Address Book Project

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# Introduction

This document aims to provide an overview of the design of an address book project and its underlying components and a high-level overview of its processes and overall design.

# System overview

The system will allow a user to add addresses and allow the user to search the addresses, the system will then in turn return results based on that search term.

It will rely on a csv to easily store the addresses and read them as well and will return results to a Flask Web app.

## Operating environment

Python runtime environment

## Dependencies

Assuming the device this is being used on has an active internet connection, a web browser and Python 3 the following dependencies are required:

1. Dataframes.
2. Flask

## Functional Requirements

1. Must be able to fetch results from CSV file.
2. Must return results to a webpage.
3. Must be able to search amongst existing entries.

# Development Methodology

The waterfall method will be used in this project due to the small size of the project.

# Testing & Logging

The follow tests will be carried out for the program:

Insertion of Address

Reading of Address

EmptyCSV identification

Logging will be implemented into the application as well, a simple logger.

# Pseudo-Code

This is written assuming that all dependencies have met.

AddressSet Class

Instantiate self-method:

Attributes are StreetNo, StreetName, Surburb, City, Province.

Variable(s) is isPopulated()

Addresses()

If csv is populated:

Return address

Else

Return isPopulated as false

SearchAddresses(SearchTerm)

If csv is populated:

Search logic for “SearchTerm”

Return address

Else

Return false (acts as a not found flag)

AddAddresses()

If csv is populated():

Set new address:

Else

Return isPopulated as false.

HasAddresses():

if Address is populated

Return

Else:

Add Address

AddAddress(StreetNo, Street, Area, City, Province):

Call add address method

Load Addresses():

Call addresses method

SearchAddresses(Parameter):

Call addresses method

# High Level UML Activity Diagram

