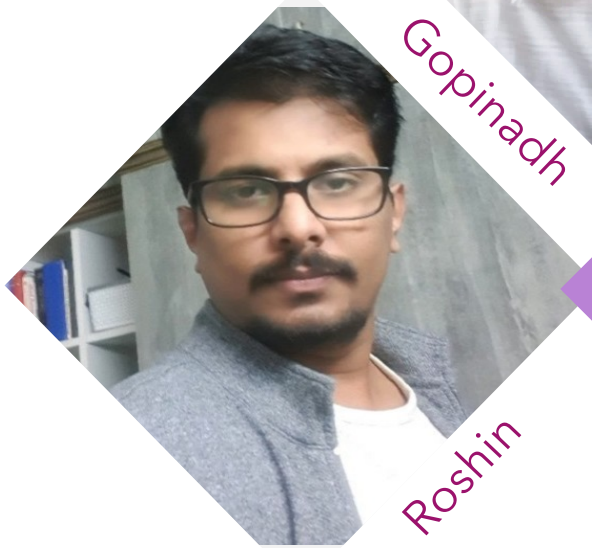

Pronounce

TEAM PRONOUNCE

Ravi

Sangeetha

Gopinadh



Roshin

Shwetha

Why Pronounce

Pronouncing someone's name correctly isn't just a common courtesy. It's far more than just the syllables that come out of someone's mouth. It's an important effort to create an inclusive society, a way to emphasize safety and belonging.

Let’s build more inclusive and safe society through Pronounce!

A person's name is to him or her the sweetest and most important sound in any language.

Name can tell the world a lot about one’s identity, as well as one’s cultural and familial background.

Making an effort to pronounce an person's name serves as a sign of respect .

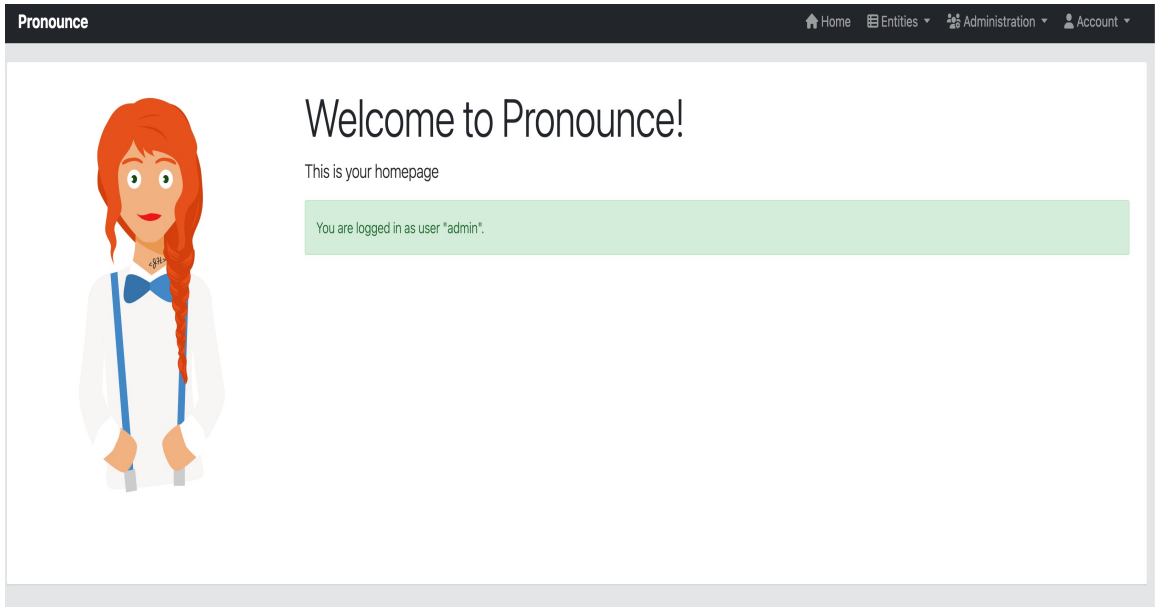
It's important to respectfully ask someone about the correct pronunciation of their name.

