P4: Toys for Learning



The project theme continues what we have been thinking about in P1 and P2, designing toys for learning. In P4 you will observe students, come up with designs and develop and test prototypes. It will run for the rest of the quarter.

Several factors are important in thinking about your project:

- **User-centered design:** We are setting up connections for you to observe and test ideas with students at a variety of sites. Design with and for them. The idea of "toys for learning" is intentionally broad. See what would be of value (and fun) for the kids you work with.
- **Human context:** we want this project to have a plausible "story" about the people who would use it, the benefit they would get from it, and the way it would fit into their lives. This includes testing your prototypes with users who are representative of your target audience.
- Physicality: each project should involve interaction that goes beyond the conventional screen. It could be a
 mobile application, something with sensors, special-purpose physical appliances, environmental actuators, etc.
 It may have multiple components, such as a screen-based interaction that operates in a larger system with some
 interaction on a physical device (think iTunes/iPod). Prototyping will be a mixture of creating devices, or mockup
 devices, and simulating how a student would interact with them. There is a variety of different prototyping
 techniques, depending on the project.
- Interaction implementation: As a CS course, it is about software implementation. The primary steps are paper prototyping, implementing an operational software prototype that illustrates and tests some aspect of the larger picture, testing that prototype, and doing a heuristic evaluation.

Schedule of activities and deliverables

The final project is organized into iterative cycles, with feedback from testing in each. We will be talking about the processes in class. In order to accommodate the different working trajectories of different projects, we are not giving everyone a uniform series of weekly milestones like we did last year. We are setting some larger milestones and will ask your team to send us a statement each week of what you intend to achieve by the next week, for discussion along with your studio presentation:

Thurs 1/21/2010 Form teams, start	contact with sites
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We will have the spreadsheet for site signup on line by Friday 1/22 morning

Tues 1/26/2010 Have your observation at least scheduled

Thurs 1/28/2010 Initial Observation visits done - you will present/discuss in class.

Each Thursday: Studio in class on projects. After class, send in your project goals for the coming week (email

to CS247@CS).

Thurs 3/4/2010 User Test Results including visit with students

Bring your test results for studio. We'll discuss the last round of changes and presentation.

Monday 3/15/2010 Final presentations 6:30-9:00pm at the d.school with posters

Guests welcome. Presentation and poster details to be specified.

Grading P4

40% Solution –design that works for your intended users

25% Implementation – quality of implementation is important

15% Presentation – The talk and the demo/poster