

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

# *International Islamic University Chittagong*



*Department of Computer Science and Engineering*

## *Project Report*

*COURSE CODE : CSE-2322*

*COURSE TITLE : DATA STRUCTURS LAB*

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# INTRODUCTION:

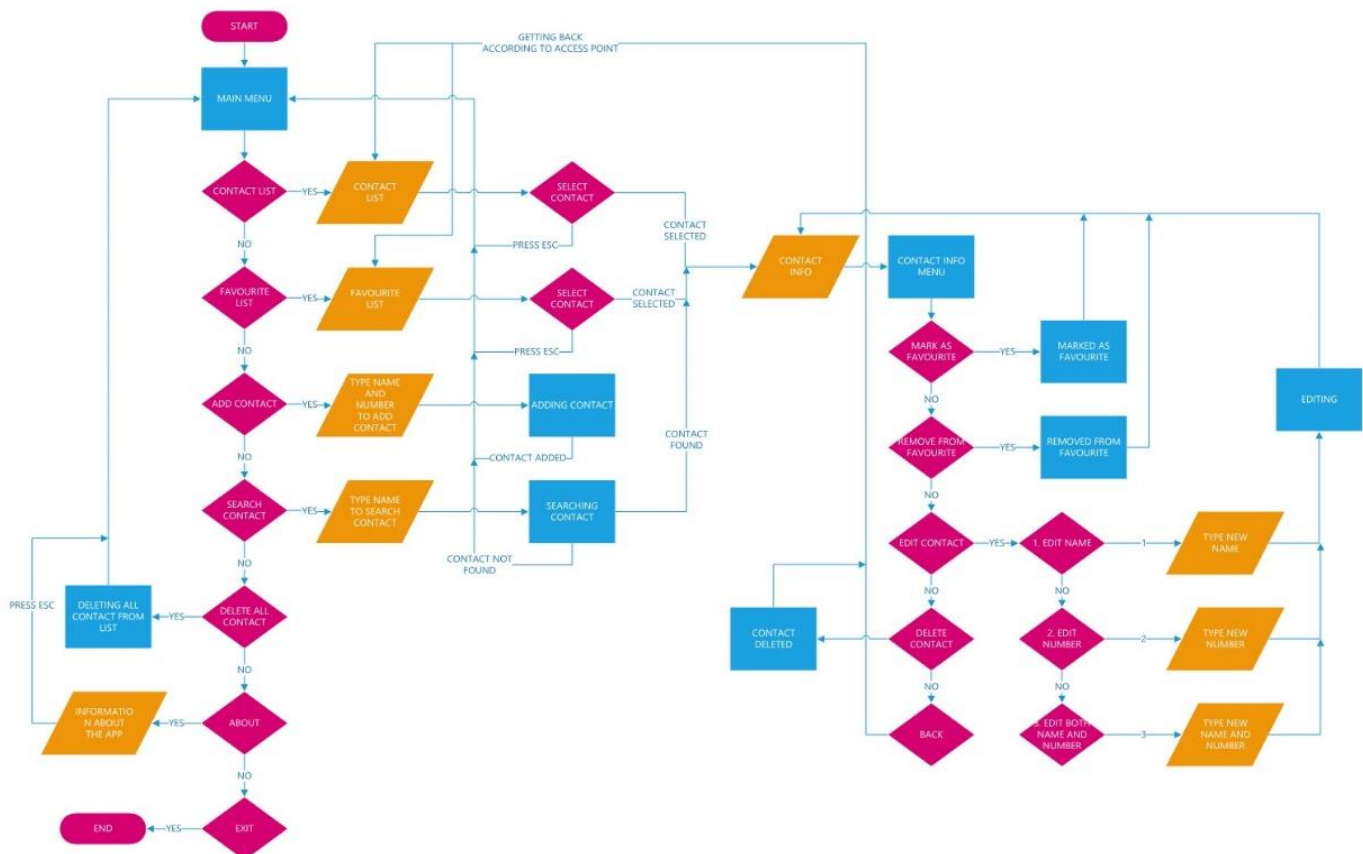
We have built a console-based application using C++ for a university project purpose. The project is about a Phonebook where one can add, delete, search contacts of peoples. We used data structure algorithms to build the program. It has some exceptional features as well.