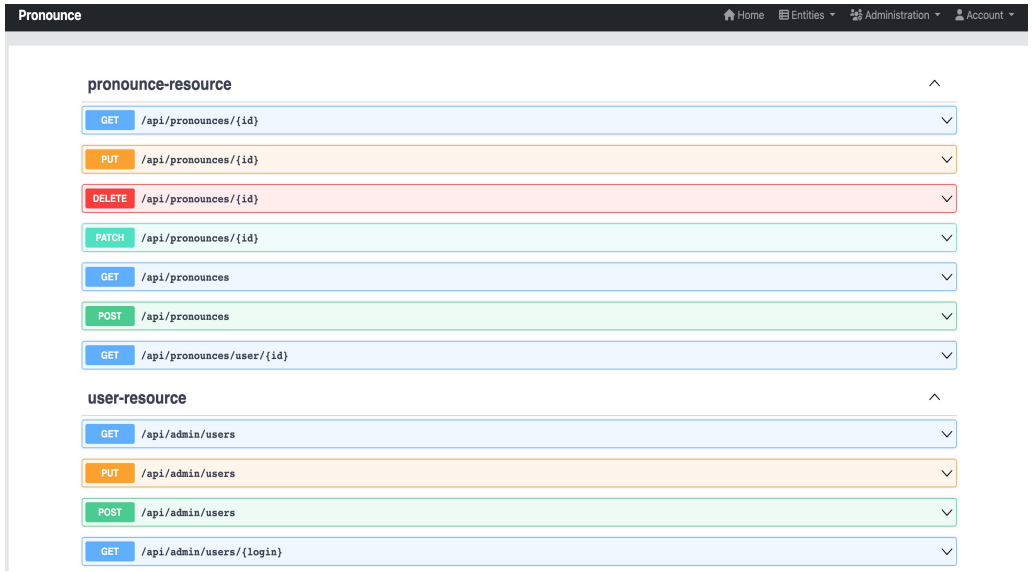
How Pronounce

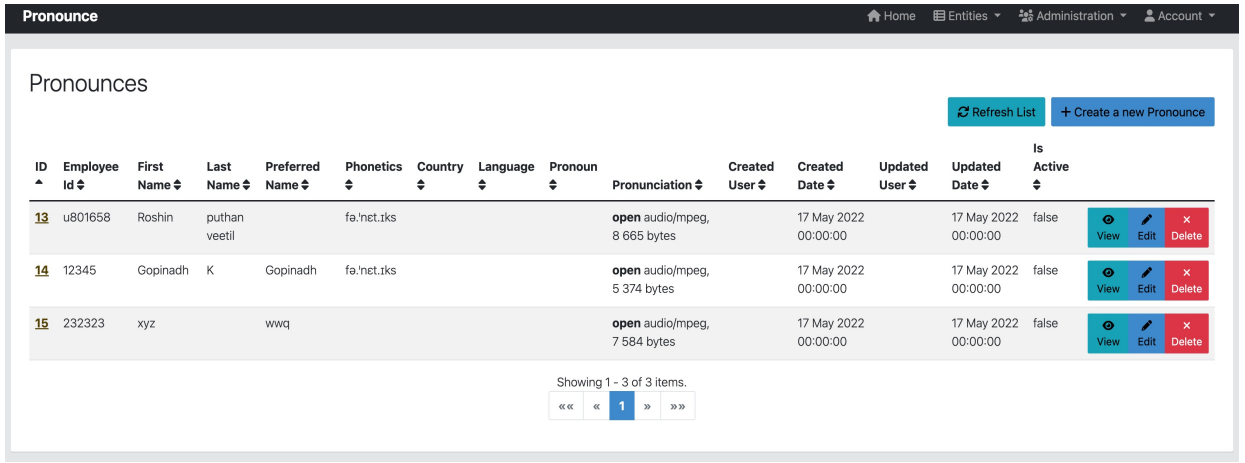
Pronounce provides complete ecosystem to enable name pronunciation across different channels.

