Sungae Park

30+ years of shaping AI-driven solutions that deliver real value to users through human-centered design

MBA in Information Tech
University of Massachusetts Lowell

BS in Computer Science
Strayer University

Vice President, AI Product Design
HCA Healthcare

Head Of Design & Research (Episource)
Optum / UHG

Chief Experience Officer / Co-Founder
OS Marketplace / SportsBiz

Director, Head of UX Design
TaxAct (part of Avantax)

Global Sr. UX Leader
Hexagon Asset Lifecycle Intelligence

Director of Digital Creative Services
LG Electronics

Web UI/UX Manager & Senior Web Developer
Cotton Incorporated

Software Application Developer
Builders Mutual Insurance Co.

Graphic Designer
Entelli Agency

It is all right to cry

Anthropomorphism

People are more engaged and satisfied when
non-human entities exhibit human-like traits,
making interactions feel more intuitive and trustworthy.

BEFORE

Coders **spend** **60%** of their time on **Scrolling**.

See evidence → Click to code

AFTER

"**Codable Highlights**" section in snippets in SOAP

GenAI suggests → See evidence

OpenAI's API delivers real-time, customized coding support by integrating **client-specific guidelines**, **diagnosis codes**, and **structured formats**

Client-specific Guidelines
Custom rules for client accuracy

Diagnosis Code
Core medical codes for precision

Record Format
Structured response output

Train

CoderGPT

Open AI API
ChatGPT 4o

OpenAI API connects
with CoderGPT

NLP detected
Diagnosis term

Pass

Gen AI
Response

Output

DEMO: https://adaptivecoder.netlify.app/
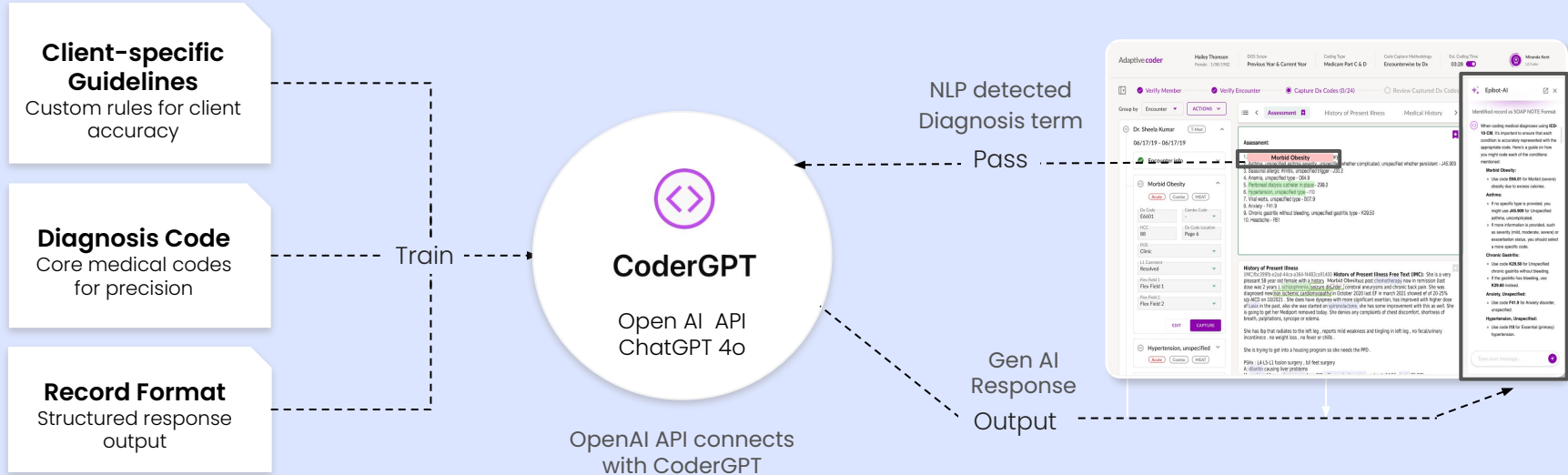
Build something 🧡 Lovable

