

Assignment I-2

Concept Development I: Diverging

This **individual** assignment asks you to practice concept development and generation:

- Reflect on HMW questions and problem frames generated during class on your project. Revise or edit these questions as appropriate;
- Individually, lead a synchronous, collaborative concept generation session. We encourage you to conduct this work with participants not in our program.
- Capture these concepts and process images and submit them in a legible format.
- Use an AI-enabled tool, or an LLM, to recreate the concept generation session.
- Compare and contrast the outputs of these efforts, and reflect on the comparative performance of both.

This assignment will be due on January 25 at 11:59PM. There is no class on January 19; however, additional material will be released to support preparation for class on January 26, so don't wait two weeks to do this!

AI usage is welcome - but please clearly cite if and how you used it.

1. Revisit your HMW Question(s) from Class.

The chosen HMW question from the below concept generation activity was: How might we make choosing investments feel as safe and reassuring as using a Ring Doorbell?

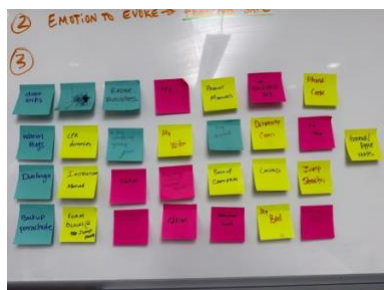
2. Individually, lead a synchronous concept generation session to explore this problem frame.

- Select one concept generation method - a group sketch-driven brainstorm, or one of the methods covered in supplemental material:
 - [Crazy 8's \[link\]](#)
 - [Analogous Experiences \[link\]](#)
 - [Morphological Matrix \[link\]](#)
 - I chose to utilize the Analogous Experiences for the group brainstorm activity.
- Individually, lead a **synchronous concept generation session** to apply this method with at least two other individuals. Make sure to set the stage with mindsets.

- Conduct this work with people who are not in the DTI program. Specify who was involved, and why you selected them.
 - I conducted the synchronous concept generation session with several of my coworkers. I selected them intentionally because they fall within the target demographic for this project that focuses on young adults who are either new to investing or have varying levels of beginner experience with financial decision-making. This made them particularly relevant contributors, as their perspectives closely aligned with the intended user base of the proposed service.
 - Prior to the session, we all briefly shared our prior experiences with investing, and we learned that we all represented a range of familiarity with investing, from complete beginners to those who had some prior experience.
 - In addition, working with coworkers made it logistically feasible to conduct the session synchronously, given shared schedules and proximity. This allowed for natural, real-time collaboration without the need for extensive coordination, while still providing meaningful and relevant user insight.
- The session should last a minimum of 20 minutes.
 - The session consisted of approximately 45 minutes of active engagement, with some breaks throughout the session due to participant availability constraints.
- Aim for a minimum of 25 solutions across the group - ideally more!
- Capture:
 - **Process Images:** at least 3 images of the effort in-progress (hint: great for a portfolio!). For in-person sessions, this would be photos of the activity; for remote sessions, include screenshots featuring participants and a creative collaboration workspace.



- **Concepts:** Capture the concepts developed in a legible format, e.g. as photos of sticky notes, scans of paper, etc.



- Group and cluster concepts into themes
 - Mechanism-based clustering:



- When the safety happens clustering:



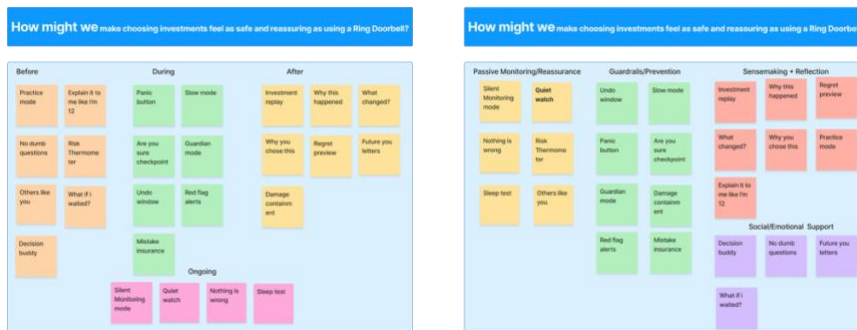
- We initially explored a four-category clustering based on when emotional safety was experienced (preventative/before, during/real-time, after/reactive, and passive/ongoing). However, the group struggled to consistently differentiate between passive and real-time safety, so we collapsed the framework into three clusters:



- The rest of this assignment, along with artifacts showing the progress of the full concept generation activity, are attached in the Analogous Experiences doc.

