



Teacher's Pet

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Project Goal

Background: During communication between a speaker and an audience it is difficult for the speaker to know just how much the audience understood their speech.

Goal: Design a system that can provide a speaker with a detailed breakdown of how well they are communicating. Speakers will receive feedback on guest comprehension.

The techniques we will use to understand guest comprehension:

- **Questions** – guests answer questions during lecture
 - Template based - Predefined questions
 - Auto-generated - Relevant questions created autonomously during lectures

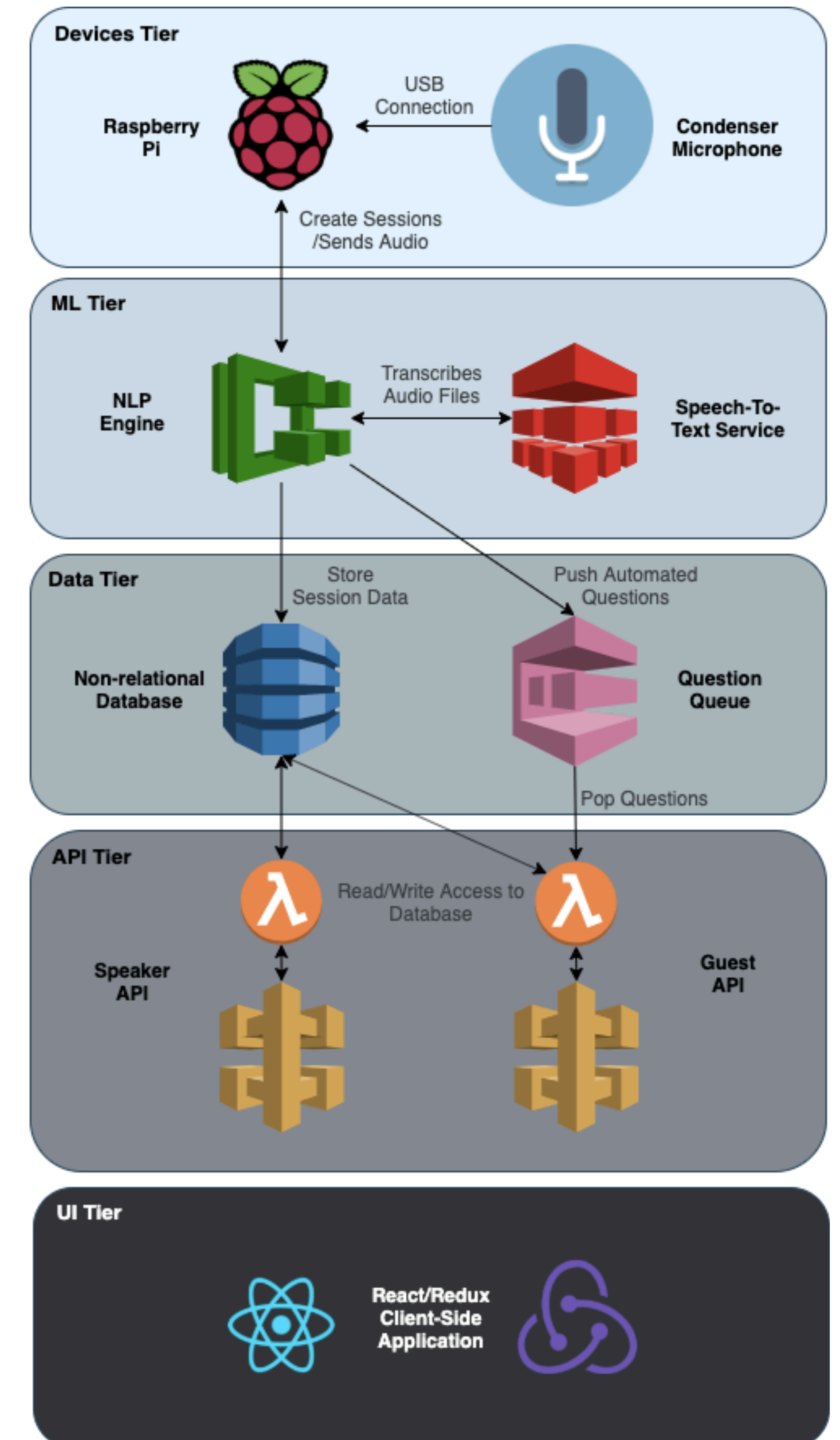
The information the speaker will receive as feedback:

- **Topics** that were covered in their talk
 - Which topics guests were struggling in (% of correct responses)

Current Progress

	Task	Nik	Monish	Dertli	Kevin
Design Work	NLP Design Doc		✓		
	System Design Doc	✓			
	DSP Design Doc				✓
	UI Mocks			✓	
NLP	Setup Speech to Text				
	Code NLP Engine		WIP		
	Setup NLP Engine Server				
	Training Models				
	Testing Models				
Web	Speaker REST API				
	Guest REST API	WIP			
	Speaker UI / UX				
	Guest UI / UX	WIP			
	Setup Database				
	Setup Question Queue				
Audio	Interface with Devices				
	VoIP				WIP
	Audio Capture				
Devices	3D Modeling			WIP	
	State Machine Implementation				
	Send Messages over HTTP				

