

Tab 1

# BYU x UTAH

## AI Product Hackathon Packet

[Link to Kickoff Slide Deck](#)

[Team Sign up Sheet](#)

[Link to Kickoff Recording](#)

### Background

Product teams sit at the intersection of user needs, design, business strategy, and technical feasibility. Great product teams deeply understand real user problems, prototype, get user feedback, iterate, and build focused and impactful solutions.

AI is fundamentally reshaping how products are built. It has blurred the traditional boundaries between product management, design, and engineering, and dramatically expanded what small teams can accomplish. As a result, the future of product work increasingly requires “full-stack product builders” - people who can think like a PM, design like a UX creator, and build like an engineer using modern AI tools.

In this hackathon, you will practice becoming a full-stack product builder by acting as the founding team of a new startup.

### Prompt

You are the founding team of a startup built on the belief that **school should not feel like a constant struggle to stay afloat.**

Your mission is to design a product that helps students **thrive academically and socially at the same time.**

Your team should:

1. **Define a specific student segment and identify a real pain point**
  - Who are you designing for?
  - What specific pain points do they experience?

- What evidence do you have that this problem is real and meaningful?
- Ideas:
  - i. Notes collaboration website
  - ii. Rate my professors but for classes
  - iii. App that stops you from doom-scrolling and shows a message
  - iv. Organization for student's week
  - v.
- 2. Use AI to build an MVP solution**
  - What is the simplest version of your product that still delivers real value?
  - How does your solution directly address the problem?
  - Have you tested it with real students?
  - What feedback did you receive, and how would you iterate?
- 3. Create a slide deck of your process and your solution**
  - What was your process?
  - How did you validate your problem?
  - How did you use AI to help prototype/build?
  - What pivots did you make or would you make in the future? Why?
  - What impact will your solution have?

## Deadlines and Deliverables

**Submission deadline:**

**Friday, February 13 at 12:00 PM MST (Noon on Friday)**

**Submit your work via this form:**

[https://docs.google.com/forms/d/e/1FAIpQLSe8zDVRJ7IW\\_40zIFgD9q6VfQuwQDbSUVXiH0I5CIUNLG7Iaw/viewform?usp=publish-editor](https://docs.google.com/forms/d/e/1FAIpQLSe8zDVRJ7IW_40zIFgD9q6VfQuwQDbSUVXiH0I5CIUNLG7Iaw/viewform?usp=publish-editor)

**You will submit:**

- 1. A link to your digital solution**
  - This could be a prototype, demo video, or functioning web app.
- 2. A slide deck with:**
  - Your target customer and their problem
  - Your process for arriving at a solution - how did you use AI?
  - A short demo of your solution (this could be a live walkthrough, video recording, or be built into your presentation)

## Presentations (In-Person, Friday 13th 2:00-5:00)

**Location:** Rollins Center for Entrepreneurship & Technology at BYU

Be prepared to present your slide deck (a demo of your solution should be built into your presentation). The judges are industry professionals and can be found on the BYU PMA

[website](#). Each team will have 7 minutes to present followed by 3 minutes of Q&A. Conciseness is key.

After you submit your deliverables in the form above, you will be emailed your presentation time and additional details about presentation day.

## Evaluation Criteria

This is a “**full-stack product builder**” hackathon.

You will be evaluated on your **process** as well as your **final build** based on a standardized rubric. The team that scores the highest wins.

Judges will look for:

- Problem Definition & User Understanding
- Design & UX Quality
- Technical Considerations and Use of AI
- Creativity in Solution
- Presentation & Communication

## Tips for Success

**Be scrappy and resourceful. You are encouraged to:**

- Use AI to increase your speed and creativity, but ground your decisions in real students.
- Start narrow: Will you scope down your user base? Or will you cater your solution to all students?
- Talk to real students, use quick surveys, and gather evidence fast.
- How many people experience this problem? How often does it occur? What evidence supports this?
- Use AI tools to prototype and build: create low-fidelity designs, get feedback, and iterate quickly
- Has your solution been tested with real users? What did users say? How did you adapt based on feedback?
- What features are in MVP versus v2 ?
- Be concise: Is your communication clear and convincing?
- Tell a story: we want to hear the process of your product development
- How would you measure the success of this product? What impact will it have?

