

Storyteller Bot

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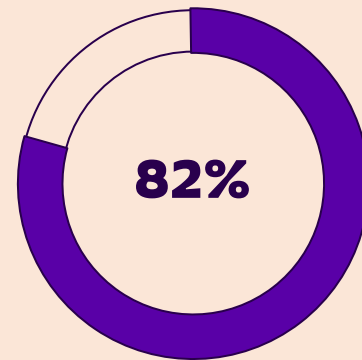
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Conclusion



01

Motivation and Goal



**of students eligible for
free or reduced lunches**

do not read at or above
proficient levels by fourth
grade

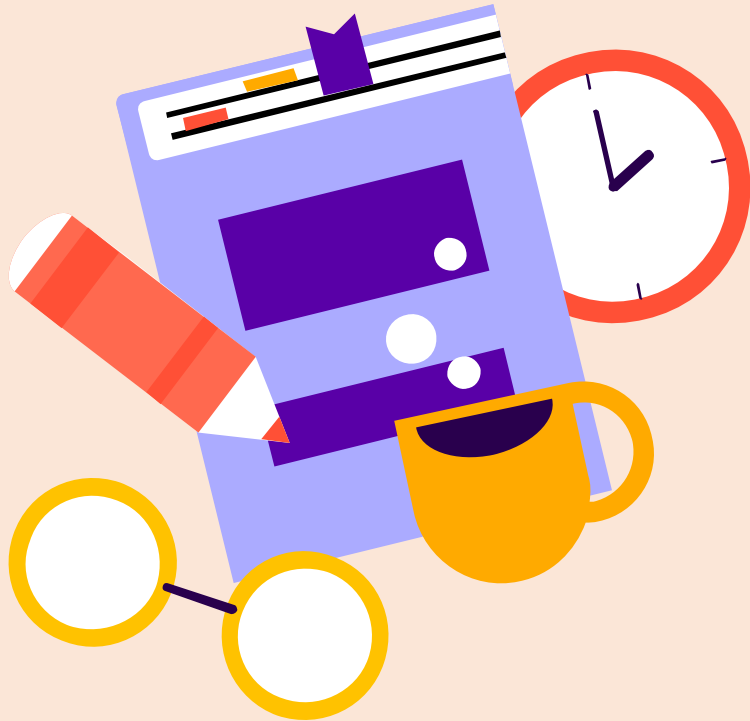
Research Question

“How can we design a technological solution to address the education/literacy gap between students of different socioeconomic statuses?”



02

Problem Background Related Work

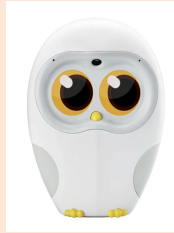


Current Landscape



Tega

MIT Companion AI
- Personalized
Literary Skills
Building



Luka Reads

Singapore Based
AI Literary Device -
Reads
Chinese/English
Titles



Codi Bot

Preprogrammed
Audiobooks,
English Titles



Reading Software

Literary Skills and
Comprehension
Games Available
Online



My Differences

“Storytelling” Focus
Kid Centric
Cost

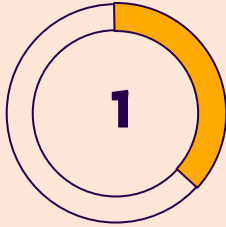


03


Approach



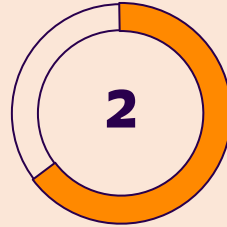
Project Components



Hardware Loop

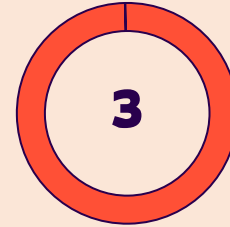



Technical Components of the Project (Camera, Wiring, Connecting to Laptop/UI/Software)




Software Loop

Developing Framework, Computer Vision, Choosing/Connecting APIs, Additional Features (Gamification, UI Development)



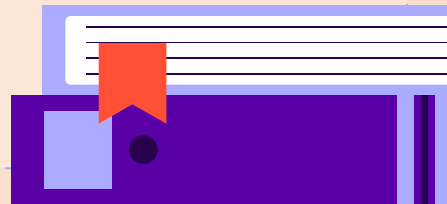
Physical Product

Assembling the Product, Kid-Proofing/Kid-Encouraging, Lowering Cost, Effective Positioning/Ease of Use





**ITERATE,
ITERATE,
ITERATE.**





04

Implementation

Software Components



Computer Vision

OpenCV, PyTesseract, Vision Language Models, Google API



Additional APIs

Translation, Audiobooks, Libraries, etc.