System Architecture



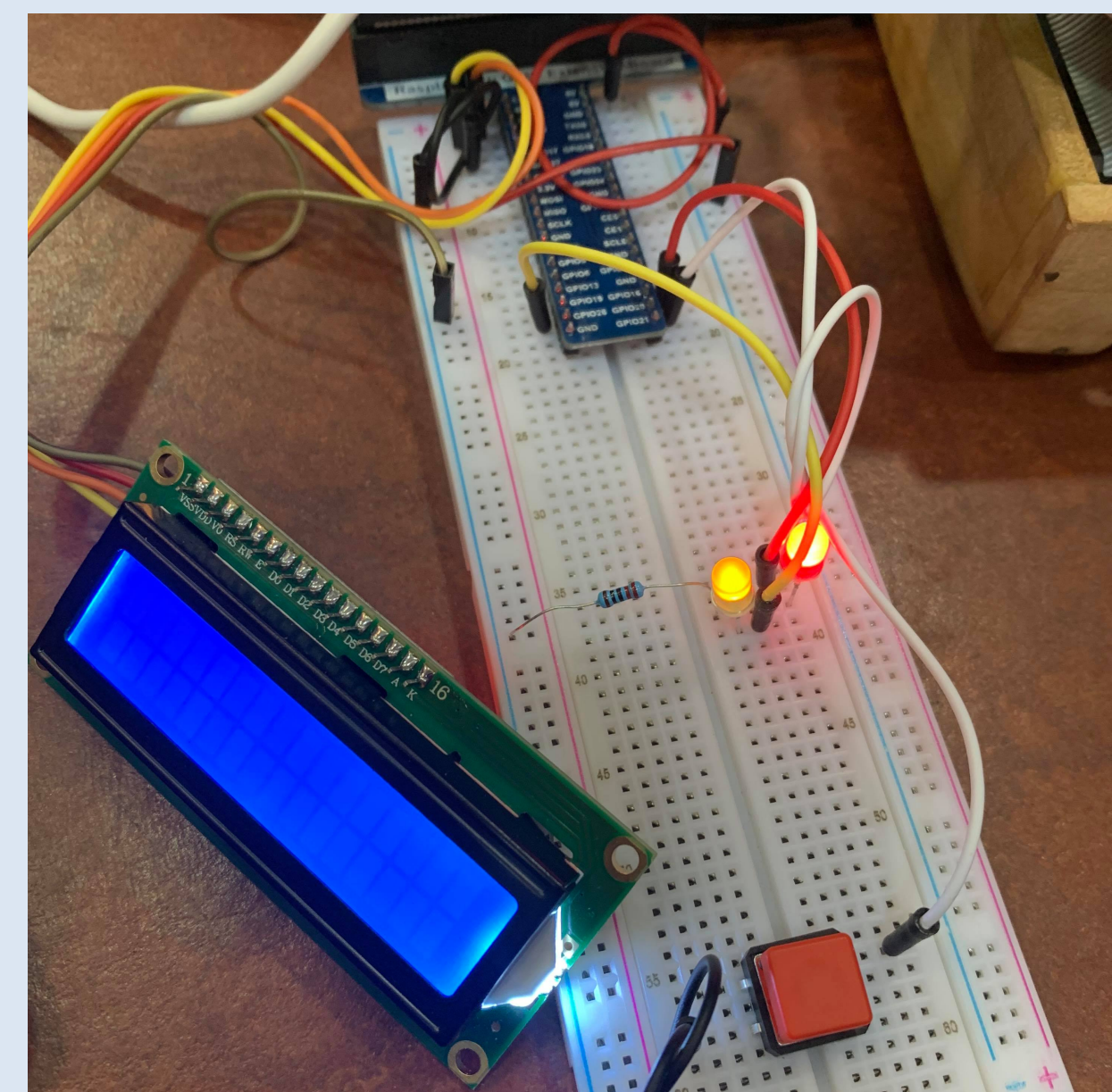
UI Guest/Speaker



References

- [1] Manning, Christopher D., et al. "The Stanford CoreNLP Natural Language Processing Toolkit." *ACL Anthology*, www.aclweb.org/anthology/P14-5010/.
- [2] Mark Snyder, William B Swann, Behavioral confirmation in social interaction: From social perception to social reality, *Journal of Experimental Social Psychology*, Volume 14, Issue 2, 1978, Pages 148-162, ISSN 0022-1031, [https://doi.org/10.1016/0022-1031\(78\)90021-5](https://doi.org/10.1016/0022-1031(78)90021-5)

Hardware



Team

