Passion for music & teaching

Challenges in Education

Saving Key Details

Independant and empowered

Some facts

1.3

BILLIONS

*Experience disability**

60

MILLIONS

*Completely blind***

70%

OF VISUAL IMPAIRMENT STUDENTS

*Has barriers in education****

OUR TARGET

Blind individual, low vision, and student

“We need a tool that empowers them and allows them to overcome this educational barrier”

* World Health Organization - Disability”

** Orbis - Avoidable blindness. Blind people by 2050

*** Journal of Blindness Innovation and Research - Access to Math and Science Content for Youth Who Are Blind or Visually Impaired

Bright Path

Education without barriers

Hack for accessible personalization and recommendation

Value proposal

Empowering through a seamless multilingual assistance.

Based on

Facilitating note-taking

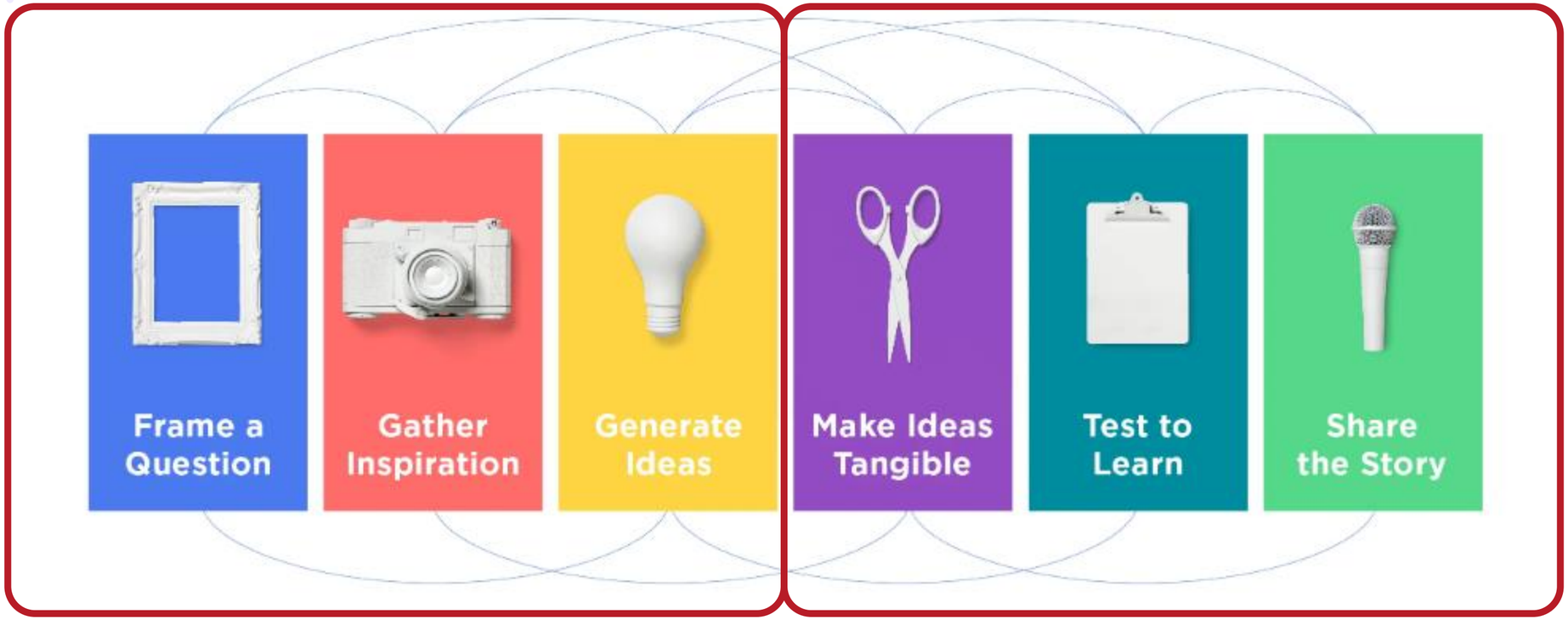
Use of Microsoft Azure AI services.

User Centric

Accessible via web browser.