## FEATURE

- =>It will display all the contacts and one can select contact to access other accessibilities
- =>One can add contact to the phonebook by entering the name and phone number.
- =>One can search contact by entering EXACT name in CAPITAL LETTER.
- => One can delete contact by selecting specific contact.
- => One can edit contact's name or phone number by selecting that specific contact
- =>One can add favourite number and remove it from favourite.
- => One can delete All contact.

## Implementation

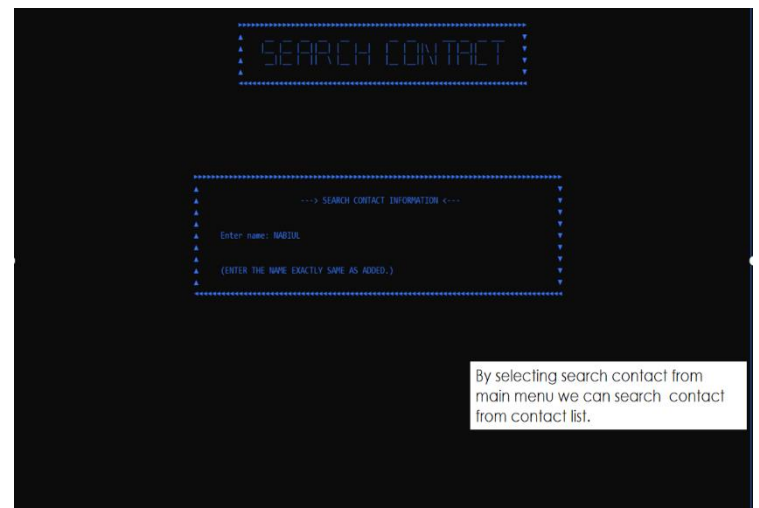
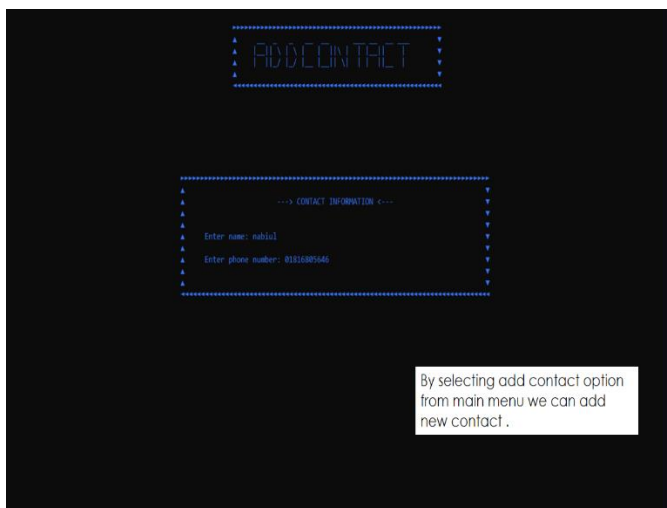
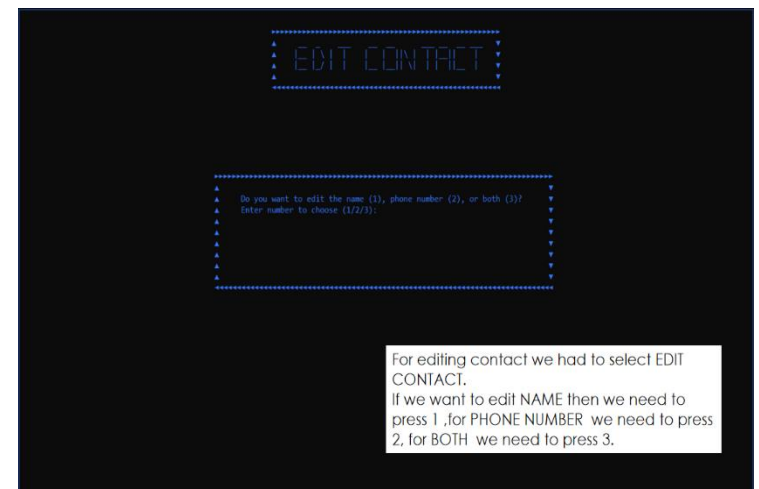
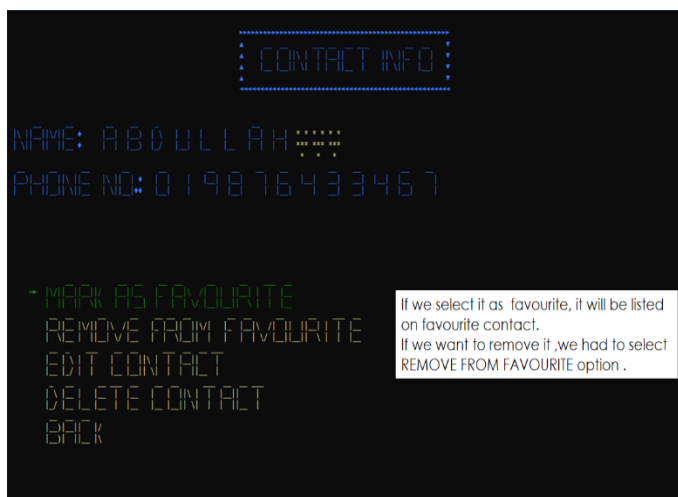
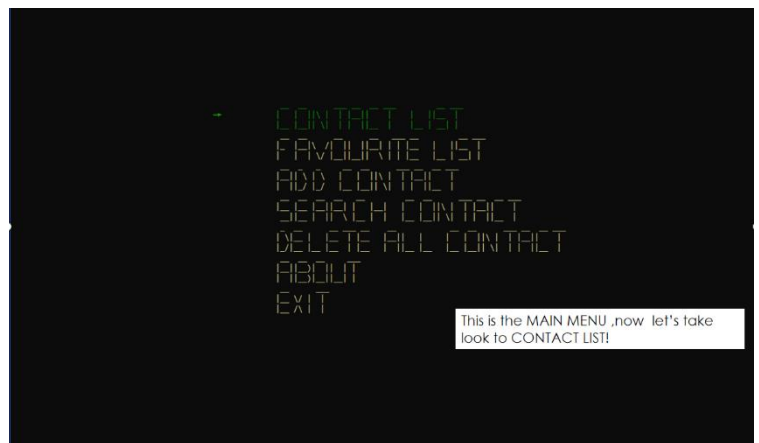
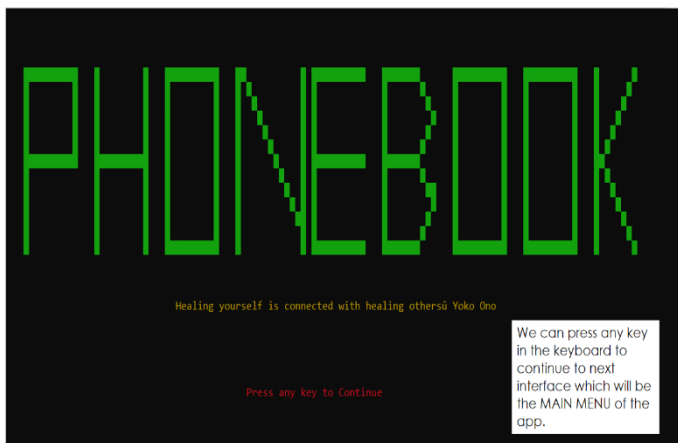
### FLOW CHART OF PHONEBOOK



