on P2. We'll come around and look at them, but not take them away from you.

Thurs 1/22 Short talk on Metaphors and Models by Terry, present P3 prototype
Each team will present a prototype/model/mockup/skit that best conveys the feel for what you are designing. It isn't intended to be a finished product, but an artifact(s) that gives us a clear picture of its goals and basic ideas.

After the presentations, you will also choose the P4 teams partly based on identifying the ideas you want to pursue, partly on getting a good mix of skills.

Grading P3

40% **Process** – how broadly and deeply have you explored your design space and responded to user feedback?
20% **Solution Concept** – how well does your design solution synthesize the various needs of your users?
30% **Prototyping** – how effectively is your design conveyed in prototypes?
10% **Presentation** – how effectively can you present your design to others?