**Introduction (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. What can we do to make it easier for employees to pronounce others’ names as they would like them to be pronounced, and for employees to let others know how they would like their names pronounced?

**Challenge Description:**

This challenge will deliver a solution for phonetic pronunciation of names. The successful solution will enable Wells Fargo employees to understand the pronunciation of people’s names in two ways:

1. Standard Pronunciation: The solution will provide standard aural pronunciations for names, based on rules. Standard solutions may come from industry-standard solutions.
2. Non-Standard Pronunciation: The solution will enable employees to override standard pronunciations and provide “custom” pronunciations for cases where the employee prefers pronunciation that differs from the pronunciation provided by the standard solution.

The solution will provide a user interface for administrators and employees to look up pronunciations. More importantly, 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.

Core User Stories

1. As an employee or contingent workers, I want to allow other employees and contingent workers to hear the pronunciation of my name so that they can address me in the way I prefer to be addressed.
   1. I want the system to provide a standard pronunciation of my name.
   2. I want to be able to provide a custom pronunciation to override the suggested pronunciation of my name.
   3. I need to be able to opt out of the pronunciation service.
   4. Given name will have different pronunciation in different countries. I want to pronounce name as per selected Country.
   5. Should I speak name fast or slowly? I am looking to pronounce names fast or slowly as per input provided.
2. As an employee looking to pronounce another employee’s name, I want to be able to hear the non-standard pronunciation, if provided, or standard pronunciation, of any employee’s or contingent worker’s name
3. As an administrator, I need to be able to maintain pronunciations so that the system operates properly.
4. As an employee using adaptive technologies, I need the user interface to be compliant with WCAG 2.0 AA, so that my adaptive tech works appropriately, and I can use the system fully.

Suggested Roadmap User Stories

1. As the administrator, I need the application to authenticate silently through OKTA so that authentication is simple and compliant with enterprise authentication approach.
2. As the administrator, I need the application to use LDAP and fetch details like Ad-Ent, EmployeeID etc
3. As the product owner of a different product, I need to be able to call the API for the name pronunciation service, passing in a spelling and receiving back the pronunciation and phonetics. The content and format of the payload are negotiable but should comply to industry norms.
4. As the product owner of a different product, I need APIs in such a way so that it can be integrated in internal portals like Teamworks

**Sample Input/Output:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sample Input** | | | | | **Sample Output** | |
| **Sr.No** | **Legal**  **First Name** | **Legal**  **Last Name** | **Preferred**  **Name** | **Pronunciation** | **Phonetics** | **Pronunciation** |
| 1 | Abdullah | Khan | Aby |  | əˈbaɪ |  |
| 2 | Sanja | Kon |  |  | sanya kɑn |  |
| 3 | Jose | Aldo | Jose |  | hoʊˈzeɪ |  |
| 4 | Baohua | Lee | Bao |  | ˈbaʊ |  |
| 5 | Anuj | Anand | Andy |  | ˈændi |  |
| 6 | Yingfang | Lu | Julia |  | ˈʤuljə |  |
| 7 | Paul | John |  |  | pɔl ʤɑn |  |

Note: The above audio files can be downloaded from cyntax as well.

## Solution Package:

Following are the tasks that need to be executed as part of this challenge:

* Provide high level user stories for the challenge.
* Provide a Design approach.
* Code that needs to be uploaded to the Git repo (Instructions for Git).
* Provide playbook.
* Automated test suite and coverage report.

Details of each of the deliverables are as follows:

#### User Stories

This document needs to capture the high level user stories that are part of the platform design. It would be desirable to have roles/actors to be part of the user stories and scenarios that were considered.

#### Design Approach

The design document should detail out overall approach on solving the problem. This could include any class diagrams/sequence diagrams indicating the approach and a high level traceability matrix.

#### Working code

The resultant application should have good quality and generic enough so that new rules can be added and/or removed easily and committed to respective Git repos that are assigned.

#### Demo Video

Record a demo video, upload it to storage service on respective cloud, and provide the video link during the submission.

#### Playbook

Provide Playbook/Runbook for deploying the solution. Provide information towards how it should be deployed & monitored.

#### Automated Test Suite and Coverage Report

Test cases for various edge cases should be automated. Application needs to be tested as per the test cases and the results need to be captured along with the coverage report and any excel report and graphs.

## FAQs:

Please note: We recommend you to refer to the common FAQs provided for the main challenge.