- High Performing Rest Service (Java)
- Admin Web Portal (Angular)
- Mobile App (Android & iOS)

Admin Web App







Mobile App

1:56

Pronounce

LAN Id

Password

LOGIN

1:56

Welcome admin

Preferred Name

Save

1:56

Start Stop Play

Status : RecordingStatus.Initialized

Avg Power: -120.0

Peak Power: -120.0

File path of the record: /Users/roshin/Library/Developer/CoreSimulator/Devices/8AB48701-063B-4895-8BB1-3ADA13D30BD1/data/Containers/Data/Application/6E97FC30-F680-48D5-9253-38C5AD9CB826/Documents/flutter_audio_recorder_1652729449762.m4a

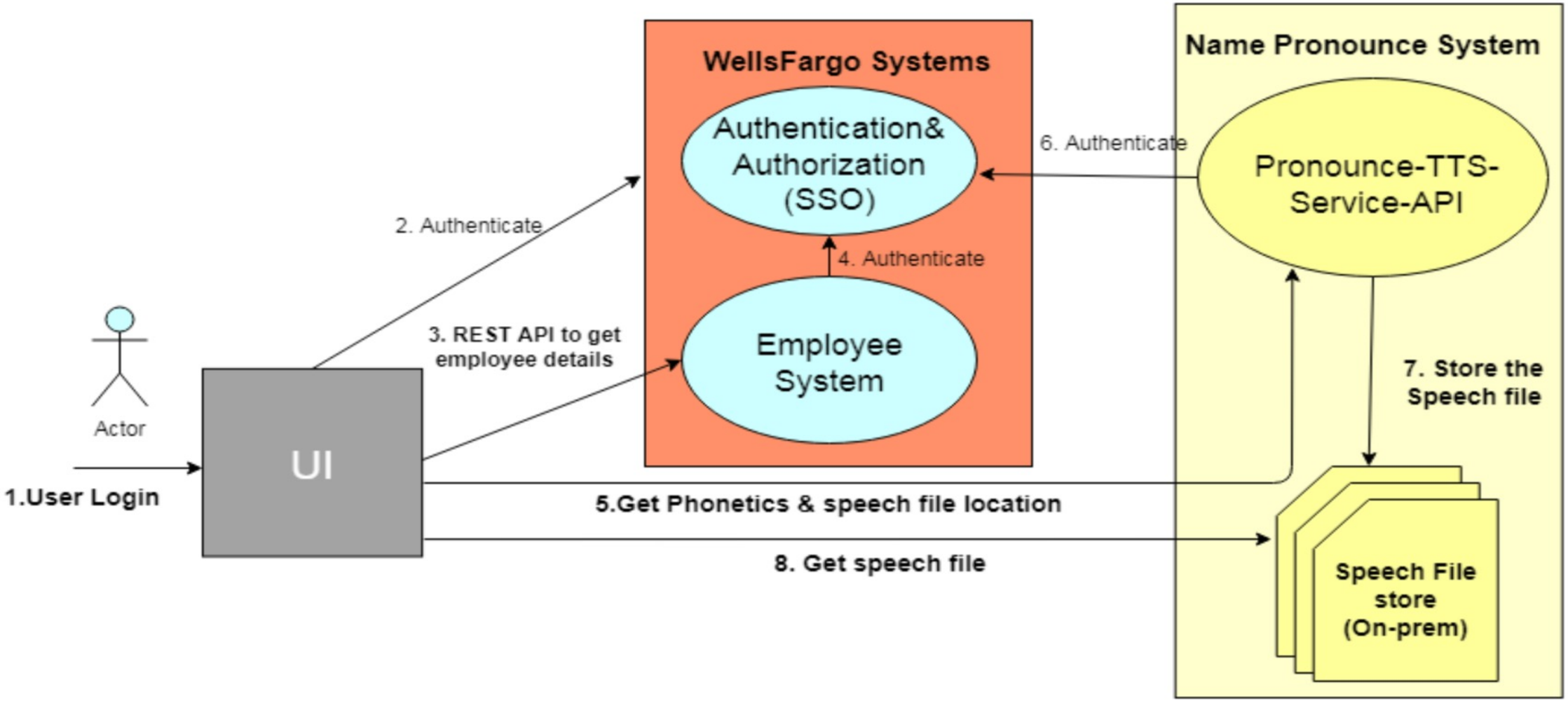
Format: AudioFormat.AAC

isMeteringEnabled: true

Extension : .m4a

Audio recording duration : 0:00:00.000000

Pronounce System



Use cases

- User Interface where the employee ID is given along with first name ,last name and preferred name with Country opted ,which creates the phonetics and standard pronunciation of first name +last name (if preferred name is empty) or preferred name if provided)) is generated and stores in the database.

