



KAIST FALL 2025

CS473: INTRO TO SOCIAL COMPUTING

SOCIAL.CSTLAB.ORG

Class 06: Interactions II

2025.09.18
Joseph Seering

ADMINISTRATIVE NOTES

- Looking ahead: DPM #1: Ideation studio on Tuesday
 - Presentation order randomly determined
 - You will not be able to edit your slides after 4:00PM!
- Any questions?
- DPM#2 studio will 10/02 – three classes after the DPM#1 studio.

DESIGN PROJECT MILESTONE #2: PITCH

Deliverables:

- In-class studio presentation on 10/02.
 - Up to 5 mins presenting / 5 mins Q&A
 - All team members must participate in the presentation
- Report due by midnight 10/02.

The studio presentation is basically a draft/summary of the report. It's the same content, but presented for discussion. You should incorporate feedback from the studio into your report.

DESIGN PROJECT MILESTONE #2: PITCH

What you need to do:

1. Problem statement

- Present convincing references and evidence that the problem exists

2. Proposed solution

- Describe in words + sketches/storyboard
- You do NOT need a low-fidelity prototype yet. That's DPM#3.

3. Present 3-5 “tasks” that your system will help users do. For example:

- Review internship opportunities
- See other students' feedback on their past internships
- Give feedback on your own past internships

4. (Brief) competitive analysis: 2-3 alternative approaches people currently use to solve this problem

5. Share your plan:

- In your team, who'll be responsible for what?
- What is your timeline for each of the to-dos?
- How will you find the crowd or users to use and test your system?

DPM#1 EXAMPLES

PROBLEM STATEMENTS

Problem Statement

Students in dormitories struggle to find handed-out or sharable items, leading to unnecessary purchases.

PROBLEM BACKGROUND

Problem Background

From our experiences, freshmen and exchange students often face financial pressure when buying new items for campus, while many students moving out throw away perfectly good, reusable items. Although donation boxes exist, they are scattered and lack visibility, and students often struggle to find someone to exchange items with, leading to unnecessary purchases. Similarly, other universities have addressed this issue by encouraging students to use messaging apps to exchange second-hand items, creating a more affordable campus experience [1]. Some universities also organize offline exchange events, though these happen less than twice a year [2]. This problem is important because it reduces resource waste by reusing otherwise discarded items and financial pressure on students by promoting sharing among students, thereby fostering sustainability and easing mental stress associated with unnecessary purchases.

MOTIVATION

Motivation

Our research and interviews revealed that group purchasing is often coordinated through in-person conversations or online messaging apps. However, these methods are inefficient for sharing information—verbal exchanges are slow to spread deals, and posts in messaging apps can get lost among other messages. Additionally, this lack of organization creates friction when managing payments and logistics. Social computing provides a platform where users can easily connect with other interested co-buyers, streamline payments and logistics, and foster an engaged and close-knit community. It also caters for the varying needs, preferences, and spontaneous deals that emerge from collaborative human interactions, which a fully automated system is not flexible for. It is also cheaper than retailers or other intermediaries, which add their own operational costs to the overall cost. Being flexible, low-cost, and community-driven, social computing is the ideal solution for our problem.

HMW QUESTIONS

Selected HMW Questions

- HMW make the search for donation items more organized and visible?
- HMW encourage a culture of sharing and reusing items among students on campus?
- HMW reduce the number of items thrown away by students?

3 Selected HMW Questions

1. HMW make it easier for performers to **quickly share feedback efficiently**?
2. HMW help dancers and choreographers to easily **keep track and manage changes** in choreography over time?
3. HMW ensure that all members have a **clear understanding** of the choreography **vision and goals**?

SOLUTIONS

HMW 1: How might we find co-buyers with the same need?

- Create online forums or groups within a platform where users can join based on specific interests or product categories.
- Implement a matching system that pairs users looking to buy the same items in real-time based on their search queries or wishlists.
- Provide a virtual bulletin board where users can post and browse listings for bulk purchases they are interested in sharing.
- Organize scheduled events for popular products where users can sign up in advance to participate in a bulk purchase.
- Utilize geolocation to suggest potential co-buyers who are nearby and interested in the same products.

HMW 2: How might we remove the communication barrier between co-buyers?

- Offer a set of common message templates for initiating conversations, confirming orders, and coordinating logistics.
- Provide an in-app messaging system that allows users to communicate without sharing personal contact information.
- Implement a shared calendar where co-buyers can indicate their availability for pickups or deliveries using visual cues, reducing the need for detailed discussions.
- Provide shared documents or lists within the platform where co-buyers can collaboratively input information like quantities desired, preferences, and notes.
- Use icons, status indicators, and pre-set responses (e.g., thumbs up, checkmarks) to convey messages without typing.

HMW 3: How might we help users avoid the discomfort of reminding others to pay or dealing with delayed payments?

- Require all co-buyers to pay their share upfront to the app before the group purchase is finalized.
- Implement an automated reminder system that sends notifications to users about upcoming or overdue payments.
- Establish a credit system where users earn or lose points based on their payment behavior, affecting their reputation or incurring penalties on the platform.
- Break down payments into smaller milestones (e.g., deposit upon joining, balance before shipping) with automated notifications for each stage.
- Introduce an in-app wallet where users can deposit funds in advance and use the balance for group purchases.

STORYBOARDS

Provide a way to leave timestamped notes or video comments during rehearsals, allowing instant feedback on specific moments in the choreography.

