Journal Report 20 03/01/20 - 03/07/20 Arvind Ravipati Computer Systems Research Lab Period 1, White

Daily Log

Monday March 2

Decided to Create the Account for the Google Cloud Speech to Text API. Had to Sync Local Code and Google Account which Required API Keys. Downloaded a JSON File with Credentials and Set up Local Environment, which Took Care of these Credential Errors. Ran into Invalid Mode for the Audio File and Looked into Potential Fixes.

Thursday March 5

Fixed the Invalid Mode Error for the Audio File. Found Out the Audio File Had to be Less than a Minute. Had to Use an Asynchronous Call to Use the API for Larger Audio Files. Asynchronous Calls Require Audio Files Stored in Buckets on Google Cloud. Manually Set up Buckets on Google Cloud and Looked into Adding Files to Buckets using Python. Ran into Permission Errors for Accessing the Audio File and Looked into Potential Fixes.

Timeline

Date	Goal	Met
Feb 21	Research into Audio to Text Methods	Yes, Found the Google Cloud Speech
	that Can Account for Punctuation	to Text API
Feb 28	Begin Implementing the Google	Yes, Started Writing Program to Im-
	Cloud Speech to Text API	plement API
Mar 6	Finish Implementing the Google	No, Ran into Permission Errors with
	Cloud Speech to Text API	Buckets on Google Cloud
Mar 13	Continue Implementing the Google	
	Cloud Speech to Text API	
Mar 20	Finish Implementing the Google	
	Cloud Speech to Text API	

Reflection

I was happy to begin coding the Google Cloud Speech to Text API, as it helped me create a more realistic timeline for the future. I realized implementing the API would take much more time due to new ideas such as buckets and the errors that came along (permission and access errors). I am scared that that the asynchronous calls do not support punctuation, as the example for punctuation used synchronous calls. If this becomes the case, I will break the audio file into 55 second segments and concatenate the translations or again look into new APIs (I hope this do derail my end of year goal). After fixing this issue, I will start to integrate both parts of the project together.

Year-End-Goal Statement: By the end of this year, we will create a website using TJ Director where one can upload an audio file (.mp3 or .wav) and we return the summarized text of the audio file using our program. In addition, we plan to have an updated and clean Github repository for others to understand our project.