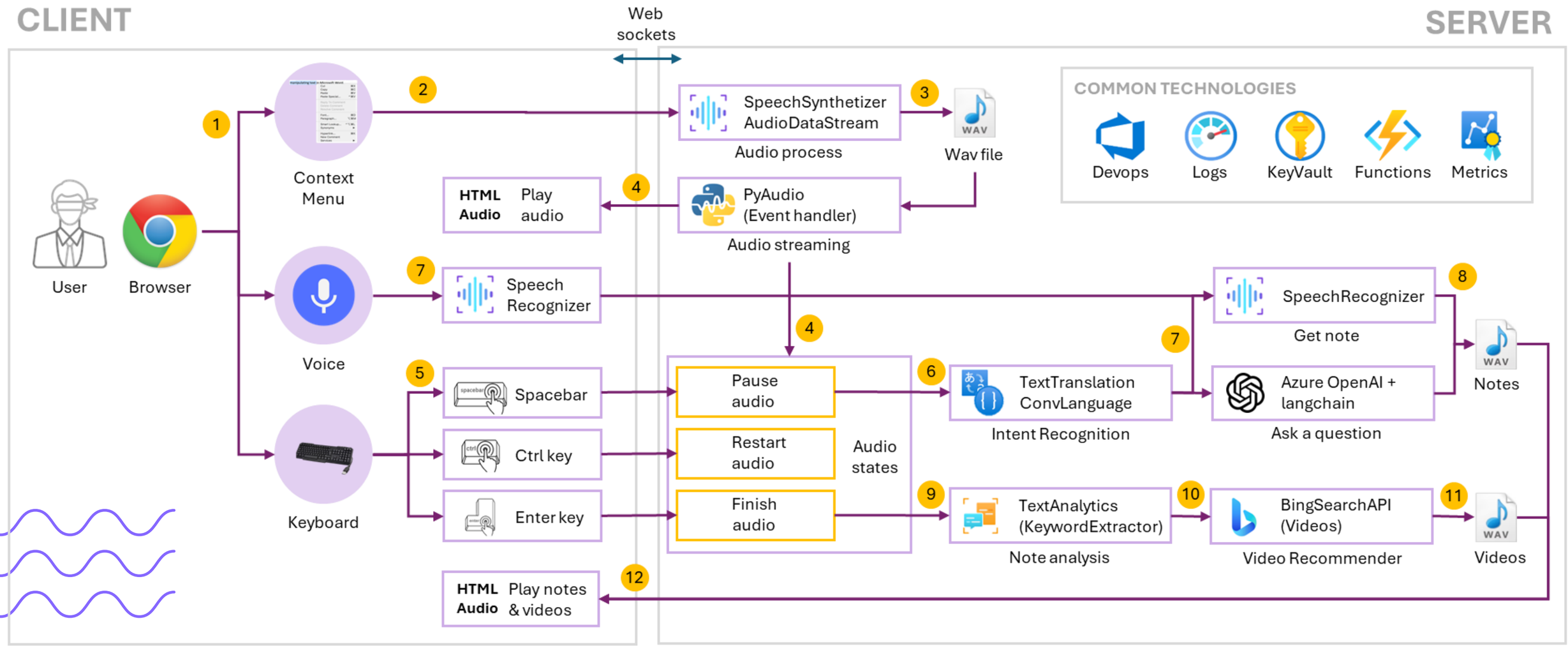
Nothing about us, without us

Methodology



Design Thinking

Architecture



Architecture (explanation)

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Steps

1. **Input:** The user selects text, right-clicks, and chooses Bright from the context menu.
2. **Process audio:** The selected text is sent to the server and processed by the synthesizer.
3. **Audio creation:** A .wav audio file is created.
4. **Event handler:** The file is sent to the browser and activates the event handler.
5. **Spacebar event:** Pauses the audio.
6. **Input:** The user listens, and what they say is processed by an intent recognizer.
7. **Intent recognition:** Either a personal note is saved or the text is analyzed by question via OpenAI.
8. **Audio creation:** It is stored in a list of notes, and then a .wav audio file is created.
9. **Enter event:** Ends the audio and sends the list of notes for keyword analysis.
10. **Recommendation:** Recommends videos based on keywords.
11. **Audio creation:** The videos are stored, and then a .wav audio file with the titles is created.
12. **Client response:** It is played in the browser.

