CAHSI WORKSHOP

Human-Centered-AI Collaboration for Rapid UX Design

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Photo: Keira Burton / Pexels

The plan for today

Design a conference app for undergraduate researchers.

12	5	12	8	20	10	10	9
Learn	Groups	Interview	Features	Build	Test	Reflect	Share

minutes



AI does most of the building. You do the part AI cannot do: talk to real people, watch them use it, and decide what to fix.

What is human-centered design?

Design that starts with people, not technology.

- Learn what people need before you build
- Show rough ideas early and often
- Watch real people use what you made
- Change it based on what you see

"You are not your user."



Photo: Keira Burton / Pexels



This story of Doug Dietz from GE Healthcare is an excerpt from David and Tom Kelley's book Creative Confidence.

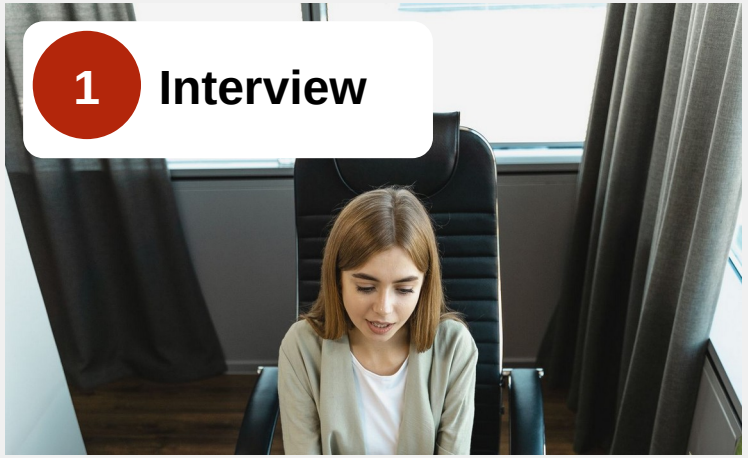






The classic design cycle

How teams have done it for decades













Photos via Pexels: 1 Tima Miroshnichenko, 2 Fabian Wiktor, 3 Ketut Subiyanto, 4 Zayed Hossain, 5 RDNE Stock project, 6 Mikhail Nilov

The problem: building took the longest



Illustrative, not measured

Weeks

to turn a sketch into something a user could click. So teams tested less and guessed more.

Now AI can build in minutes

Before

- Hand-build every screen
- Weeks per version
- One or two test rounds, if lucky

With AI

- Describe it, get a working prototype
- Minutes per version
- Test, fix, and test again today

But AI has never met your users.



Which steps can AI speed up? Which ones can it not replace?

Keep this question in mind. We will answer it at the end.

GET READY

Count off into groups

5 MIN

1. When Dr. Schnepp points to you, say the next number, from 1 to 15.
2. That number is your group. Write it down on your phone!
3. Go to the table Dr. Schnepp calls for your group number.
4. In your group, find the birthday closest to today.
5. Open one laptop to gemini.google.com and sign in.



Write down your number!

You need it again for testing.



Birthday closest to today?

You are the interviewee.

DONE WHEN: Your number is written down, you are at your table, and one laptop is signed in.

BREAKOUT 1 OF 5

Interview your teammate

12 MIN

Topic: their trip to Albuquerque and their experience at this conference so far.

Interviewee

Tell real stories. Be specific.

2 askers

Take turns asking. Follow up.

1 note-taker

Type notes on a laptop or phone.

Example questions

1. Walk us through your trip here, from packing to arriving.
2. What was confusing or stressful along the way?
3. What apps or websites did you use? What was missing?
4. What are you most excited or nervous about here?

DONE WHEN: Your notes have at least 5 real moments from the interviewee's trip or conference day.

BREAKOUT 2 OF 5

Turn insights into features

8 MIN

1. Read your notes out loud.
2. Find 3 to 5 insights: a need, a struggle, or a strong feeling.
3. Turn each insight into an app feature.
4. Ask your interviewee: "Would this have helped you?"
5. Pick your top 3 and type them on the laptop.

Examples

We heard: *"I didn't know which sessions were meant for students."*

Feature: A filter that shows student-friendly sessions.

We heard: *"I got lost finding the shuttle from the airport."*

Feature: Step-by-step directions from the airport to the venue.

DONE WHEN: Your top 3 features are typed on the laptop.

BREAKOUT 3 OF 5

Build it with AI

20 MIN

In Gemini, choose Canvas. Type this prompt with your 3 features:

```
Build a mobile-friendly web app for first-time
undergraduate researchers at a computing
conference in Albuquerque.

Include these features:
1. [feature]
2. [feature]
3. [feature]

Use realistic fake data. Make every button
work.
```

1. Send the prompt. Then click through every feature.
2. Broken? Say what you see: "The Save button does nothing."
3. At 3 minutes left, stop. Write one test task per feature.

What is a task? A goal a user has, not a button to click.
Feature: a filter for student sessions → **Task:** *"Find a student session that starts after lunch."*

DONE WHEN: All 3 features work, and your 3 test tasks are written down.

BREAKOUT 4 OF 5

Test with another group

10 MIN

Pick 2 hosts and 2 testers. Testers go to your group number + 1. (Group 15 goes to Group 1.)

Hosts

- Read one task out loud
- Watch and type notes
- Note where they pause, tap the wrong thing, or say "hmm"

Testers

- Think out loud the whole time
- Say what you expect to happen
- Be honest. Confusion helps them

The one rule

- Hosts: do not help.
- Do not explain or point.
- If stuck, ask: "What would you try next?"

DONE WHEN: Testers tried all 3 tasks, and hosts have notes. Testers return to their home group.

BREAKOUT 5 OF 5

Reflect and improve

10 MIN

Back with your home group.

Talk (6 min)

1. What did testers do that surprised you?
2. Where did they get stuck?
3. What did the AI get right about your interviewee? What did it miss?
4. What would you fix first?

Improve (4 min)

Tell the AI what you saw:

```
Testers had trouble with:
1. [what they did]
2. [what they did]

Fix these problems. Do not add
new features.
```

DONE WHEN: You can name one thing AI did well and one thing only humans could do.

WHOLE ROOM

What is AI good at? What are humans good at?

9 MIN

AI is good at...

- Where did AI save you time?
- What did it do well on the first try?
- What did it get wrong?

+

Humans are good at...

- What did your interviewee tell you that AI could not know?
- What did testers notice?
- What choices did your group make?

What happens when they work together?

Better together

Human-AI collaboration leads to better products.

- People tell you what to build.
- AI builds it fast.
- People show you what to fix.
- AI helps you fix it.
- Try this loop in your own research.

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Thank you! | Dr. Jerry Schnepp | jschnepp@roosevelt.edu



Photo: Andy Barbour / Pexels