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DOCUMENTATION

**PHONEBOOK**

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**A Namibian Telecommunication Phonebook**

***Modules:***

**Module 1: Contact management**

This module handles operations related to contact example insertion, deletion and updating of contacts.

Functions

Insert contact: add new contact to the phone book

Delete contact: Remove a contact from the phone book based on a unique identifier (e.g name or phone number)

Update contact: Modify details of an existing contact

**Module 2: Search and Display Contacts**

This specific module will be responsible for searching contacts and displaying all contacts in the phone book.

Functions

Search contact: Find a contact by name or phone Number

Display all contacts: Show a list of all contacts in the phonebook

**Module 3: Sorting contacts**

Function:

Sort contacts**:** Sort the contacts using a simple sorting algorithm

**Module 4: Efficiency Analysis**

**Function:**

This specific module analyzes the efficiency of the search algorithm in a phone book

**Pseudocodes**

**Module 1: Contact management**

*Insert contact*

Start

Prompt user for contact name

Get contact name

Prompt user for phone number

Get phone number

Insert new contact to contact list

END

*Delete contact*

Start

Prompt user for contact name

Get contact name

Delete contact from contacts

END

*Update contact*

Start

Prompt user for contact name

Get contact name

IF ( contact is in the phone)

Display “contact does not exist”

Else

Update contact details

END

**Module 2: Search and Display Contacts**

*Search contact*

Start

Prompt user for contact name

Get contact name

IF (contactName is on the list)

Return contact

Else

Display ‘’ Contact not found, please enter another contact)

END IF

END

*Display contact*

Start

FOR (Each contact IN contacts)

Display “Name: " + contact.name + ", Phone: " + contact.phone + "

END FOR

END

**Module 3: Sorting contacts**

Start

Arrange all contacts in alphabetical order by their names

END