

PROJECT REPORT: CONTACT MANAGEMENT SYSTEM

1. Introduction

1.1 Background

The Contact Management System is a Java-based program developed to manage a list of contacts. The system allows users to perform operations such as adding, viewing, updating, and deleting contact information.

1.2 Objectives

The primary objectives of the project are:

Create a user-friendly interface for managing contacts.

Implement functionalities to add, view, update, and delete contacts.

Utilize Java programming language for system development.

2. System Design

2.1 Functional Requirements

The Contact Management System provides the following functionalities:

Add Contact: Users can add new contacts by providing the name, phone number, and email address.

View Contacts: Users can view a list of all contacts stored in the system, including their details.

Update Contact: Users can update the phone number and email address of an existing contact.

Delete Contact: Users can delete a contact from the system.

2.2 System Architecture

The system is designed as a console-based application using Java. It uses the ArrayList data structure to store and manage the list of contacts. The program is organized into modular functions to handle each functionality separately.

3. Implementation

3.1 Technologies Used

- Java programming language
- Scanner class for user input
- ArrayList for storing contacts

3.2 Code Structure

The program consists of the following main components:

Contact Class: Represents a contact with attributes such as name, phone number, and email.

ContactManagement Class: Contains the main method and functions for adding, viewing, updating, and deleting contacts.

4. User Guide

4.1 Installation

No installation is required. The program is a standalone Java application.

4.2 How to Use

Run the program.

Follow the on-screen menu to perform desired operations.

5. Results

5.1 Test Cases

Test Case 1: Add a new contact.

Test Case 2: View all contacts.

Test Case 3: Update an existing contact.

Test Case 4: Delete a contact.

5.2 Screenshots

Include screenshots demonstrating the program's functionality during testing.

6. Conclusion

The Contact Management System is a successful implementation of a basic contact management application. It provides a straightforward interface for users to manage their contacts efficiently.

7. Future Enhancements

Potential future enhancements include:

Implementing a graphical user interface (GUI) for a more user-friendly experience.

Adding data persistence to store contacts between program executions.

8. Acknowledgments

<https://stackoverflow.com/>

<https://www.geeksforgeeks.org/java-tutorial/>

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