## Helpful Tools

All of the tools below are completely optional. However, because this is an AI product hackathon, we strongly encourage every team to experiment with how AI can amplify their workflow, speed up prototyping, and improve their final build.

AI should be used as a multiplier for product thinking. The strongest teams will use AI to move faster while still grounding their decisions in real students and real evidence.

### **Ideation, Prototyping, and Building:**

- LLMs - [Gemini](#), [Claude](#), [Chatgpt](#)
  - Use these for brainstorming, refining problem statements, designing flows, drafting surveys, generating UI ideas etc.
- AI App Builders: [Lovable](#), [Bolt](#), [v0](#)
  - Helpful if you want to create a functional web-based MVP quickly with AI assistance.
- Design: [Figma \(and Figma Make\)](#), [Stitch](#)
  - Best for UI/UX design and creating clickable prototypes without coding
- AI Coding Assistants: [Google Antigravity](#), [Cursor](#), [Claude Code](#), [Codex](#)
  - Agentic IDEs and command-line tools

### **User Research & Problem Validation:**

- Quick surveys: (Google Forms, Typeform) to gather evidence from real students
- [User interview template](#): to structure conversations about pain points
- Campus forums/social media - (Reddit r/BYU, r/Utah, class Discord servers) to observe authentic student struggles
- [Granola](#): AI notetaker for customer calls to help synthesize insights quickly.

### **Presentation**

- Google Slides or Canva: Clean, simple templates
- Screenshots/screen recordings: Show, don't just tell during your demo

## **Sample Slide Outline (Optional)**

This outline can be used as a starting place. It should be adapted. Remember to cater your presentation to the **evaluation criteria** and to keep it to **10 minutes**.

### **Slide 1 — Title / Company Name**

### **Slide 2 — Executive Summary**

- Who your target student is
- The core problem you are solving

- One sentence on your solution (your MVP in plain language)

### **Slide 3 — Target Users and Problem**

- Dive deeper into user and problem

### **Slides 4–6 — Our Process (4 slides total)**

Use these 3 slides to tell your story. (You should **not** use these titles on your slides)

- **Slide 4 — How we validated the problem**
  - Who you talked to
  - What evidence you gathered
- **Slide 5 — How we developed the solution (and used AI)**
  - How AI helped you ideate, design, prototype, or build
  - What tools you used (if helpful)
- **Slide 6 — How we tested and iterated**
  - Who you tested with
  - What feedback you received
  - What you changed (or would change)

### **Slide 7 — Our MVP + Demo**

- What you built
- Live walkthrough, screen recording, or built-in demo

### **Slide 8 — Impact & Future Iterations**

- What impact this could have for students
- What v2 would look like

## **Questions?**

Reread this packet as your question is likely covered above. If not, send an email to [product@byu.edu](mailto:product@byu.edu) with the subject line “HACKATHON QUESTION”.

Good luck! Now go build!

[Nathan McCauley](#)

[Dylan Mattern](#)

[Ella Moore](#)

Andre Bernal

Jesse

Mick Buck

Justin Maxwell

# Interviews

# User Interview Template

## Part 1: Introduction (2-3 min)

- "Thanks for chatting with me! We're working on a project to help students manage school better. I'd love to learn about your experience. First, tell me a bit about yourself—what are you studying and what's keeping you busy this semester?"

## Daily Experience:

- "Walk me through a typical week for you. What does Monday to Sunday look like?"
- "Tell me about a recent time you felt overwhelmed or stressed at school. What was happening?"

## Academic Challenges:

- "What makes it hard to stay on top of your classes?"
- *Probe:* "Can you give me a specific example?"
- "How do you currently keep track of assignments, deadlines, and studying?"
  - *Probe:* "What's frustrating about that system?"

## Social Challenges:

- "How do you balance social activities with school work?"
- *Probe:* "When was the last time you had to choose between the two? What happened?"
- "Tell me about a time you wanted to hang out with friends but couldn't because of school."

## Current Solutions:

- "What apps or tools do you use to manage school and social life?"
- *Probe:* "What do you like/dislike about them?"
- "Have you tried anything to make this balance easier? What worked or didn't work?"

## Part 3: Pain Point Prioritization (5 min)

- "Of everything we've talked about, what's the **single biggest struggle** you face as a student right now?"
- "On a scale of 1-10, how much does this problem affect your day-to-day life?"
- "How often does this problem come up? Daily? Weekly?"

