

# My Development with Aphasia

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Rising Again Through Code

By Ewan C. Crawford



## One APP at a time STROKE SURVIVOR

I created this to show the world that aphasia does not erase intelligence, talent, or purpose—and that people with aphasia still have a voice, even if it sounds different.

## 1. Before the Stroke: Identity in Code

Before my stroke, I was a professional developer and entrepreneur. Technology was not just my career. It was part of my identity. I built systems, solved problems, and created tools when tools did not exist.

I filed a United States Patent Application Publication (Pub. No.: US 2015/0355335A1)

SYSTEM AND METHOD FOR COMPRESSING GPS DATA

It solved a real problem. That was who I was — a builder.

## 2. The Stroke: When Language Changes

Then I had a stroke. A stroke affects more than movement. It affects language, rhythm, and confidence.

Aphasia became part of my life. Spelling became the hardest part. Sometimes the word is clear in my mind, but my fingers hesitate.

For a time, I felt I had lost part of my identity. Being a developer was part of who I was.

## 3. The Turning Point: AI Opens a Door

My son Kieran told me that AI could write Swift code and help debug errors. Before that, I did not believe I could build software again.

It felt like a door opened. AI did not replace my thinking. It translated it.

## 4. My Adaptive Workflow

I start in the Notes app on my iPad. The larger screen makes it easier to see. I write in plain English what I want the app to do.

I then use ChatGPT to generate full SwiftUI files. I refine them many times. I copy and paste from my iPad to my Mac. In Xcode, I use SwiftUI previews and break development into one screen at a time.

## 5. Debugging as a Puzzle

Swift error messages in Xcode can be overwhelming. Trying to describe what I want to happen takes energy.

When something does not work, I treat it like a challenge. I try two or three times, then step away if needed.

When it finally works, it feels like victory. It feels like validation.

## 6. From S.A.L.T. to MyAphasia

After my stroke, NeoTerra Systems developed S.A.L.T. When the company closed, that project ended. But the mission did not.

MyAphasia was born. I built it for myself and for others with aphasia. When it was published on the App Store for free, the moment was astonishing.

## 7. Phoenix App: Rising Again

I named enterprise Phoenix App intentionally. The phoenix rises from the ashes. It represents rebuilding identity and proving that life after stroke is not over.

## 8. Coding as Neuroplasticity

Coding strengthens memory, focus, confidence, and problem solving. It is not just development. It is neuroplasticity in action.

## 9. A Message of Hope

If someone with aphasia reads this, I want them to feel hope, courage, motivation, and possibility.

Aphasia does not erase intelligence. Technology is access. AI is not cheating. It is an accessibility tool.

We are not broken minds. We are adapting minds. And we are still building.

## 10. What APP'S have I done?



### MyAphasia

MyAphasia helps people with aphasia and speech difficulties communicate easily using simple, customizable phrases and natural text-to-speech voices.



### MyAphasia Hangman

MyAphasia Hangman is a thoughtfully designed word-guessing game created to support people with aphasia, stroke survivors.



### MileageTrak

Track every drive with precision. Automatic GPS mileage logging, real-time maps, miles or km, and easy CSV export—perfect for expenses and tax claims.



### Batch Rename

Batch Rename makes organizing photos, documents, and downloads fast, simple

## 11. What's Next?

I have almost finished .....

### **MyAphasia Spelling**

MyAphasia Spelling is a purpose-built speech and spelling practice app designed to support individuals with aphasia, stroke recovery, and language challenges.

The app presents a clear image and invites the user to spell the word step-by-step, similar to a supportive hangman-style learning system. Letters are revealed progressively to encourage learning without frustration.

Key Features:

- Large, clean interface optimized for iPhone and iPad
- Image-based word prompts
- Progressive letter reveal system
- Text-to-Speech playback
- Practice speaking mode
- Voice recording and audio export
- Alphabetical solved words tab
- Designed with accessibility in mind

But I am stuck with trying to get a Library of Pictures to load on installation of the app.

**Future projects I am considering.....**

### **MyAphasia Spot the Difference**

This would be a simple, aphasia-friendly activity.

What the user sees

- Two pictures side-by-side
- Example themes:
  - Cars
  - Houses
  - Animals
  - Kitchen items
  - Everyday objects

### **MyAphasia Memory Builder**

- Picture → hide → recall word
  - 2–4 word sequence recall
  - Tap letters in order
  - Adjustable difficulty
  - Large buttons, calm colors
  - Voice playback
  - Progress tracking graph

Neuroplasticity angle: strengthens working memory circuits.