3. Concept Development with AI

- Use an AI-enabled platform - either a task-specific tool, e.g. FigJam AI - or direct chat with an LLM - to explore the problem frame.
- First, convert the How-might-we frame to a prompt appropriate to guide AI-enabled idea generation.
- Work through at least three iterations of the prompt to better tailor the outputs toward your goals. Aim for 25 concepts in final.
- Capture the outputs in a legible format.
- Group and cluster, as above (individually)



- Artifact: capture your three iterated prompts, and the outputs.
 - I iterated on the prompt three times to progressively shift the outputs from feature-level analogies toward emotionally grounded, psychologically safe experiences. **Full outputs can be found in attached Outputs docx.**
 - Prompt 1 + Output 1:

You are helping generate design concepts for a product that supports young adults in choosing investments.

HMW: How might we make choosing investments feel as safe and reassuring as using a Ring Doorbell?

Interpret "safe and reassuring" as: calm, non-overwhelming, confidence-building, low-regret, and non-judgmental.

Ring Doorbells create safety through mechanisms like passive monitoring, alerts, history/playback, user-controlled sensitivity, shared access, two-way communication, modes, and privacy controls. Use these as mechanisms—not surface features.

Task:
Generate 25 distinct product or service ideas.

Each idea should include:

Idea name

Ring mechanism used

What the user does

One sentence explaining why this feels safe

Here are 25 distinct concepts mapped to Ring-style safety mechanisms, but applied to investing decisions for young adults.

- Portfolio Watchtower**
Ring mechanism: Passive monitoring
What the user does: Connects their accounts and lets the system quietly track risk, diversification, and premiums.
Why it feels safe: Nothing requires constant attention, but someone is always "on watch" for problems.
- Risk Melior Sensor**
Ring mechanism: Alerts
What the user does: Sets personal thresholds for volatility, losses, or risky behavior.
Why it feels safe: You're only interrupted when something truly matters.
- Decision Replay**
Ring mechanism: History & playback
What the user does: Reviews past decisions, context, and outcomes in a timeline.
Why it feels safe: You can always go back and understand what happened.
- Confidence Mode**
Ring mechanism: Modes
What the user does: Switches between "Beginner", "Guided", and "Autopilot" levels of guidance.
Why it feels safe: You control how much help you want at any moment.
- Regret Mitigator**
Ring mechanism: Sensitivity controls
What the user does: Chooses how conservative or adventurous the platform should be.
Why it feels safe: The system adapts to your emotional tolerance.
- Second Opinion Button**
Ring mechanism: Two-way communication
What the user does: Asks an AI or human coach before executing a big decision.

- Prompt 2 + Output 2:

You are helping generate design concepts for a product that supports young adults in choosing investments.

HMW: How might we make choosing investments feel as safe and reassuring as using a Ring Doorbell?

Interpret "safe and reassuring" as: emotionally calm, non-overwhelming, low-regret, non-judgmental, and protective against impulsive or fear-based decisions.

Ring Doorbells create safety through mechanisms like: passive monitoring, alerts, playback/history, adjustable sensitivity, shared access, two-way communication, modes, and privacy controls. Use these as structural inspirations, not surface-level features.

Task: Generate 25 distinct product or service concepts.

Each idea must:

- Describe a specific moment in the user's experience (e.g., first time investing, market dip, decision regret, FOMO moment)
- Map clearly to one Ring safety mechanism
- Explain how it reduces emotional stress or fear
- Avoid generic fintech clichés

Output format:

Idea name
Ring mechanism used
What the user does (specific)
Why this feels emotionally safe (specific)

Here are 25 distinct concepts mapped to Ring-style safety mechanisms, each tied to a specific emotional moment.