Idea to app in seconds, with your personal full stack engineer

Design a friendly AI assistant named Kairo, inspired by Baymax from Big Hero 6. Kairo should look calm, supportive, and non-threatening. The assistant is used in a healthcare or wellness app

Attach

Private

Startup dashboard   E-commerce product page   VitePress docs   Personal website

BEFORE

Static templates that lose nuance

AFTER

Real-time, dynamic summary

Patients

John Doe — Stable
MRN: MRN12345
Room: 101-A
Congestive Heart Failure, Type 2 Diabetes

Jane Smith — Caution
MRN: MRN67890
Room: 102-B
Acute Pancreatitis, Hypertension

Robert Johnson — Critical
MRN: MRN54321
Room: 103-ICU
Septic Shock, Pneumonia, CKD Stage 3

John Doe ⊙ Stable
67y, male   MRN: MRN12345   Room: 101-A   Provider: Dr. Smith   🕐 Day 735

Congestive Heart Failure   Type 2 Diabetes   Full Code

Handoff Communication

You are the: **Outgoing Nurse**

ASSESSMENT
Patient is showing improvement in breathing. Edema reduced in lower extremities. Labs show stable electrolytes.

RECOMMENDATION
Continue current medication regimen. Monitor I/O closely. Encourage ambulation TID. Pending echo scheduled for tomorrow.

Nurse Garcia · 07:20 AM
Acknowledged. Will monitor I/O and encourage ambulation as recommended.

Handoff completed and acknowledged by Nurse Garcia

Use SBAR Template

🎤 Enter handoff information...

Patient Summary

| Vitals | Medications | Labs | Allergies |

VITAL SIGN	VALUE	STATUS
Heart Rate	78 bpm	normal
Blood Pressure	132/84 mmHg	normal
Temperature	98.6 °F	normal
Respiratory Rate	18 breaths/min	normal
Oxygen Saturation	96 %	normal

⊙ **Patient Data Summary**
This is EHR data automatically populated from the patient record. Always verify critical information before making clinical decisions.

AI proactively monitors patient progress, flags gaps in care plans, prioritizes tasks, and nudges stakeholders—coordinating across care teams in real-time.

Admit
May 4, 2025

LOS / GMLOS
4 / 3.5 days +0.5

Diagnosis
Congestive Heart Failure

Insurance
Medicare

⚠ Fall Risk   ⊙ Anticoagulation

Avoidable Days: 1 (Awaiting Insurance Authorization)

Current Barriers
Oxygen requirements   Functional decline
Lives alone

Maria Garcia   Active
65 y.o. Female | Room 312B

Admit
May 6, 2025

LOS / GMLOS
2 / 2.8 days

Diagnosis
Community Acquired Pn...

Insurance
Medicare Advantage (Bl...

⚠ Language Barrier - Spanish Preferred

Current Barriers
Medication access   Language barrier

William Thorne   Pending Discharge
84 y.o. Male | Room 201C

Admit
May 3, 2025

LOS / GMLOS
5 / 2.1 days +2.9

Diagnosis
UTI

Insurance
Medicare

⚠ Fall Risk   ⊙ Confusion Risk

Disposition Planning

🏢 **Recommended Placement**

Skilled Nursing Facility (SNF)

Recommended SNF placement due to functional decline and high care needs. Patient requires rehabilitation and 24-hour nursing supervision before safe return home is possible.

Alternative Options
Inpatient Rehabilitation
Home Health with Caregiver Support

Two Midnight Rule Status

Criteria Met

Patient meets Two Midnight Rule criteria with a 9-day stay and active medical treatment required for Congestive Heart Failure, Acute Exacerbation. Continued inpatient care is medically necessary due to severity of illness and intensity of service requirements.

