UIDAI HACKATHON-21

AADHAAR

BITSian coders
Team ID-JK3Ghmjv06

Aim 🎯

To make an API which makes address formatting easier and a simple process.

The Problem

Many citizens in India currently face an acute problem where Address printed in their Aadhaar card is not in the proper format and often some word(s) is repeated. This problem sometimes aggravates to their PAN card, Voter ID card, Driving License,etc.
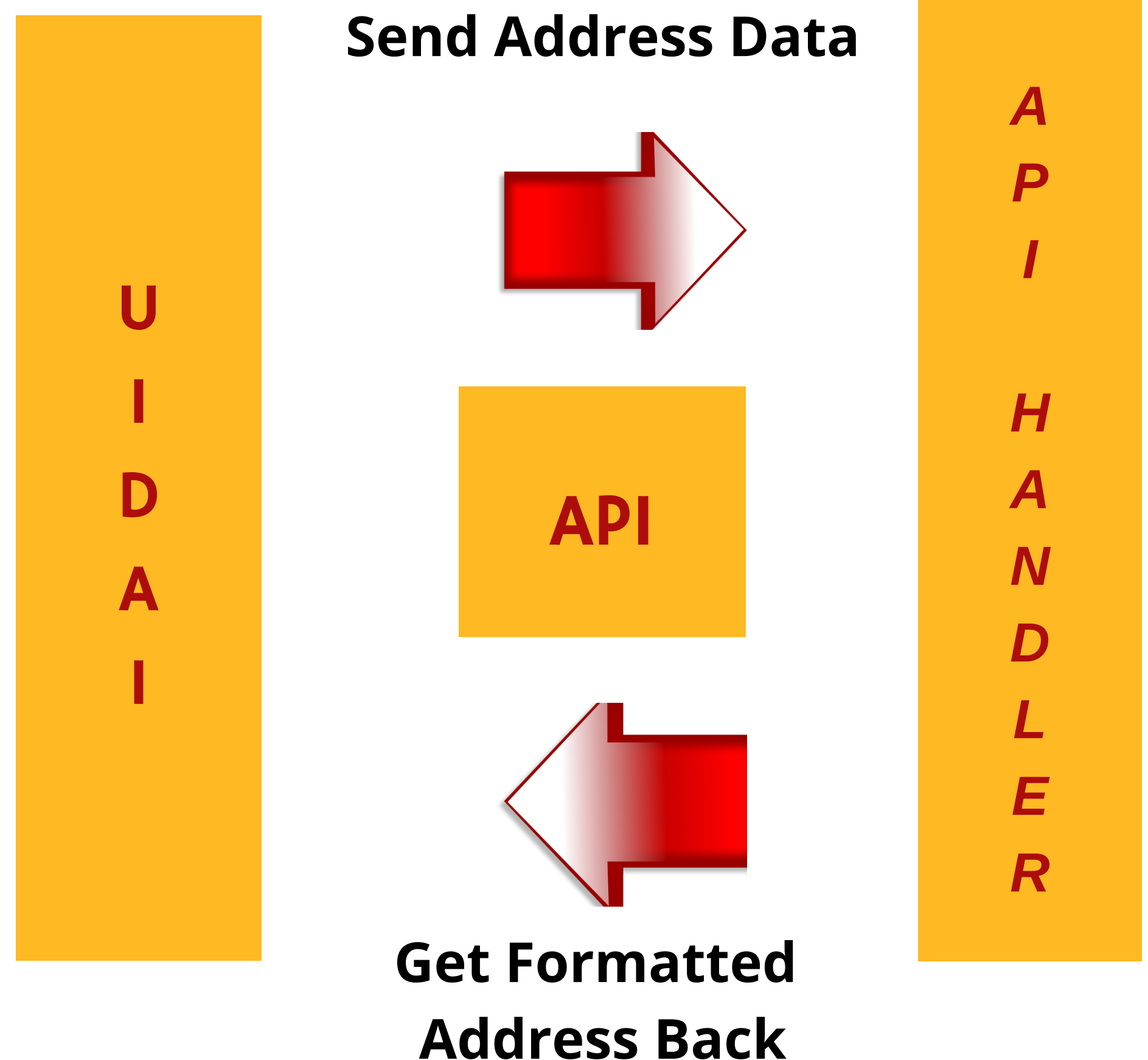Given below is an example of one such case.

We are determined to rid the citizens of this hassle and work with UIDAI to come up with an elegant solution.

damaravancha
gudur mandal
Damaravancha
Dameravancha,Warangal
Andhra Pradesh - 506134

Introduction

Application Programming Interfaces, better known as APIs are software intermediaries that allow two systems to communicate with each other

U I D A I

Send Address Data

API

Get Formatted Address Back

A P I   H A N D L E R

Our Solution

We have used python 3.7 to write a program to format the address. The user send the address data in JSON format, which is extracted and each subpart of address is stored as an array element.

We compare the similarity of each element with others using 'SequenceMatcher' function and if it is similar by more than 90%, the repeated part is removed from the output

Please find the code along with appropriate files in the Github Repository

Why is it innovative ?

Since we use the compare functions to format the address, it allows the user to enter the data in any language. The data is stored as strings. The Compare function compares any two strings and hence the language wont cause any difficulty in the program. The program can also handle missing fields and case insensitive jumbled inputs.
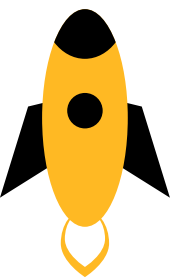
This allows us to not use any translation APIs that may leak any private information to any companies or organisations.
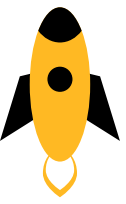
How will it bring about a change?

Aadhar is one of the most used document in order to verify a person and as an address proof. On the basis of Aadhaar, multiple other important documents like voter ID and PAN Cards are made. Due to the formatting issue, one can face problem in opening bank accounts and getting documents issued by the government due to mismatch in the address printed and the actual address.
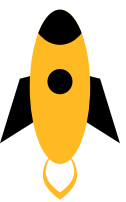
We, along with UIDAI are determined to solve this.

🚀 In India, most people are scared in handling the government documents as a small mismatch can cause huge problems. Our program allows user to just enter the address once and all the work is done by system itself, minimising the human error and maximising efficiency.

🚀 The program also helps in enabling ease of access and promotes Digital india.

Timeline

DAY 1

Discussion and planning based on the problem statement,

DAY 2

Coding and execution with made-up examples.

DAY 3

Refining and Testing the code with actual examples.

DAY 4

Presentation; further refining and minor tweaking.