Speech API

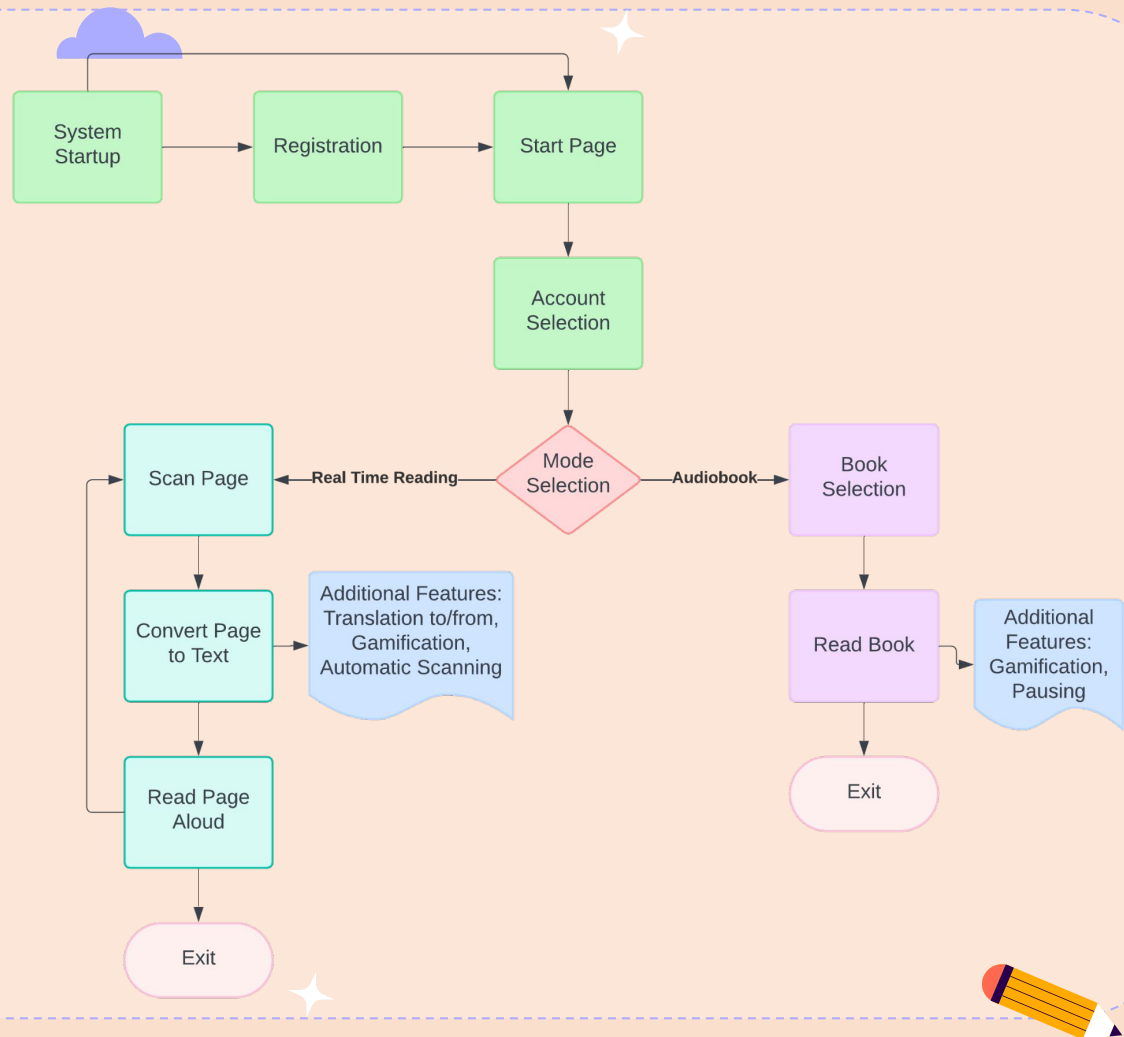
gTTS, Google API, alternatives



User Interface

Human-In-The-Loop, Terminal, Python GUI, Remote, etc.