Patient SDOH Barriers

Housing   high impact
Lives alone, 15 stairs to enter home

Transportation   medium impact
No reliable transportation for follow-up

Update Disposition Plan

Discharge Summary   AI-Generated

DISCHARGE SUMMARY
PATIENT: Robert Johnson (72 y.o. Male)
MRN: 7823941
ADMIT DATE: May 4, 2025
LENGTH OF STAY: 4 days
PROVIDER: Dr. James Wilson
DIAGNOSIS: Congestive Heart Failure,
Acute Exacerbation
SECONDARY DIAGNOSES: Type 2 Diabetes,
Hypertension, CKD Stage 3

MEDICAL NECESSITY DOCUMENTATION:
Patient required inpatient admission
for Congestive Heart Failure, Acute
Exacerbation with complicating factors
including Type 2 Diabetes,
Hypertension, CKD Stage 3.
  Admission was medically necessary
due to the severity of illness
requiring continuous monitoring and

☑ Copy   🖨 Print   ⬇ Export to EMR

Peak End Rule

People remember the **most intense moments** (the "peaks") and the final moments of an experience (the "end").

Journey Map: Simple Filer

STAGE
Details

PREPARE & LOGIN
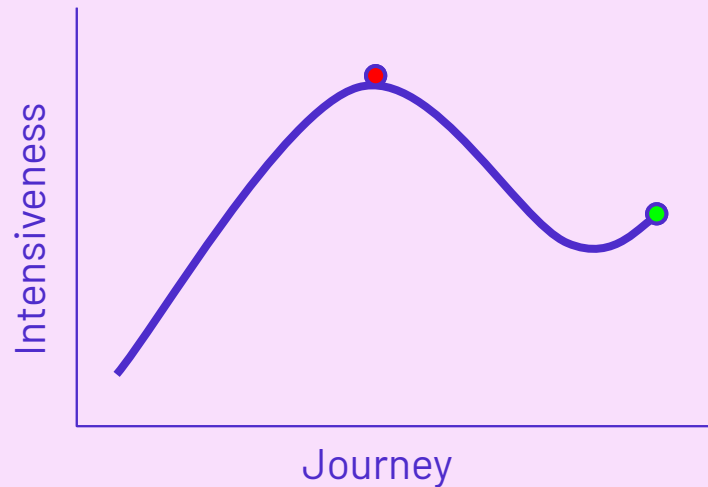Gather W2 information , decide what tax software to use, login/create account.

BASIC INFO
Import previous year taxes, personal info, dependents, and filing status.

FEDERAL
Income, deductions, credits, taxes, section summary.

REVIEW & FILE
Review, alert checker, marketing up-sell, how do you want to pay, how do you want to receive refund, amend, e-file/print return, submit.

Journey steps and labels:

- 1 — Receive W2
- 2 — Use previous year's tax software
- 2 — Use a new tax software (first timers or switchers)
- 3 — Login via website or email link
- 3 — Research products
- 4 — Login
- 5 — Login success
- 5 — Password reset
- 6 — Import previous year's info
- 6 — Manual entry
- 7 — Verify info
- Basic Info
- 8 — W2 import (success)
- 8 — W2 manual entry
- 8 — W2 import (fail)
- Federal
- 9 — Standard Deductions
- 10 — Credits & Taxes
- 11 — Federal summary
- 12 — No errors
- 12 — Review and fix Federal errors / Needs review
- Tax Return Review
- 13 — No alerts
- 13 — Needs review
- 14 — Marketing upsell
- 15 — Tax file submission
- 16 — Pay for product
- 17 — Refund distribution
- 17 — Pay IRS
- 18 — Finish & Logout
- 18 — Finish & Logout

PAIN POINTS

- Funds are tight. Saving few bucks is key.
- Most users cannot remember their login info
- Login failure leads to frustration & delay of entry
- Users are very frustrated about having to manually enter information that is already known by the software
- Multiple errors that make import fail: Software unable to access W2, user error, or employer portal incompatible
- Offers more control to the users but is prone to user error
- Most often happens due to confusion in earlier steps. This alert causes additional confusion and anxiety
- A setback towards the finish line makes users feel like that failed somewhere.
- Users ignored marketing and were usually annoyed at the interruption
- None of the participants enjoyed paying and some were surprised at the amount due
- This is always met with a level of sadness, confusion, and often anger

