



AI synergy!

Developing an English Learning Game using AI Tools

Octavian Popoviciu

Multibit Solutions

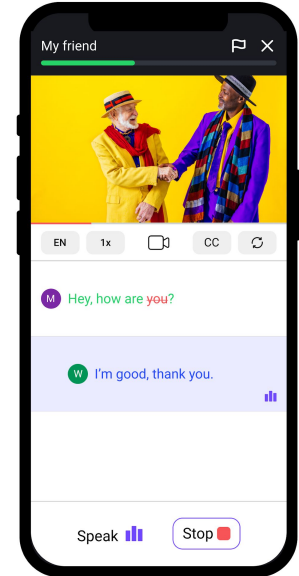
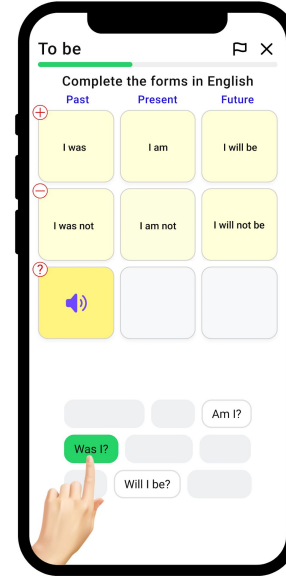
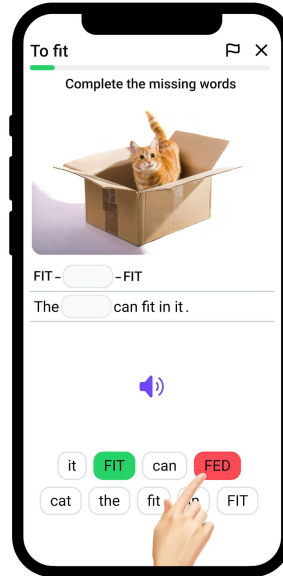
octavian@multibit-solutions.com
<https://www.multibit-solutions.com>





About the game

- Learn English
- Play a game
- Rhyme irregular verbs
- Conjugate all verbs
- Video game





Content generation using LLMs

- Conjugation:
 - Regular verbs
 - Irregular verbs
 - Past, present, future
 - Simple, continuous, perfect, perfect continuous
 - Positive, negative, question
 - Multiple languages: EN, DE, RO, IT, ES, others planned
 - ~50% success rate
- Rhymes for irregular verbs
 - The 3 irregular verb forms
 - Rhyme with your native language: DE, RO, IT, or ES
 - ~5% success rate





Speech to text, text to speech

- Natural Language Processing (Speech To Text)
 - Microsoft Azure (paid API)
 - Google Cloud (paid API)
 - Amazon Web Services (paid API)
 - **OpenAI Whisper (paid API/free local)**
 - Vosk (free local)
 - CapCut (paid local)
- Voice generation (TTS)
 - Microsoft Azure (paid API)
 - Google Cloud (paid API)
 - Amazon web services (paid API)





Deployment hardware

- AMD Epyc processor on rented server
- Personal PC/laptop using
 - CPU
 - GPU
- Custom build PC, using Nvidia GTX 4080
- Custom build PC using TPU (untested for now)





Collaboration inquiry/offer



Open for

Research collaborations,

Knowledge transfer

Product development

Thank you!