1. "Quiet Watch"

- Ring mechanism used: Passive monitoring
- What the user does: A first-time investor links their bank account and just observes suggested portfolios without being asked to act.
- Why this feels emotionally safe: No pressure to decide. Watching without committing lowers anxiety and builds familiarity before risk.

2. "Nudge, Not Noise"

- Ring mechanism used: Adjustable alert sensitivity
- What the user does: Sets how intense market movements must be before they get notified.
- Why this feels emotionally safe: Prevents panic spirals from constant micro-fluctuations and protects against doom-refreshing.

3. "Decision Replay"

- Ring mechanism used: Playback/history
- What the user does: Reviews the context of why they made a past investment (goals, mood, data at the time).
- Why this feels emotionally safe: Reduces regret by reminding them they weren't "stupid," just human with limited info.

○ Prompt 3 + Output 3:

You are helping generate design concepts for a product that supports young adults in choosing investments.

HMW: How might we make choosing investments feel as safe and reassuring as using a Ring Doorbell?

Design explicitly for these emotional fears:

- Fear of making the wrong choice
- Fear of losing money
- Fear of looking stupid
- Fear of missing out
- Fear of not knowing enough
- Fear of irreversible mistakes

Ring Doorbells reduce fear by offering: passive protection, early warning, the ability to replay and understand events, shared oversight, two-way communication, and strong user control.

Task: Generate 25 ideas that directly target one or more of these fears.

Each idea must include:

- Which fear(s) it targets
- Which Ring mechanism it uses
- A concrete user interaction
- Why this reduces anxiety or regret

Avoid generic fintech language. Focus on psychological safety.

Here are 25 concrete product ideas designed to make investing feel safe, observable, reversible, and socially supported—like a Ring Doorbell for money. Each one explicitly targets emotional fears, uses a Ring-style mechanism, and explains why it reduces anxiety.

1. "Investment Replay"

- Fears: Wrong choice, looking stupid, not knowing enough
- Ring Mechanism: Replay & event history
- Interaction: After any decision, users can replay a visual timeline showing what info they had, what alternatives existed, and what influenced the choice.
- Why it helps: Removes shame. Shows you didn't "mess up blindly"—you made the best call with what you knew.

2. "Undo Window"

- Fears: Irreversible mistakes, losing money
- Ring Mechanism: Strong user control
- Interaction: Every action has a visible countdown (e.g., 24 hours) where it can be fully undone.
- Why it helps: Knowing you can reverse decisions reduces panic and impulsive regret.

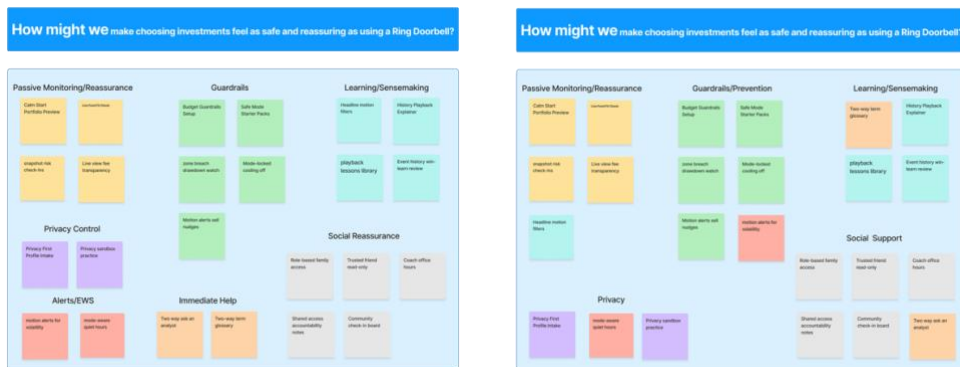
3. "What If I Waited?"

