Software Design

Document

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# Introduction

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 the names. To make it easier of the employees to pronounce each other names as they would like them to be pronounced. This name pronunciation tool will deliver a solution for phonetic pronunciation of names

# General Overview and guidelines

## Overview

The solution will provide a user interface for administrators and employees to look up pronunciations, the solution will provide an API, providing name pronunciation as a service. The User interface will allow employees to record and play back non-standard pronunciations.

**2.2.1 Proposed solution – Statement of Need**

The existing system does not provide how to pronounce names of employees, the proposed system will dramatically improve team member name pronunciation as they wish. Employees will be able to customize their names as per their preference which let others know how they would like their names pronounce.

## Roles

**Admin –** Able to maintain pronunciations so that the system operates properly

Employee will be able to get the Standard pronunciation of their name and also custom pronunciation to override the suggested pronunciation of their name

# System Design

## Overview

Name Pronunciation: A Person’s name is an extension of who they are and is rooted in that person’s language, culture and identity. Pronouncing a person’s name correctly affirms that person and may add to his or her self-worth. Incorrectly pronouncing a person’s name almost always does the opposite.

Name pronunciation tool delivers a solution to ease person name pronunciation with phonetic pronunciation of names.

* Focus on Pronunciation, Ease of Use. Provides the stability to produce English sounds intonation patterns in context with names
* Increase self-confidence in the way you speak
* Listening to individual, help others get it right
* Is tailored to an individual’s caring about correct pronunciation of names
* Empowers encouraging everyone to check and to correct pronunciation when needed

# System Architecture and Architecture Design

## Software Architecture

The following goals addressed in execution of the proposed solution

**Development Environment/tool**

The application development environment using Angular, VS 2019 Dot Net core

**Ease of Use**

The name pronunciation tool features will be easy to use and provide a strong user experience

**Extensibility**

Features can be enabled as needed or required by the users.

**API Enabled**

Application is API centric and supports an open and published API architecture

**RESTful Framework**

The application and underlying architecture WEB API REST framework

**Operational Environment**

* Visual Studio 2019 development
* Angular UI
* Node JS
* GIt Version control
* Github Repository
* SQL database
* Apache Directory Studio
* JRE 11

Development Environment

Table: Software Descriptions

|  |  |
| --- | --- |
| **Software** | **Description** |
| Github | Version control repository |
| Visual Studio 2019 | WEB API development |
| SQL | Database |
| Angular UI | UI Framework/Theme |
| Node/ Node Js | Programming language |
| Apache directory studio | LDAP active directory services |

## Software Architecture Diagrams

Active directory authentication using LDAP:

