MINI PROJECT REPORT

On

GRIEVANCE REDRESSAL SYSTEM

Submitted in partial fulfilment for the completion of the course

Mini Project I in

III Semester of B.E.

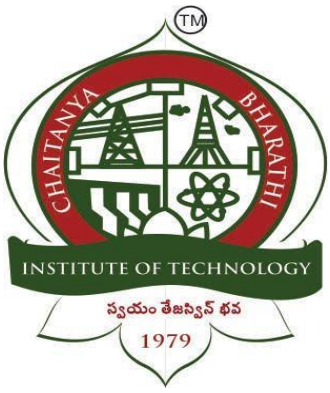
INFORMATION TECHNOLOGY

By

K. SAI VAMSHI (160118737042)

Under the guidance of

Dr.B.VeeraJyothi,
Assistant Professor,
Dept. of IT, CBIT.



DEPARTMENT OF INFORMATION TECHNOLOGY
CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY (A)
(Affiliated to Osmania University; Accredited by NBA(AICTE) and NAAC(UGC), ISO Certified 9001:2015)
GANDIPET, HYDERABAD – 500 075
Website: www.cbit.ac.in

2019-2020

DECLARATION

I hereby declare that the work reported in the present report titled "**GRIEVANCE REDRESSAL SYSTEM**" is a record of work done by me in the Department of Information Technology, **Chaitanya Bharathi Institute of Technology, Hyderabad**.

No part of the report is copied from books / journals / internet and wherever the portion is taken,the same has been duly referred. The reported results are based on the project work done entirely by us and not copied from any other source.

K. SAI VAMSHI (160118737042)

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY (A)

DEPARTMENT OF INFORMATION TECHNOLOGY

(Affiliated to Osmania University)

GANDIPET, HYDERABAD – 500 075

CERTIFICATE

This isto certify that the project work entitled "**GRIEVANCE REDRESSAL SYSTEM**" submitted to **CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY,** in partial fulfilment of the requirements for the completion of III semester of B.E. in Information Technology, during the academic year 2019-2020, is a record of original work done by **K. SAI VAMSHI (160118737042)** during the period of study in Department of IT, CBIT, HYDERABAD, under my supervision and guidance.

Project Guide
Dr.B.VeeraJyothi
Professor,Dept. of IT,
CBIT, Hyderabad.

Head of the Department
Dr.SureshPabboju
Professor, Dept.of IT,
CBIT, Hyderabad.

ACKNOWLEDGEMENT

I would like to express our heartfelt gratitude to Dr.B.VeeraJyothi, our project guide, for her invaluable guidance and constant support, along with her capable instruction and persistent encouragement.

I am grateful to our Head of Department, Dr.SureshPabboju, for his steady support and the provision of every resource required for the completion of this project.

I would like to take this opportunity to thank our Principal, Dr.P.Ravinder Reddy, as well as the management, for having designed an excellent learning atmosphere.

My thanks to all members of the staff and our lab assistants for helping us to carry out the groundwork of this project.

I also take this opportunity to thank our parents for their support to complete the project.

ABSTRACT

The main objective of this project is to test and implement knowledge gained in a particular programming language. The programming language used in this project is object-oriented programming using C++.A real life problem statement is taken, which is formally called the 'GRIEVANCE REDRESSAL SYSTEM'. The main motive of this project is to create a bridge for communication between the people and the authority.

Grievance Redressal is a management and governance related process used commonly in India. While the term "Grievance Redressal" primarily covers the receipt and processing of complaints from citizens and consumers. Usually a Public Relations Officer (PRO) is designated with the role of receiving complaints, but this mechanism often fails on account of lack of authority vested in the PRO over offices of various capacities. Therefore Grievance Redressal mechanism is mandated in government agencies and departments that are directly involved with serving citizens and organizations. On a large scale this mechanism addresses and solves the problems faced by the people. In one way it acts like a feedback providing mechanism. The mechanism allows us either to post a problem or vote for a problem. The problem, which gets the highest number of votes,is passed to the respective organizations to get resolved.

Technologies Used:

Language: Object Oriented Programming Language-C++.

Platform: Dev C++, Notepad.

CONTENTS

DESCRIPTION	Pg. no.
LIST OF SCREEN SHOTS	1
CHAPTER-1	
1. **INTRODUCTION**	2
1.1 Overview	2
1.2 Motivation	2
1.3 Basic Definitions	3
1.4 Problem Statement	4
CHAPTER-2	
2. **TECHNOLOGIES**	5
2.1 About C++	5
2.2 Introduction to C++	5
2.3 Features of C++	6
CHAPTER-3	
3. **EXISTING SYSTEM**	9
CHAPTER-4	
4. **PROPOSED SYSTEM**	10
4.1 Methodology	10
4.2 Architecture of Proposed System	11
CHAPTER-5	
5. **SOFTWARE REQUIREMENT SPECIFICATIONS.**	12
5.1 Introduction	12
5.2 Users and their characteristics	12
5.3 Software and Hardware Requirements	12
CHAPTER-6	
6. **IMPLEMENTATION OF PROJECT**	13
6.1 Introduction	13