- Fears: FOMO, wrong choice
- Ring Mechanism: Replay + early warning
- Interaction: Shows simulated outcomes if you had waited 1 day, 1 week, 1 month before acting.
- Why it helps: Teaches patience and reframes missed chances as learning—not failure.

- **Stretch (extra credit):** automate this process by using a python script to drive API calls to your favorite foundation model.

- Automated process + outputs can be found at the following link:
https://github.com/kimberlycoston/DeSIGNTK521_I-2.git

- Artifacts of clustering of AI outputs:



4. Readings & Compare and Contrast

- Read three additional (short) pieces from popular business media on the role of brainstorming in practice.
 - WSJ 2023. [“Office Brainstorms are a Waste of Time.”](#)
 - Forbes 2025. [“The Next Casualty of AI: Brainstorming.”](#)
 - *Optional*. Economist 2025. [“The last days of brainstorming.”](#)
- Evaluate the concepts and concept clusters that emerged from both activities.
- Write a 200-500 word addressing the following:
 - **Compare and contrast.** Compare and contrast the outputs of the synchronous vs. AI-enabled concept generation session. What did each approach excel at? What were their limitations?
- The synchronous, in-person concept generation session excelled at producing emotionally grounded and context-rich ideas. Participants were able to build off one another in real time, which reflected the collaborative role of brainstorming presented in class (#7 from ‘Rules of Brainstorming’). Because all participants shared a similar professional background, many of the examples were anchored in familiar experiences, making the concepts easier to interpret collectively. Clarifications happened in real-time, which also supported alignment and deeper engagement.
- However, this approach was constrained by time, interruptions, and cognitive fatigue. As the session progressed, participant energy declined and the quality of ideas noticeably decreased, underscoring how heavily synchronous brainstorming relies on sustained human motivation and attention. I also experienced facilitator fatigue due to the drawn-out nature of the process, the constant need for engagement, and frequent task-shifting. This made me wish that human brainstorming could be much more time-efficient than it realistically is.
- In contrast, the AI-enabled session showed its strength with speed, scale, and endurance. It generated a large volume of ideas quickly and without fatigue. I also loved that it required minimal explaining or clarification. However, its early outputs were more generic and less emotionally nuanced. While AI was efficient, it lacked the lived, context-specific grounding that emerged in the human session.
 - **Comparison with research papers, the popular media above, and conventional wisdom.** How do your anecdotal findings contrast with last week’s assigned reading? Do they validate or challenge the results reported?
- My anecdotal findings mostly align with the results in both readings from last week. Similar to Lee & Chung’s finding that ChatGPT can increase idea fluency and productivity, the AI-enabled session in that I engaged with generated a significantly higher volume of ideas in a shorter amount of time. However, consistent with Meincke et al.’s conclusion that ChatGPT may reduce idea diversity, the early AI-

generated outputs were more generic, abstract, and thematically repetitive compared to the human-generated concepts.

- Where my findings diverge from a purely negative interpretation is in the role of iteration and facilitation. When the AI was prompted more carefully and given emotionally grounded human-generated seeds, the ideas became more specific, psychologically meaningful, and varied. This suggests that AI's creative limitations may be less inherent and more dependent on how it is framed and guided, as we discussed in class. The findings from this week's activity further support my stance that AI would support concept generation in a hybrid model to which AI amplifies and extends human-generated insights rather than originating them.
 - **Facilitation.** What is the role of the facilitator in each of these scenarios? How would you facilitate an AI-enabled human concept generation session?
- In the synchronous session, my role as facilitator was primarily about managing people rather than ideas. I focused on keeping participants on task, encouraging engagement, monitoring time, clarifying confusion, and preventing energy loss and distractions. Much of the work was motivational and organizational.
- In the AI-enabled session, the role shifted toward managing the process rather than the people. Instead of motivating participants, I was shaping prompts, refining framing, and curating outputs. In a hybrid session, I would combine both roles of maintaining group dynamics while using AI to handle structuring, clustering, and iteration when human energy begins to drop.

5. Submit

- Submit one .pdf via Canvas to [assignment I-2](#). **Due Jan 25, 11:59pm.**