- User Interface which takes the customised audio playback and overrides the audio data stored in db.

- User Interface which takes the employee ID information of the fellow employee which returns the standard /customised name pronunciation audio playback and phonetic information.

Assumptions made

- There is a main employee table where we have only read access in which the employee details are stored. Our table loads the employee first name ,last name ,employee Id information from the master table to our app specific table .These fields are non modifiable.
- By default the phonetic and sound track is produced from the first name +last name combination.
- If user adds preferred name data ,then the phonetic and sound track will be recreated with these two information.

Roles in the System

- Admin - who has complete privilege to view all user information and performs add/delete or update user related information .
- User -who has limited privilege and can view his own information and update the information. User can just access the phonetic and audio information of other employees but cant update an information of others. User Interface which takes the employee ID information of the fellow employee which returns the standard /customised name pronunciation audio playback and phonetic information

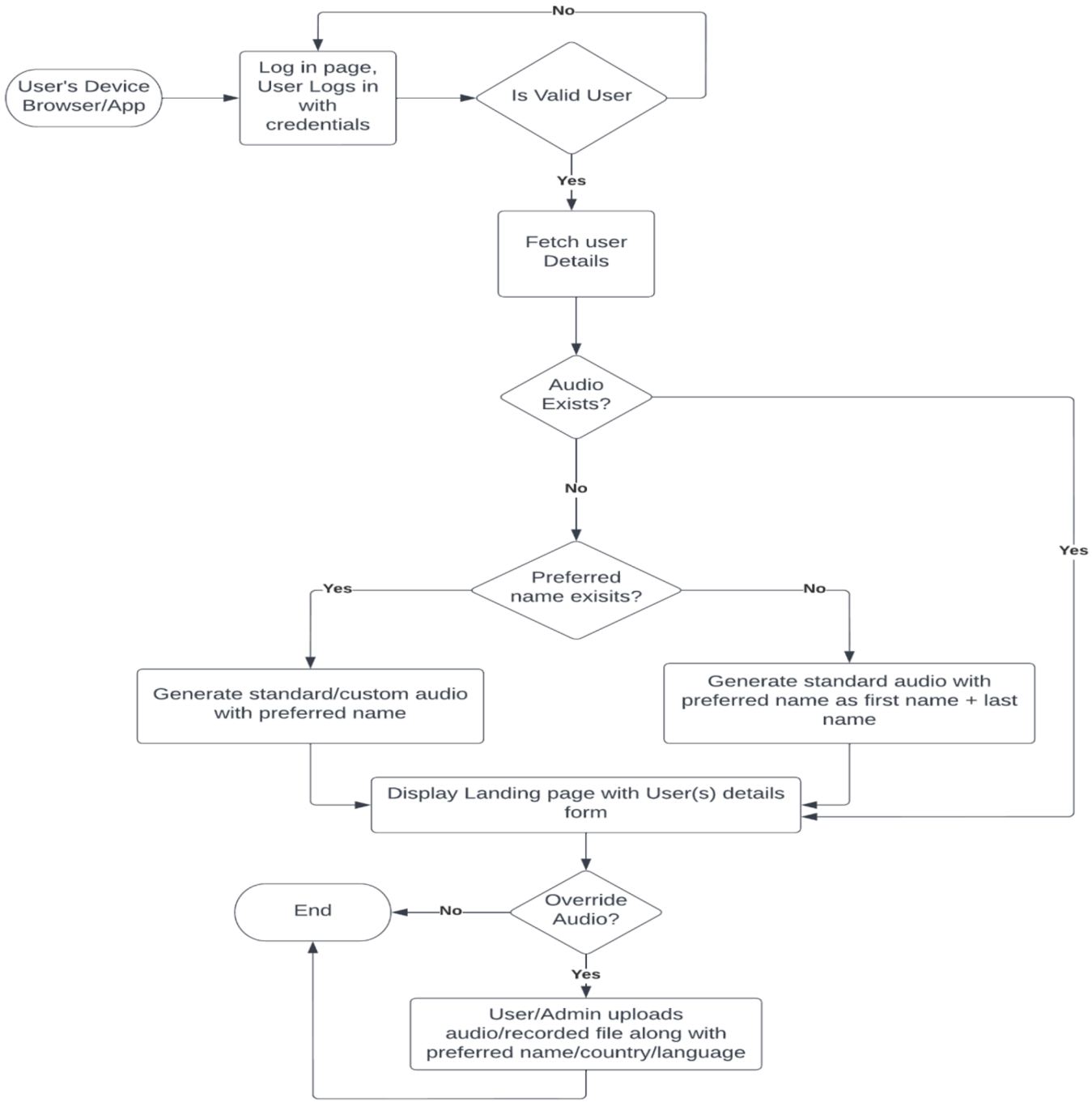
Sequence of Steps :