6.2 Testing Results and Screenshots 14

CHAPTER-7

7. **CONCLUSION & FUTURE SCOPE** 25

BIBILOGRAPHY 26

LIST OF SCREENSHOTS

Screen Shot	Description	Page No.
Screenshot 6.2.1	Main portal	15
Screenshot 6.2.2	User Registration	16
Screenshot 6.2.3	User Registration (To avoid duplication)	17
Screenshot 6.2.4	User Login Main Page	18
Screenshot 6.2.5	Posting a Problem	19
Screenshot 6.2.6	Vote for already existing problems	20
Screenshot 6.2.7	Voting for posted problems	21
Screenshot 6.2.8	Votes of already existing problems	22
Screenshot 6.2.9	Votes of posted problems	23
Screenshot 6.2.10	Admin Portal	24

1. INTRODUCTION

1.1 Overview

GRIEVANCE REDRESSAL SYSTEM FOR LOCALITY PROBLEMS is a model developed using Object Oriented Programming concepts, including various libraries and the concept of files. Two logins are created i.e. one for user and one for admin.

C++ programming language is used to develop this project, which including the following libraries.

- #include<iostream>
- #include<string.h>
- #include<cstring>
- #include<conio.h>
- #include<stdlib.h>
- #include<fstream>

1.2 Motivation

Grievance Redressal mechanism is mandated in Government agencies and departments that are directly involved with serving citizens and organizations. The main motive of doing this project is to create an interface between user and admin which helps in reacting to a particular issue without any delay. The creation of such platform has a huge advantage over conventional paper based systems. This project can be used by any college/school/company to make voting and posting computerized. It also provides security for aggrieved person to participate without fear of intimidation or retribution. It gives the added advantage of greater confidentiality and transparency in complaints dealing procedure. This project gives the instant results of the poll, and track the voter voted or not. The objective of the Grievance Redressal Cell is to develop a responsive and accountable attitude among all the stakeholders in order to maintain a harmonious atmosphere. This project provides security for aggrieved person to participate without fear of intimidation or retribution.

The project that is developed satisfies the above said features and hence making the procedure of grievance more effective. The problem, which gets the highest number of votes would be sent to the admin. The project provides clarity in procedures and time frames

adopted. From all this we can conclude that this project has a wide scope in handling problems very confidentially.

1.3 Basic Definitions

1.3.1. FILE HANDLING:

In C++, files are mainly dealt by using three classes available in fstream headerfile as follows:

ifstream:

Used for reading data from files.

ofstream:

Used for writing data to files.

fstream:

Used for both reading and writing data to files.

1.3.2. OPERATIONS ON FILES:

During the execution of the project various operations have been performed on the above mentioned files, one of which is ‘Random Access of Files’.

Random Access of Files:

If the amount of data stored in a file is fairly large, the use of random access will allow you to search through it quicker. If it had been a sequential access file, you would have to go through one record at a time until you reach the target data. A random access file lets you jump directly to the target address where data is located.

In C++, random access is achieved by manipulating seekg(), seekp(), tellg() and tellp() functions. The seekg() and tellg() functions allow you to set and examine the get_pointer, and the seekp() and tellp() functions perform these operations on the put_pointer.

Random access files also decrease the time taken for searching when compared to other conventional techniques.

Data has been stored in files in the form records i.e using objects and thus random access is performed using read() and write() functions which follows the following syntax:

Read():

Fileobject.read((char*)&variable,sizeof(variable));

Write():

Fileobject.read((char*)&variable,sizeof(variable));

Each record is designated as an object of the class and while retrieving comparisons are done, when the required record is found then the whole information is thus accessed.

1.3.3. STANDARD TEMPLATE LIBRARIES - The C++ STL (Standard Template Library) is a powerful set of C++ template classes to provide general-purpose classes and functions with templates that implement many popular and commonly used algorithms and data structures like vectors, lists, queues, and stacks.

- **Containers**

  Containers are used to manage collections of objects of a certain kind. There are several different types of containers like deque, list, vector, map etc.

- **Algorithms**

  Algorithms act on containers. They provide the means by which you will perform initialization, sorting, searching, and transforming of the contents of containers.

1.4 Problem Statement

A Real World Problem Statement which is formally called the “Grievance Redressal Procedure” has been employed and worked upon. User will be given a login that allows him/her to either Vote for the already existing problems (or) explicitly post a problem if any. After every user has completed giving their vote, the problem that gets the maximum number of votes would be sent to the Admin who could get the access after logging in with a particular ID and password. This way the problem that has the most significance to get solved would be looked upon by the admin after he logs in with a unique ID and password which is known only to him.