Specific Resource

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Conversational Language Understanding Details

Create a language resource through https://language.cognitive.azure.com/:
Create a project and 2 intents: "get_note" and "infer_text“. Utterances for training are:

infer_text

- What does that mean?
- Can you summarize what I just heard?
- Tell me more about that
- Can you give me a summary?
- I want to ask a question about this
- What does it mean?
- Give me more information about that
- Can you explain that?
- Explain this to me
- I want to know more about this
- What is the meaning of that?
- Summarize it for me
- Can you elaborate more on this?
- Explain it in detail
- What does it exactly mean?
- I need more details about this
- I want to understand this better
- Give me an explanation of this
- Summarize it briefly
- Can you infer more about this?
- Can you explain what I just heard?
- What else can you say about this?
- I need an explanation
- Give me an analysis of this
- Can you infer something more?
- Explain more about this topic
- I need to understand this better
- What does this information mean?
- What is the summary of this?
- Give me a synopsis of this
- How do you interpret this?
- What does all this mean?
- Help me understand this
- Break this down for me
- Can you detail this?
- I need an interpretation of this
- Give me a clear idea of this
- Can you summarize?
- I want to understand the meaning of this
- What is the essence of this?
- What does this imply?
- I want a clarification on this
- Explain this to me in detail
- What is the context of this?
- Give me more context on this
- What can you infer from this?
- Explore more about this point
- What is the key information here?
- What can you say about this?
- Give me a detailed explanation of this

NOTE

We used 50 utterances for a robust training, but for testing purpose you can get around 10 and could be enough

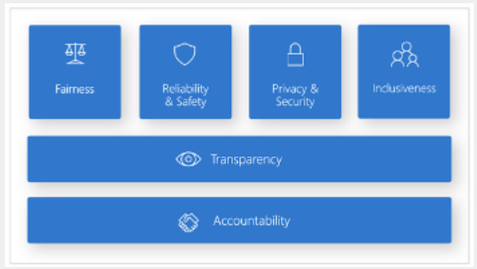
get_note

- Save a voice note
- I want to save this
- Take a note
- Save note
- I want to make a note
- Save this as a note
- Add a note
- Take note of this
- Save this for later
- Save this as a voice note
- Add a voice note
- Save this
- I want to note something
- Save a note about this
- Record a note
- I want to record this
- Make a note of this
- Record this as a note
- Save this message
- Save this audio
- Note this down, please
- Record this information
- I want to take a note
- Make a record of this
- I need to save a voice note
- Archive this information
- Make a recording of this
- Add this to my notes
- I want to take a note for this
- Put this in a note
- Capture this
- Save this audio as a note
- Take a recording of this
- I want you to save this
- I want to take a voice note
- Record this for me
- Make a record of this, please
- Archive this for later
- Create a note with this
- Note this message
- Save this recording
- I want to record a voice note
- Memorize this
- Save this data
- Make a note of this, please
- Save this in my notes
- I want to save this message
- Record this in a note
- Make a voice note with this
- Take this as a note

Key features

- Interactive Reading
- Powered by Azure
- Privacy-centric
- User-centered design
- Accesibility standards
- Multilanguage
- Error-proof (Tested)

Compliance for



Responsible AI

Web Content Accesibility Guidelines

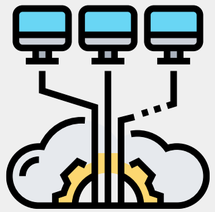
Link to the solution

https://github.com/tomas-pucutay/brightpath-hackaton-microsoft/

What comes next?

Future Applications

Technologies to be deployed



Future Markets

Next Steps

BrightPath's Team

Feliciano
Partner

Tomás
Tech strategist

Hugo
Researcher

Tony
Product Owner

Fer
Frontend (UX/UI)

Our keywords

entrepreunership

artificial_intelligence

latin america

azure

código_facilito

Get in touch!

/nestorespinozaurco/
/tomaspucutay/
/tony-carballo/
/itzama/


Thank you