- UI will make a call to SSO to get valid security token, first name, last name, and uid.
- A GET method is used to connect the 'Name Pronounce System' for getting the phonetics, and creating the speech file in the speech file store based on the preferred name, or combination of first name and last name.

The sample response would be in below format for a uid=u99999,
firstname=Paul and lastName=John,


```
{
   "fileLocation": "http://35.10.34.12:5000/u99999-Paul John.mp3",
   "phonetics": "pɔl ʤɑn"
}
```

Flow Diaram


User's Device Browser/App
Log in page, User Logs in with credentials
Is Valid User
No
Yes
Fetch user Details
Audio Exists?
Yes
No
Preferred name exisits?
Yes
No
Generate standard/custom audio with preferred name
Generate standard audio with preferred name as first name + last name
Display Landing page with User(s) details form
Override Audio?
End
No
Yes
User/Admin uploads audio/recorded file along with preferred name/country/language

Pricing of GCP TTS:

- Text to Speech is priced based on the number of characters sent to the service to be synthesized into audio each month.
- Charged automatically, if usage exceeds the number of free characters allowed per month (i.e. Including spaces, SSML tags ,newlines).
- A waveNet generates speech that sounds more natural than other test-to-speech systems. It synthesizes speech with more human-like emphasis and inflection on syllables ,phonemes and words.

Feature	Free per month	Price after free usage limit is reached
Standard (non –Wavenet) voices	0-4 million characters	$0.000004 USD per character($4.00 USD per 1 million chars)
Wavenet Voices	0-1 million characters	$0.000016 USD per character($16.00 USD per 1 million chars)

Cost with HA and Optimization:

Name	Quantity	Region	Product_ Description	Unit_price, USD	Total_price, USD
Cloud SQL for PostgreSQL: Regional - vCPU in Americas	1460	us-central1	CP-DB-CUSTOM-1-3.75	0.0826	**120.596**
Cloud SQL for PostgreSQL: Regional - RAM in Americas	5475	us-central1	CP-DB-CUSTOM-1-3.75	0.014	**76.65**
Cloud SQL for PostgreSQL: Regional - Standard storage in Americas	10	us-central1	CP-DB-CUSTOM-1-3.75	0.34	**3.4**
Cloud Datastore Instances	100	us	CP-CLOUD-DATASTORE-INSTANCES	0.1782	**17.82**
Text-to-Speech Standard - Characters (millions)	12	us	CP-TEXT-TO-SPEECH-STANDARD	2.666666667	**32**
Compute optimized Core running in Americas	11680	us-central1	CP-COMPUTEENGINE-VMIMAGE-C2-STANDARD-4	0.033982	**396.90976**
Compute optimized Ram running in Americas	46720	us-central1	CP-COMPUTEENGINE-VMIMAGE-C2-STANDARD-4	0.004555	**212.8096**
Prices are in US dollars, effective date is 2022-05-16T11:14:09.969Z.					**Total : 860.18536**

Cost of Services

Service Name	Instances	Storage and Type	OS	Effective hourly Rate	Estimated Component Cost
Compute Engine	4 (Regular VMs – Compute optimized)	c2-standard-4 (vCPUs- 4, RAM-16GB)	Debian, Ubuntu	USD 0.167	**USD 487.90 per 1 month**
Data Store	NA	100 GiB	NA	NA	**USD 17.82**
Cloud SQL for PostgreSQL	2	db-standard-1 10.0 GiB	NA	NA	**USD 204.05**
Text-to-Speech	NA	Number of characters: 12 millions	NA	NA	**USD 32.00**
Prices are in US dollars, effective date is 2022-05-16T11:14:09.969Z .					**Total Estimated Cost: USD 741.76 per 1 month**

THANK YOU