Type Evolve

The AI Typing Trainer.

Type Here!

In the quiet of the early morning, the beach was a serene escape. Waves whispered secrets to the shore, and seagulls soared above. Footprints dotted the sand, telling tales of early walkers. The horizon, painted in hues of pink and orange, heralded the promise of a new day.

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Our Motivation

- There has been a troubling trend recently emerging in computer technology education... kids are no longer learning to "touch" type (aka using a QWERTY keyboard)
- "Typing with two thumbs on a smartphone simply doesn't translate to being able to type effectively on a computer." [1]
- "Most develop idiosyncratic, personalized hunt-and-peck methods. Many do not touch type, or type without looking at the keyboard by placing the fingers on the home keys" [2]





- 1 https://www.learning.com/blog/teaching-keyboarding-still-relevant-2023/
- 2 https://www.technologyreview.com/2011/08/15/22130/out-of-touch-with-typing/

Application Flow



User types out prompt, aiming for speed & accuracy

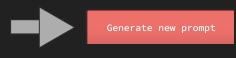
User receives color coded output of their accuracy



User receives their feedback outputs:

Results

- Accuracy %
- WPM
- Missed words
- Elapsed time
- Keyboard heatmap



User can generate a new prompt from our model

Prior feedback is used as input to generate next prompt using LLM

userPrompt = `Create a story within a 50-word limit, that includes
the words \${formattedWords}, and \${difficulty} words with letters
\${formattedLetters}.`;

Technologies Used

- Frontend
 - JavaScript + React
- Backend
 - CapybaraHermes-2.5-Mistral-7B served via llama-cpp
 - Preference-tuned using dpo-mix-7k dataset
 - Quantized to run locally on Mac M1 CPU

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Improvements for the Future

- User login/data store for continuous learning
- Potentially more accuracy scores
- More accurate missing words analysis
- More precise keyboard heatmap weights





Thank you for listening!

Questions?