## Part 4: Ideal Solution (Optional - 3-5 min)

- "If you could wave a magic wand and fix one thing about your student experience, what would it be?"



- "What would make school feel less like you're 'constantly struggling to stay afloat'?"
- 

## **Interview Tips for Your Team**

### **DO:**

- Ask "Tell me about a time when..." (gets specific stories)
- Stay silent after asking—let them fill the space
- Ask "Why?" and "Can you tell me more about that?"
- Take notes on exact phrases they use

### **DON'T:**

- Lead with your solution idea
- Ask "Would you use X?" (people lie about hypotheticals)
- Ask multiple questions at once
- Pitch or sell anything

# Timeline

#### Monday

- 9:30 Initial Meeting

#### Tuesday

- Interview for Pain Points
- 8:15pm Tanner Building Meeting -
  - Identify Main Problem / Pain Points
  - Select Good Interviews
  - Develop Plan / Solution
  - Begin Figma Design

#### Wednesday

- Main Dev Day
- Work on Figma Designs for UX
- Build out backend DB
- Get GitHub Repo up and somewhat functional

#### Thursday

- Main Testing Day
- Figure out what does and doesn't work in the application
- Reconnect Product with Story

#### Friday

- Practice presentation early friday morning?
- Finalize Demo & Slide Deck
- Submit by noon
- Present 2pm if possible

# Grok Commentary on Collective note app

Pros and Cons list of the collab notes idea

Hey Hailey! Got it—here's the pros/cons and devil's advocate section from my last deep dive, condensed into a tight, scannable list. Same honest take, just shorter and punchier.

#### **\*\*Pros\*\***

- Builds instant social pods in class → turns lectures from isolating to inviting (20–30% higher belonging/retention in structured groups)
- Shared notes cut individual workload → catch more details, reduce frantic solo scribbling
- AI recall questions drive active recall → 2–3× better long-term retention than passive review
- Professor-directed groups = built-in adoption → no cold-start problem, spreads fast in courses
- Frees up time/energy → more bandwidth for real hangouts and friendships

#### **\*\*Cons & Devil's Advocate\*\***

- Professor buy-in is risky → many won't bother assigning groups → adoption could stall at 20% or less
- Forced 4–5 person groups backfire → bad chemistry, introverts withdraw, resentment builds (30–40% disengagement in mandatory groups)
- Free-riding & uneven effort → one slacker ruins it for everyone → high-achievers get frustrated (social loafing hits 25–50% in collab tools)
- AI questions can be inaccurate or irrelevant → bad notes = bad quizzes → trust erodes fast
- Privacy/judgment risk → personal notes/questions visible to group → awkwardness or exclusion
- Adds friction instead of removing it → editing, group coordination could feed procrastination if not seamless
- Stays class-bound → low stickiness after semester ends → misses long-term social thriving

#### **\*\*Quick Alternate Twists to Fix the Weak Spots\*\***

- Make groups opt-in + AI-matched (by learning style/availability) → more autonomy, less resentment
- Gamify recall quizzes (group competition, badges, shoutouts) → fight free-riding, boost fun
- Add solo fallback mode + anonymous Q&A → include introverts, reduce pressure
- Blend with calendar nudges → auto-suggest “hangout slots” after study blocks → tie academics to social wins

This keeps the core strong while highlighting where we need to harden it. Which con worries you most right now, or want us to prototype one of the twists in more detail? Let's bullet-proof this thing! 🚀

# Leah's Interview Notes

### Amelia

- Mineralogy two final exams and a final project
- Work 3 days a week, every afternoon, TA job
- Classes/work til 4, hw, readings every day
- Learning suite and canvas calendars
  - "I think it's okay. Just one system would be nice, but I don't trust myself to use my own system. They work well."
  - "For my schedule, I use Google Calendar."
- Note-taking: "In Word, I have a folder for each class and a different Word document for each day of class. I'm interested in Google Notebook. It would be nice to use an iPad to type and draw things. It works well enough."
  - "Since my notes are online, it's easy to control + F to find a specific day and topic. To find something between days, I open all of the documents."
- Single biggest struggle: finding time to fit work and homework into my schedule
- Magic wand: get enough sleep every night. That would fix all of my problems

### Zane

- Biochem and advanced physiology - heavy workload
- School, homework, work, home, bed
- Notability on my iPad
  - I like that I'm able to handwrite my notes, but I can still search it even though it's handwritten. I like using lots of colors in my notes.
  - Sometimes my notes aren't super applicable to the exams, so it's hard to know what from the lecture will apply to the exam.
- Single biggest struggle: Having the time to do the fun stuff I want to do.