Software System Design Framework

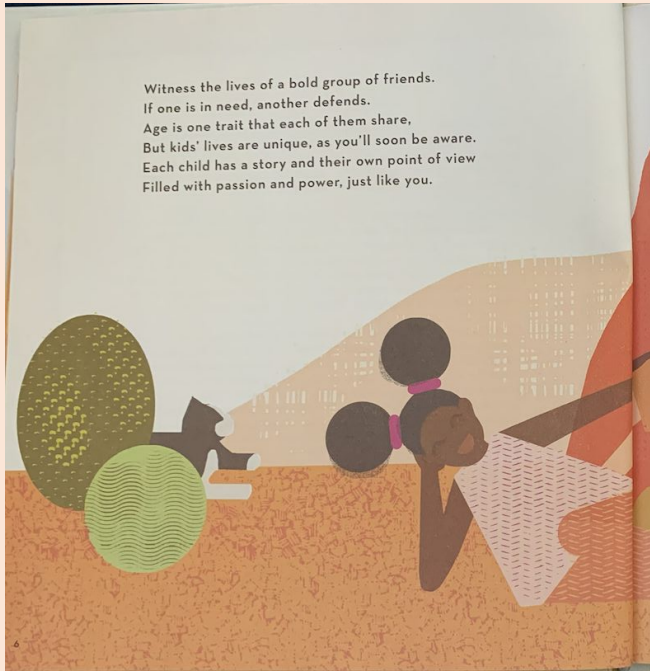




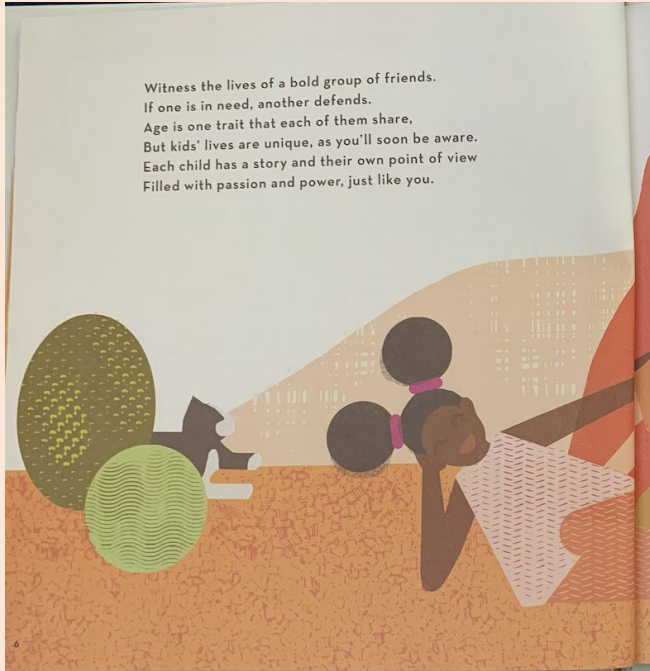
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Results

Current Progress Video



Current Progress



Current Progress



Exhibit Preparation

Paper/Board

- Description of Problem
- Past Solutions
- My Solution

→ Software Map
(Easy → Lift flap for complex)

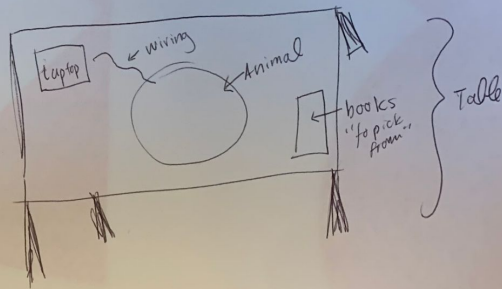
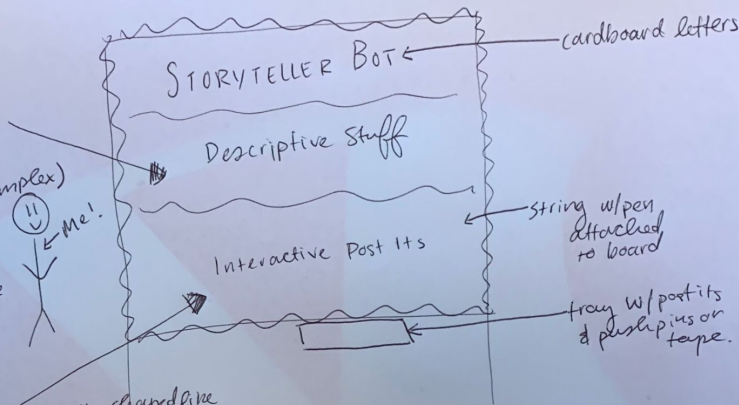
→ "Hardware"

- Stretch Goals in Future
- A bit about tech/justice.

Interactive Post it Section

- Write a note w/ your experience, what should I add next, what do you like, books to add

★ Led lights around the board? like fairy lights?
★ Letters that pop off board that say storyteller bot
★ Wordle thing → using mentimeter? or one of those polling software, could project.





06

Conclusion