



Announcements  
P4: Course Project  
Brainstorming

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### Final Presentations

Tuesday, March 20 6-9pm (?)  
Location TBD

## CS247L Room Change

Wed night labs will now be in

### Room 420-041

(Jordan Hall - Psych Dept)

Except for **2/8** and **2/29**

Announcements

## P4: Course Project

Brainstorming

## P4 Course Project

Iteratively design, prototype,  
and evaluate a new application  
using gesture-based input.

## P4 Milestones

- W4 Team Formation & Application Area
- W5 Initial Prototyping
- W6 Wizard-of-Oz Testing
- W7 Functional Prototype I
- W8 User Testing
- W9 Functional Prototype II
- W10 Demo & Presentation  
Final Project Presentations

Each week has a project milestone.

## Team Formation

Form a team, name your team, and choose roles.

Example Team Roles

*Coordinator:* coordinate work, scheduling

*Recorder:* manage web page, notes, aid eval

*Design Lead:* design UI, push creative ideas

*Evaluation Lead:* design & conduct user tests

*Dev Lead:* manage code, devise algorithms

Create a new website for your project.

Send the URL to [cs247@cs](mailto:cs247@cs) by **Fri 2pm**.

## Choose an Application Area

**Think carefully** about your choice of application area. **Brainstorm** a variety of areas and user needs within them before deciding!

- What needs or experiences will you address?
- Is a gesture-based UI needed & appropriate?
- Why wouldn't another approach do as well?
- Can you conduct meaningful evaluations?

Post a **1-2 paragraph description** of your area and your **rationale** for why you chose it.

## Brainstorming

## Brainstorming Session

**Goal:** to explore possible application areas and start generating user needs and design ideas.

Process (3 rounds):

1. **Topic Areas** - People, places, activities
2. **Identify Needs** - Ask "How might we...?"
3. **Generate Solutions** - Produce design ideas

Upon finishing a round, vote on the promising results and use as input for the next round.

## Topic Areas

Brainstorm possible application areas. Think about the **people, places & activities** involved. What happens if you change those variables?

For each activity, list observations or insights that surface **habits, needs, or aspirations**.

Write **one idea per post-it note**. Place post-it notes on the wall or table. As a group, organize the notes into emergent **clusters or themes**.

## How Might We... ?

Using the results from the last round, generate "**How might we ...?**" questions that suggest design opportunities (again, 1 per post-it).

Example: *How might we engage children to learn more about a piece in a museum exhibit?*

Don't worry about concrete design solutions yet; **focus on questions that surface user needs**.

Sort the post-its and vote for your favorites.

## Design Ideas

Pick your top "how might we" questions. Brainstorm concrete design ideas for each.

What kinds of gestures might you use?

What other forms of input are appropriate?

What forms of feedback should you provide?

How will users learn the system?

## Brainstorming Success

**Fluency:** you leave with a lot of good ideas. A good brainstorm can result in ~100 ideas/hour.

**Flexibility:** you have a wide variety of concept directions hidden in the mess of ideas.

**Springboards:** you leave with a handful of great springboards that you can start to prototype.



**The room should look like this!**

## **Brainstorming Rules**

**Defer judgment.** Separate idea generation from idea selection. For now, suspend critique.

**Encourage wild ideas.** Breakthrough ideas are next to the absurd ones.

**Build on others' ideas.** Listen and add to the flow.

**Go for volume.** To have a good idea, have lots of ideas.

**One conversation at a time.** Keep momentum; save side conversations for later.

**Headline.** Capture the essence and move on. Don't stall the group with a long-winded idea.