### Ashleigh

- Stress: Starting junior core and recruiting at the same time - not prepared for what that entailed
  - Logistics of what recruiting looked like - a lot combined with infamous Warren case they were working on
  - Had to figure out future even though just decided major
- Staying on top of classes: now in program, takes me longer than peers to learn and understand concepts, so I've spent way more time on average on each assignment than peers.
  - Group aspect of junior core - "Having an assigned group makes it easy to ask questions and explain things out loud, because TAs can be hard for me sometimes. It's just another way to hear things from peers, and you're in the exact same situation, so it's easier to relate to each other."
  - Used Teams - had to do everything in Microsoft, so that's the best way to collaborate because you could all be on the same thing and see what everyone is doing.
  - Have assigned times to meet - 1st semester not so much, 2nd semester was every day after class. "That was super helpful relationship wise, and you get in the habit of doing it everyday."

- Downside: "It's hard when you feel like the four of them know what they're doing and you don't, so you're apprehensive about speaking up."
- Keeping track - "This year I've just been using the notes app on my computer, and I write out each day with the things that are due. Usually on Friday, I go onto Canvas and Learning Suite for the next week and type out what I need to get done."
  - Frustrating: "There have been a couple of times that my professor has changed things, so it's not always accurate"
  - Nice: "I love checking them off."
- Google Calendar: "I like it. I have it color-coded for classes, exercises, church, running errands, etc. Fiance and I have a shared color for unique things we're doing or both doing together."
- Single biggest struggle: "I'm kind of chilling. I have an internship and full-time job. Currently, it's my research class - demonstrating knowledge not on a test, but in a group, in front of people, thinking on my feet."
- Notes:
  - Financial: physical packet printed out slides and problems
    - Love having the problems - don't have to spend time writing things out (helps when going back and studying)
    - Each day is a different section, color-coded, organized by notes with problems below
  - iPad
    - Takes longer to copy them down
    - Connect to computer
    - Drag images from computer into notes
    - Manipulate notes easier
    - Good way to practice problems without wasting a bunch of paper
    - Hand doesn't hurt as much
  - Physical notebook
    - Binding gets in the way of hand
    - Could probably be more organized - color would be helpful
- AI: "I explain how I think something works and see if I'm missing anything. I'm aware that it's not the best at advanced accounting concepts, so I don't give it numerical problems unless they're pretty simple. I can type out what I'm thinking and see if I'm on the right track."
- "I haven't used flashcards because there hasn't been memorization of vocabulary terms."

#### Quinter

- "When I have to travel for frisbee and there are midterms to take and there's a lot of schoolwork, plus a job that requires a lot of brain power and dedication. It feels like my brain is turned on for 16+ hours a day because of classes, work, homework, and studying."
- Keeping track: "Depends on the week. Sometimes on Sunday night or Monday morning, I look at my assignments for the week and write out what I have to do each day in order to get everything done. A lot of mental notes."



- Idea: big projects - "I have three papers that aren't due until the end of April, but I already have to start of them. So, when I have 2-3 month projects, how do I best organize my time to do those?"
  - In order for them to be part of my day-by-day right now, I'd have to break down all of the steps in between. A lot of time I leave those until the last week before the next part is due."
- Balance: "Recently, I haven't really been social during the week. So the week is school and weekends are social. The things that I do for school that aren't homework are essentially my social life during the week, like study groups, studying with people, going to a pre-law event -- that's my socialization."
- Apps/tools: "I used to use a whiteboard, which was super helpful, but I don't have one right now."
  - "Sometimes I organize everything on the app To Do"
  - "I use Apple Calendar a lot. I like that it's both on my iPhone and laptop."
- Notes - pen/paper
  - "It's a lot of writing, which is great, actually. I remember things better when I use paper. It's good because it forces me to recall things more -- I can't just search the name of the concept, I have to remember more about it to find it in my notes. That can also be frustrating, because sometimes my notes aren't super organized."
  - "it's easy to draw pictures and diagrams."
- AI
  - "If I don't have time and I need to do a reading for a class, I find a downloadable version of the reading and have it summarize the main points. If I'm allowed to, I have it check grammatical/spelling errors (if I remember to do that). I've used it to develop study guides and quiz questions."
- Single biggest struggle: "Time. Between working 4 hours per day, 3 hours of class, 2-3 hours of homework to do, it doesn't leave a whole lot of space for things like extra events, case competitions, participation in clubs, etc. That doesn't even include meals, exercise, going to the temple, reading scriptures, etc."
- Magic wand: "If classes could give a better balance between reading, homework, and actual experiences. For example, I liked how my Portuguese Literature class had readings and homework, but sometimes we went on class trips to the museum, etc, and we had required cultural events. If that could replace some of the other work sometimes, that would be great."

