# Final report

## Introduction

The problem is to produce a messaging app home page. This will allow users to view their messages and save/delete them, view and edit contacts, view and edit their profile and finally organize the information in separate ways e.g. alphabetically.

## Main requirements

* Home page with list of chats
* Open messages to view contents
* View and edit profile
* View and edit contact list
* Be able to organize the messages in different ways such as alphabetical
* Be able to favourite contacts to have their messages be seen first
* Search through all messages for key words
* Deleting messages
* Save/Load program from disk
* Menu system with interface

## Structures implemented

|  |  |
| --- | --- |
| Data structure | Use |
| Linked list | To store chats from newest to oldest, To use store the messages in the chats |
| Binary tree | To store contacts alphabetically |
| Sets | To make sure the contacts only appear once |

## Classes

Menu – Main menu, displays contacts and chats

Contacts – Contains a name and phone number

Messages – the nodes for the contacts binary tree

Chats – the nodes for the messages linked list

## Class Diagram

## Test Plan

## Design

We Want a GUI based design. Which allows a user to see the entire list/most of the chats at one time. They will be able to select one which will show the messages. At the top of the chat, it will provide the user with relevant information about the contact e.g. name, favourite.

## Task allocation

|  |  |  |
| --- | --- | --- |
| Task | Lead contributor | Regular contributor |
|  |  |  |
|  |  |  |
|  |  |  |
| Being useless | ruairidh | Munro |
| Big scottish mountain |
| Ladder equivalent <-HAHA |

## Self Evaluation