

**CS-639 — Interaction Design Studio**

# **Agency Spectrum Studio | In-Class Exercise**

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# Pod Shuffle

Before we start — find your new pod.

# Today's Exercise

**Design the same task at three agency levels — then use the four decision factors and HAX guidelines to find the right level.**

- **Low agency** (Levels 1–3): User controls everything; system provides information
- **Medium agency** (Levels 4–6): System recommends or acts; user approves or vetoes
- **High agency** (Levels 7–9): System acts independently; user monitors or is informed

**The question isn't "what level is best?" — it's "what level is right for **this** task, **this** user, and **these** stakes?"**

# Step 1: Choose Your Task

**Pick a domain** — your A1 app, a class exercise, or a common app (email, music, navigation, shopping).

**Pick one task** with 3–5 steps. Good candidates:

- Organizing or filtering content (email, files, photos)
- Making a selection (route, playlist, purchase)
- Creating or editing something (message, document, design)
- Planning or scheduling (calendar, to-do, travel)

**Identify:** Where does this task currently sit on the agency spectrum? What level, and for which stages (acquisition, analysis, decision, action)?

# Step 2: Design at Three Levels

Sketch the same task three times — each at a different agency level.

## Low (Levels 1–3)

User controls everything. System offers options or information, but the user decides and acts at every step.

What does the user do at each step? What information does the system provide?

## Medium (Levels 4–6)

System recommends or acts. User approves, adjusts, or vetoes. Initiative is shared.

Where does the system take initiative? How does the user approve or override?

## High (Levels 7–9)

System acts and informs. User monitors and intervenes only when needed.

What does the user need to see? How do they know the system did the right thing?

## Step 3: Analyze with the Four Decision Factors

Before choosing a level, evaluate your task against the four factors from Monday's lecture:

<b>Factor</b>	<b>Lower agency (1–5)</b>	<b>Higher agency (6–10)</b>
<b>Error cost</b>	Errors are costly or harmful	Errors are minor or recoverable
<b>Reversibility</b>	Actions are hard to undo	Actions are easily undone
<b>Frequency</b>	Rare, high-stakes decisions	Frequent, routine tasks
<b>System confidence</b>	System is often wrong	System is reliably accurate

**Annotate each design:** Is the level too low, right, or too high for this task? Which factors drove that judgment?

# Step 4: Evaluate with HAX Guidelines

Now that you've identified the right level, evaluate how well each design supports the user at that level.

Pull up the **HAX Toolkit**: [microsoft.com/haxtoolkit](https://microsoft.com/haxtoolkit)

HAX Phase	Key Guidelines	Ask Yourself
<b>Initially</b> (G1–G2)	Capabilities, limitations	Does the user know what the system can do at this level?
<b>When Wrong</b> (G7–G11)	Dismiss, correct, explain	Can the user undo or fix what the system did?
<b>Over Time</b> (G12–G18)	Learn, adapt, notify	If the system learns, does the user know?

**Annotate:** Which guidelines become harder to satisfy at higher agency?

# What Good Looks Like

## Strong submissions:

- Three visibly different designs — not the same flow with minor changes
- Clear indication of who acts at each step (user vs. system)
- Four-factor analysis that shows **why** one level fits better than the others
- HAX annotations that show which guidelines matter at which level

## Common pitfalls:

- Three designs that look the same with different labels
- High agency that ignores trust and transparency
- Assuming higher agency = better design
- Skipping the four-factor analysis or HAX evaluation

# Example: Email Triage

## Low agency (Level 2–3):

- User opens inbox, sees all messages
- User scans, reads, decides priority
- User manually files, archives, or flags

## Medium agency (Level 4–5):

- System sorts inbox by predicted priority
- Suggests: "Archive these 12?" — user approves
- Flags urgent messages; user handles the rest

## High agency (Level 7–8):

- System auto-archives low-priority messages
- Surfaces only messages needing response
- Tells user: "Archived 47 messages today"

**Four-factor check:** Error cost is moderate (missing an email matters), reversibility is high (can un-archive), frequency is high (daily), confidence is high (patterns are clear). Supports medium-to-high agency — but G11 (explain why) becomes critical.

# Get Started

1. **3 min:** Choose domain, task, and identify current agency level
2. **15 min:** Sketch all three agency levels
3. **7 min:** Analyze with the four decision factors — annotate each design
4. **7 min:** Evaluate each design against HAX guidelines
5. **Remaining:** Finalize annotations and recommendation

**Due Friday morning on Canvas** — all three designs with four-factor and HAX annotations, plus your recommended agency level with justification.

**Friday critique: "At what level does your system earn the user's trust — and where does it lose it?"**