Alerts flag users to review and make updates to previous sections

QUOTES

"My goal is to just get it done. Get the most back I can." - P4

"I don't want to get locked out." -P5

"You have this information, why do I need to tell you my address?" - P9

"I don't trust my employer very much to have a PDF that is easy to use or access my W2." - P4

"The controlling part of me just wants to enter it all in myself." - P5

"[owing] kinda feels debilitating. Even after everything you've given throughout the year, you have to give even more." -P2

"When you think you're going to get money back but you owe, is like getting a lump of coal." - P8

INSIGHTS

New tax software users
These customers typically have a goal of saving money. They have previously used a CPA or are shopping around to get the most competitive price.

Deciding on tax software
Most users opt to use the same software year over year because they don't have to think about it. Familiarity and ability to retrieve previous year's tax information are top reasons. Most users were willing to pay more to avoid the extra friction of starting from scratch.

Login
Users typically log in once per year and often forget their password. This leads to frustration, often feeling personally responsibility for that failure. They wish there was an easier way to recall their login details while still keeping it secure.

Entering Basic Information
One of the top reasons customers use the same software year over year is the ability to import previous year's taxes and all essential information. This reduces friction and the amount of time required to start. Manual entry is a big source of pain.

Note: The Simple Filer prefers to see their information presented and check for accuracy.

W2 Entry
The experience and emotions of the Simple Filer are heavily influenced by whether or not they have to manually enter their information and if they are successful in attempting to import their W2s.

Deductions
By choosing the standard deduction, the Simple Filer saves time and finds the process to be simple. At this point in the process we begin to see a change in mood depending on whether or not they are receiving a refund or needing to pay the government.

Manual Entry
For the Simple Filer, the majority of confusion stems from having to manually enter information. If there are areas that need review the Simple Filer can become frustrated and confused, often feeling anxious with what "they did wrong", putting the blame on themselves.

*State filing was not observed

Review
After making it through the Federal section of W2s and Deductions, the Simple Filer is starting to feel like they are almost done. If they happen to receive an alert to go back and review other sections they instantly begin to feel anxious and confused as to what "they did wrong".

Product Marketing
Marketing up-sell is met with annoyance, with the Simple Filer ignoring the prompts and materials, feeling they don't need anything additional as their tax situation doesn't warrant additional purchases.

File
Refund distribution is met with delight, while having to pay the IRS often results in sadness and anger. The Simple Filer can become confused if they don't understand why they may owe this year as opposed to previous years.

Tenured Trina + Advocate Adam + Rule Follower Ruth

Nudge Type	Profile Check-In	Early Access	Awareness + Education
Message	Trina: "Hi Trina, it's time to confirm your shift preferences. You're almost done — just one quick check-in to keep things running smoothly." Adam: "Hey Adam, ready to review your upcoming shifts and suggest improvements?" Ruth: "Hi Ruth, just a quick check – do your schedule preferences still match policy?"	Trina: "Early access is now open. Tap here to finalize your schedule before others."	Trina: There's a small new feature that can help save time — want a quick peek? Adam: "You've been invited to beta test a new scheduling tool — want early access?" Ruth: "There's been a policy update — review now to stay compliant."
Trigger Logic	Frequency: Every 30–45 days Condition: No updates to shift preferences in last 30 days	Frequency: At start of early access window (e.g., 2 weeks before schedule publish date) Condition: Trina is on the "early access" list due to past consistent behavior	Frequency: 1–2 weeks after a new feature release Condition: Trina has not used the feature yet but meets criteria for power user
Data Points:	Last modified date of profile preferences Schedule cycle start date	Early access flag = True Has not yet submitted upcoming schedule	User role and behavior score (Cluster 1, consistent logins) Feature flag = off for user
Delivery Method	Magic link (no login) to "Preferences" screen	Magic link (no login) to upcoming schedule	Magic link (no login) to feature intro or demo
Failover Logic	If ignored within 7 days → send 1 reminder	If not completed within 3 days → escalate with "Your spot is still open" nudge	Optional follow-up: "Still want to try it out?"