Kacie

- Typical week: MW class 12-5:15, OCI meetings MWTh, library to do homework (on campus most of the day), TTh spin cycle class, classes, no class Friday but homework all day, laundry, meal prep to bring lunch and study more
- Stressed: "Yesterday I was feeling quite stressed. I had to turn in an essay for a class that I hadn't really started, and then I also remembered that I had two other assignments that I completely forgot about. I was doing homework and turning stuff in up until 11:55. I didn't end up going to FHE, so I had to sacrifice that."

- "I missed the assignments because two classes are on Canvas, and the rest are on LearningSuite, so on the calendar, I can't see the Canvas assignments. I used to put it all into a color-coded spreadsheet, but I stopped because LearningSuite has the prioritizer."
- "I use Google Calendar for classes, things with school, if I do any work, if there are any BYU activities I want to go to, or hang out friends."
- I take notes in Word in Microsoft 365. Last semester I used Google Docs, but then I was mixing school stuff with personal things, so I stopped doing that. I divide it with textbook notes and then lecture notes for each class, but I'm not super organized.
  - I don't know how much I'm liking it because it's a lot of scrolling. I know on Google Docs there's a way to do tabs off to the side. A document per chapter is way too much, but all in one scrolling too much.
- Single biggest struggle: "I feel like I don't feel like I can have a social life. It depends on the week, but for the most part, any time you're hanging out with friends or doing something fun, you just think about how you should be doing homework instead, and there's always a huge to-do list in your head. I always get things turned in on time, it's just the fact of doing it all feels like a lot. I feel like all I do is stare at my laptop. I don't enjoy that."
- Magic wand: "I would change readings. I feel like when you go to lecture, they're just re-telling you everything you already read. I would take out those readings and have them teach me, instead of teaching myself."
- AI: "I use Chat for grammar, spell check, and flow. I put in the rubric and have it score me and give me tips. Before an exam, I enter my notes and have it quiz me and have it give me '20 level-hard' questions about this."

# Hailey Survey Notes

31 responses from current University Students

21/30 are willing to participate in follow up testing.

Year in school:

- Ranging from freshmen to first year grad students

Majors:

- 20 majors

Briefly describe a time you felt overwhelmed or stressed in school:

- Midterms happening at the same time
- Never feeling caught up
- Memorizing lots of info
- Not enough time
- Life happens (getting sick, working, etc)
- Lots of work
- Finals week
- Lots of reading and not enough time
- Just a high stress person
- Procrastination
- Full schedule
- Spending too much time on things that don't matter
- Start of a new semester, uncertainty, overwhelming
- Sacrificing food and sleep to get things done
- Large art projects, not allowed to get much help
- Math
- Things due on the weekends

Briefly describe how you currently are keeping track of assignments, deadlines, and studying:

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# Deliverables

## Deliverables

### Collaborative Notes

Target Audience - Jr Core / Group Work Classes / Lecture Heavy Classes

### Problem:

Helping people who feel like they don't have enough time, they feel alone.

### Solution:

Creating an app to help them not feel alone in their struggles and work with a group that can help them.

### MoSCoW

#### Must Have:

- Allows people to form / be in groups
- Shared notebook / document
- AI Summaries

#### Should Have:

- Doubt Dictionary
- Chat Feature with Group

#### Could Have:

- Allow Prof as Admin to assign groups
- AI Quizzes / Game to help study
- Calendar
- Automatic prompt to schedule social/hangout time with the group

#### Won't Have:

- Shared Files for Whole Class
- Mobile Friendly

### Build in GitHub repo

- Connect to VSCode or **Cursor** or Copilot Extension or Codex Extension
- Design in Figma
- **Claude Code** to repo