### **MyAphasia Conversation Coach**

Practice real-life speaking situations.

Features

- “Order Coffee”
- “Doctor Visit”
- “Phone Call”
- Role-play mode (slow playback)
- Record + compare speech
- Confidence scale after practice
- Export recordings

### **MyAphasia Writing Pad**

Improve spelling + motor language.

Features

- Trace letters (Apple Pencil support)
- Spell after picture prompt
- Auto-save journal
- “Today I feel...” starter prompts
- Export to PDF

Great for emotional expression + recovery journaling.

## **MyAphasia Watch**

Emergency & Safety Screen

One large button to speak:

“I have Aphasia”

“Please speak slowly”

- Shows medical info
- Option to call caregiver

Good for

- Public situations
- Stress or confusion moment
- 911 call

Apple Watch compatible.

## Addendum

**What I typed into ChatGPT to make Swift code and then cut and paste into Xcode**

Build a ios app named MyAphasia

swift and swiftui

The purpose of the app is Augmentative and Alternative Communication (AAC) text to speech

Setup app

Ability to change speech engine to five standard male and female voices **Samantha, Nicky, Allison, Alex, Aaron, Tom** and **Fred**

Main GUI

The main app GUI with categories and sentences and settings

Ability to add categories

Add categories Health, Feelings, Personal and Today

Ability to add new sentences and assign them to categories

Add three sentences each category

Ability to edit and delete categories and sentences

Maximum word count for input textbox for sentences is 100

Intuitive interface for iPhone and iPad using maximum screen size for each device

Build it in complete app in one file

## **ChatGPT debugging messages into Xcode**

Can you make the entry point for the app should TODAY category

Can you pin the Today category to top of list

Can you make the Today category read only and leave ability to edit/delete sentences alone

Make "Today" category capitals

Undo last changes

Make Aphasia friendly colors

Implement your design ideas

Implement export capability to export the categories and sentences to CSV and ask user for where to save the file

Can you introduce a delay in starting the export process so that app can assemble the data first

Implement code to tap "Export Categories & Sentences (CSV)" the app generates the CSV first then asks the user where to save it

waits for 2 seconds before presenting the share sheet

When you tap "Export Categories & Sentences (CSV)", the app first generates the CSV file and show a dialogue box asking where to save the file

change output filename for export to "MyAphasia\_" date+time

Undo changes

Can you implement filename for CSV export "MyAphasia\_export\_" + date and time

Can you implement import function for categories and sentences matching encoding scheme you used to export function

The context menu in the categories screen for "Rename" is not working

The context menu in the categories screen for "Delete", can you make a screen giving the user to options delete or cancel

The context menu in the categories screen for "Rename", can you insert a pencil graphic

The Categories screen when the user swipes left it shows Delete button, can you delete code

The menu with 3 dots on the right side of the sentence, can you add a Cancel button to it

The menu with 3 dots on the right side of the sentence, can you add a graphic to Cancel option

The menu with 3 dots on the right side of the sentence Edit option is not working all the time

The menu with 3 dots on the right side of the sentence Edit option when user first opens error message "No sentence selected"

The sentence screen when the user swipes left it shows Delete button can you delete the code

Add a confirmation alert to sentence delete option

Add a option to settings to " restore to default

Add a warning to "restore to defaults" giving user the option to Cancel or not

Can you load all English (US,UK and Australia), French, German and Spanish voices

Can you add setting for default language and translate the GUI from English to French, German and Spanish

translate the user interface English to French, German and Spanish based on language default language

Translate default categories and sentences based on the language settings

In settings- Add a option to select your language from English, French, German and Spanish

1 Select your language

2 male or female

3 select preferred voice based user choice on language, if device has no voices loaded for the selected language setting can you show user a notice to System Settings and then switch to last choice

Adjust the user interface GUI based on language default language

Translate default categories and sentences based on the language settings

English- Alex, Samantha, Allison, Ava, Nicky, Susan, Tom, Victoria, Fred, Aaron, Daniel, Kate, Oliver, Serena, Arthur, Martha

French - Audrey, Aurelie, Thomas, Amélie, Chantal, Nicolas

German - Anna, Markus, Yannick

Spanish - Diego, Monica, Paulina, Laura

On "Add Sentence" function can you filter out newline and Carriage Return characters from the user input