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Overwhelmed Olive + Personal Peter

Nudge Type	Profile Check-In	Conflict Detection	Awareness + Education
Message	• Olive: "Hi Olive, just a quick check-in — want to update your availability and shift preferences?" • Peter: "Hey Peter, looks like your schedule might need an update. Tap below to make changes based on your latest availability."	• Olive: "We noticed you've had a few schedule conflicts — want to adjust your workday preferences?" • Peter: "Looks like your shifts aren't lining up with your availability — tap below to fix it in seconds."	• Olive: "You've been doing a great job staying on top of things — here's a quick walkthrough of some tips to help you plan even better." • Peter: "Want to save time next schedule cycle? This 1-minute tip might help."
Trigger Logic	Frequency: Every 21–30 days Condition: No profile updates AND 2+ declined/edited shifts in last 30 days	Frequency: Triggered when 2+ conflicts or swaps occur within a 2-week period Condition: Schedule conflict with declared preferences (e.g., custody, school pickup)	Frequency: Monthly Condition: Mixed schedule performance — responsive to nudges but moderate update behavior
Data Points:	Last modified date of profile preferences Number of declined or swapped shift	Conflict log from last 2 weeks User-declared constraints (learned or input)	Nudge response rate Change activity in preferences
Delivery Method	Magic link (no login) to "Preferences" screen	Magic link (no login) to Shift Conflicts settings	Magic link (no login) to 1-minute guide or Quick Planner Tip
Failover Logic	If not updated within 5 days → send a simplified reminder: "Still need to update your availability?"	Escalate with message: "Want help? Your manager can help clarify options."	Optional follow-up: "Want us to walk you through it later?"

HCA Healthcare

Distrust Debbie

Nudge Type	Passive Check-In	Transparency & Control	Justification Nudges (Why It Matters)
Message	Debbie: "Hi Debbie — just a heads up, your schedule settings haven't changed in a while. Want to review or skip?" (Option to dismiss or go directly to settings)	Debbie: "Want more control over your shift alerts and visibility? Update your preferences — no pressure, just options." (Emphasizes user control and autonomy)	Debbie: "We made a small update based on your recent feedback. Want to see what changed?" "There's a new policy — here's how it might affect your shifts."
Trigger Logic	• Frequency: Every 60–90 days • Condition: No profile edits in 3 months + consistent opt-outs or low activity	• Frequency: After 2+ overridden shifts or manager-assigned edits • Condition: Shift assignments differ from profile more than 3 times	• Frequency: Within 7 days of change that impacts Debbie • Condition: Debbie has ignored 2+ feature updates
Data Points:	• Last activity date • Skipped nudge rate	• Number of manager overrides • Current settings mismatched with behavior	• Change log + impact to Debbie's role • Past feature dismissal history
Delivery Method	Magic link (no login) to Settings screen with dismiss option	Magic link (no login) to Notification Settings or Shift Preferences	Magic link (no login) to Policy Summary or Feature Recap
Failover Logic	No escalation — optional only	None. Debbie prefers space and autonomy — no additional messages	Optional: Snooze until the next important update?

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Absent Anne

| Nudge Type	Re-Engagement Prompt	Simple Win Action	Positive Framing & Recognition
Message	Anne: "Hi Anne — we've noticed you haven't checked your schedule in a while. Want to take a quick look?" (Encourages lightweight re-entry with 1-click)	•Anne: "We've missed you! Did you know most teammates who updated their preferences saw fewer conflicts?" •"Anne, small updates can make a big difference — you're just one click away."	• Anne: "We've missed you! Did you know most teammates who updated their preferences saw fewer conflicts?" • "Anne, small updates can make a big difference — you're just one click away."
Trigger Logic	• Frequency: Every 45–60 days • Condition: No login or schedule interaction in last 2+ cycles	• Frequency: After ignoring 2+ cycle nudges • Condition: Inactive user with incomplete profile	• Frequency: Monthly • Condition: System detects 3+ missed nudges or low engagement
Data Points:	• Last login date • Last schedule submission timestamp	• Profile completion status • Preference fields left blank	• Nudge response rate • Conflict frequency
Delivery Method	Magic link (no login) to Current Schedule Summary	Magic link (no login) to Pick-a-Day screen with 1-question UI	Magic link (no login) to Quick Preferences Wizard
Failover Logic	If no response in 10 days → escalate with supportive tone: "Need help getting back on track? We're here if you need us."	Optional follow-up: "Want to finish later? We'll hold your spot."	1 final "opt-in again later" reminder after 30 days