## **Used Function**

- => Gotoxy = It is a non-standard function used to move the cursor on the console screen.
- => MaximizeOutputWindow = Expands the console window to its maximum size.
- => Hidecursor = Hides the mouse cursor on the screen.
- => ClearConsoleToColors = To clear the console and set foreground/background colors.
- => SetColor = Sets the current drawing color for shapes and text.
- => getch() = It reads a single character from the keyboard without waiting for Enter and returns its ASCII value.
- => Delete = For delete any data.
- => Substr = Extracts a portion of a string as a new string.
- => fflush = It forces any buffered output to be written immediately to the console.
- => Sleep = It is a function that pauses program execution for a specified amount of time.
- => transform(name.begin(), name.end(), name.begin(), ::toupper) =  
Converts all characters in name string to uppercase using toupper and modifies the original string.

# Screenshots:



## **FUTURE PLAN/POSSIBLE EXTENSION**

- => We will work more in search bar.
- => We will add email, date of birth with contact.
- => Implement search by name, phone number, or even partial matches.
- => Allow users to categorize contacts (family, work, friends) for better organization.

## **CONCLUSION**

In conclusion, Phonebook fulfills most of its characteristics of keeping information of peoples to get connected easily. One can store information of their closed ones and can easily get access to get connected to them digitally. It's a versatile application where we can add some more feature which can be user friendly.