Name Pronunciation Tool

Enterprise-wide tool for phonetic pronunciation of names

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## Document Purpose

This document describes the features delivered through Name Pronunciation tool including any up and down stream touch points to the solution, design, edge case scenarios / user stories covered, as well as the connection among logical components.

### Reviewers and Contributors

The following individuals reviewed or contributed content to this document, reviewers had the opportunity to review this document and provide input prior publishing the same. Contributors provided content to this document.­­­

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### Glossary

List the terms and acronyms within this document that may be unfamiliar to readers.

|  |  |
| --- | --- |
| Term/ Acronym | Definition |
| DB | Database |
|  |  |

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# 1 Overview

## Business Need

Wells Fargo employees and contingent workers come from an amazing diversity of backgrounds, and the variety of names within the company is profound. Often, employees find themselves struggling with the pronunciation of names. We need to develop a solution to make it easier for employees to share and understand the pronunciation of others’ names.

## API(s)

1. Microsoft Azure API for standard pronunciation
   1. Endpoint: Azure cognitive services
   2. Request: Username, region
   3. Response: Audio file
2. Login /LDAP /Authentication
   1. Request: Azure LoginID
   2. Response: Successful authentication
3. Save Custom Pronunciation
   1. Request:Employee ID, Audio, Override standard pronunciation flag, delete flag (for soft deletion), Operation (INSERT/UPDATE/DELETE)
   2. Response: Successflag
   3. Saves/ Updates/ Inserts given custom pronunciation into name\_pronunciation table
4. Pronunciation as a service
   1. Request: Full name
   2. Response: Audio file

## Design

* Admin user setup in DB master tables

Record my Pronunciation – same behaviour for both General & Admin users

1. Records pronunciation or accept audio file and convert the same to binary stream and save back in DB table “name\_pronunciation”
2. Allow to listen back the audio file before submit
3. Rerecord allows users to record again if needed based on choice, replace the previous audio file saved for the logged in user
4. Rerecord allows user again to perform actions listed above i.e. 2&3

#### View Name Pronunciation

**General User:**

1. Search by employee ELID/ Name, data fetching from master table “employee\_full\_details”
2. Allows to select employee
3. Fetches selected employee details back to user from employee\_full\_details table and display back in UI for cross checking on user selected
   1. Employee ID
   2. Employee full name, first, ,middle, last names
   3. Manager details
   4. ELID
   5. Work country
   6. Ph0ne #
4. Show custom pronunciation if its available for selected employee
5. If no custom pronunciation available, calls Azure standard pronunciation cognitive service and gets result back for selected employee
6. Employee when selects any other employee name as well – repeats steps 2 to 6

**Admin User:**

1. Search by employee ELID/ Name, data fetching from master table “employee\_full\_details”
2. Select employee
3. Fetches selected employee details back to user from table employee\_full\_details for cross checking on user selected
   1. Employee ID
   2. Employee full name, first, ,middle, last names
   3. Manager details
   4. ELID
   5. Work country
   6. Ph0ne #
4. Show custom pronunciation if its available for selected employee
5. If no custom pronunciation available, calls Azure cognitive services and gets result back for selected employee’s standard pronunciation
6. Gives option to record in case if no custom pronunciation available for admin to record.
7. Allow to override any existing custom pronunciation and rerecord.
8. Employee when selects any other employee name as well – repeats steps 2 to 6

## High level Sequence Diagram

Front end

Azure API Gateway for Standard Pronunciation

Record my Pronunciation

Azure Active Directory

Employee Search

Angular

Postgresql DB

Employee Details

Custom Pronunciation

Audio Response if available

Git Code base

## Database

**Database:**

Host: postgrescrypto.postgres.database.azure.com

Database: postgres

Port: 5432

## Github URL

https://github.com/AnilKalwakuntla/TeamCrypto

## Dependencies

1. Azure cognitive services for text to speech pronunciation
2. Azure Database for PostgreSQL flexible server

## Assumptions

* N/A