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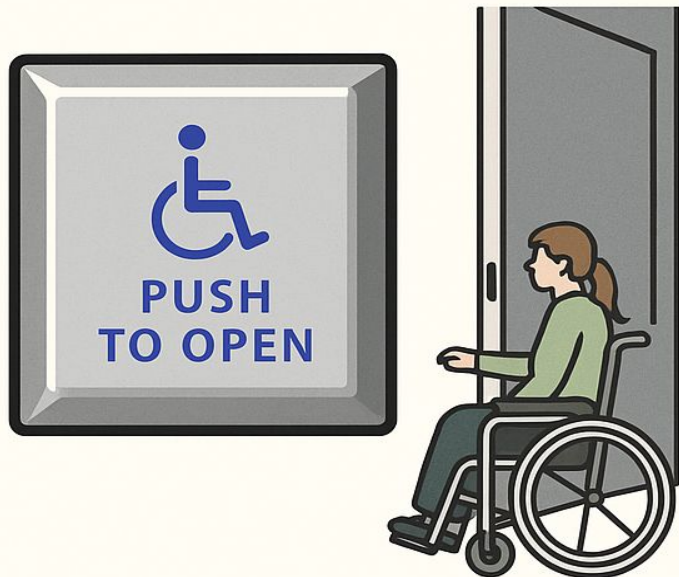
Solve for One vs. Extend to Many

Endowed Progress Effect
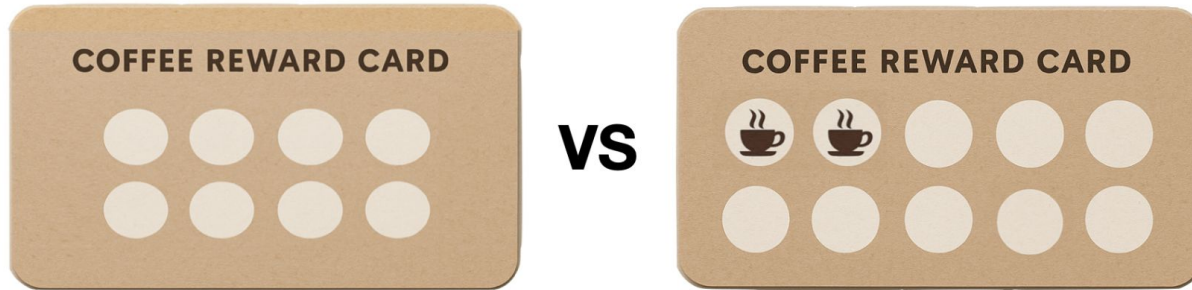
Endowed Progress Effect

People are more likely to complete a task when they feel they've already made progress.
A study showed that reward cards with **2 pre-filled stamps** led to faster completion—even though both groups still equally needed to collect 8 stamps in total. That early progress gave users a psychological head start and a sense of achievement.

Dopamine-Driven Gamification:

Pair with micro-rewards like a **4-Day Handoff Streak**, **feedback points** for Nurse Handoff, and a **headstart reward** for nurses who submit their preferences and schedules early in Timpani—using nudges via Webex/SMS and frictionless Magic Links to take users directly to the task without requiring login or searching for the functions.

Persona-based Nudge Example:

"Thanks for picking up that open shift—your coverage helped 2 teammates avoid burnout."
[Pick up another available shift now]

" You've confirmed all your shifts for the week—your reliability keeps the team running smoothly."
[View upcoming shifts or make changes]

Thank You

https://www.linkedin.com/in/**sungaepark**/