2. TECHNOLOGIES

2.1 AboutC++

C++ is a general-purpose computer-programming language that is concurrent, class-based, Object-oriented and specifically designed to have as few implementation dependencies as possible. C++ is regarded as a middle-level language, as it comprises a combination of both high-level and low-level language features. It is a superset of C, and that virtually any legal C program is a legal C++ program. C++ runs on a variety of platforms, such as Windows, Mac OS, and the various versions of UNIX. C++17 is the latest version of C++. A newer & advanced version of C++ is being released, i.e. C++20.

2.2 Introduction to C++

C++ is a general-purpose programming language created by Bjarne Stroustrup as an extension of the C programming language, or "C with Classes". The language has expanded significantly over time, and modern C++ has object-oriented, generic, and functional features in addition to facilities for low-level memory manipulation. It is almost always implemented as a compiled language, and many vendors provide C++ compilers, including the Free Software Foundation, LLVM, Microsoft, Intel, Oracle and IBM so it is available on many platforms.

The C++ language has two main components: a direct mapping of hardware features provided primarily by the C subset, and zero-overhead abstractions based on those mappings. Stroustrup describes C++ as "a light-weight abstraction programming language [designed] for building and using efficient and elegant abstractions" and "offering both hardware access and abstraction is the basis of C++. Doing it efficiently is what distinguishes it from other languages.

C++ introduces object-oriented programming (OOP) features to C. It offers classes, which provide the four features commonly present in OOP (and some non-OOP) languages: abstraction, encapsulation, inheritance, and polymorphism. One distinguishing feature of C++ classes compared to classes in other programming languages is support for deterministic destructors, which in turn provide support for the Resource Acquisition is Initialization (RAII) concept.

C++ provides more than 35 operators, covering basic arithmetic, bit manipulation, indirection, comparisons, logical operators and others. Almost all operators can be overloaded for user-defined types, with a few notable exceptions such as member access (and

*) as well as the conditional operators. The rich set of overloadable operators is central to making user-defined types in C++ seem like built-in types.

A large part of the C++ library is based on the Standard Template Library (STL). Useful tools provided by the STL include containers as the collections of objects (such as vectors and lists), iterators that provide array-like access to containers, and algorithms that perform operations such as searching and sorting.Furthermore, (multi)maps (associative arrays) and (multi)sets are provided, all of which export compatible interfaces. Therefore, using templates it is possible to write generic algorithms that work with any container or on any sequence defined by iterators. As in C, the features of the library are accessed by using the #include directive to include a standard header. The C++ Standard Library provides 105 standard headers, of which 27 were deprecated.

2.3 FEATURES OF C++

C++ is an object oriented programming language supporting Object Oriented Features as follow

- **Data abstraction:** Data abstraction is an act of representing the important features of data without including the background details or the method applied to obtain it.
- **Data encapsulation:** Data encapsulation is nothing but a process to implement data abstraction by wrapping up the data and functions into an exclusive block.
- **Inheritance:** The term inheritance refers to transferring the properties of the parent class to the child class. We can implement the basic idea of inheritance by creating more than one class, which we formally refer to as derived classes by linking them with what we call the base class. This concept reduces the redundancy of the program and makes it easy to transfer/copy the properties of one class to another.
- **Data hiding:** Data hiding refers to protecting data from unauthorized access. It is basically responsible for securing the data. It is important to note that data encapsulation is different from data hiding as encapsulation mainly focuses on shifting the focus on important data than explaining its complex nature.
- **Polymorphism:** The word poly means ‘many’ and morphism means ‘forms’. Clearly, polymorphism refers to displaying that data in more than one form.

C++ is a multi-paradigm programming language. The term “Paradigm” refers to the style of programming. It includes logic, structure, and procedure of the program.

C++ has a large community that supports it by providing online courses and lectures, both paid and unpaid. Statistically speaking, C++ is the 6th most used and followed tag on Stack Overflow and GitHub.

ADVANTAGES OF C++:

1.) **Simple**

C++ is a simple language in the sense that it provides structured approach (to break the problem into parts), rich set of library functions, data types etc.

2.) **Machine Independent or Portable**

Unlike assembly language, c programs can be executed in many machines with little bit or no change. But it is not platform-independent.

3.) **Mid-level programming language**

C++ is also used to do low level programming. It is used to develop system applications such as kernel, driver etc. It also supports the feature of high level language. That is why it is known as mid-level language.

4.) **Structured programming language**

C++ is a structured programming language in the sense that we can break the program into parts using functions. So, it is easy to understand and modify.

5.) **Rich Library**

C++ provides a lot of inbuilt functions that makes the development fast.

6.) **Memory Management**

It supports the feature of dynamic memory allocation. In C++ language, we can free the allocated memory at any time by calling the free() function.

7.) **Speed**

The compilation and execution time of C++ language is fast.

8.) **Pointer**

C++ provides the feature of pointers. We can directly interact with the memory by using the pointers. We can use pointers for memory, structures, functions, array etc.

9.) **Recursion**

In C++, we can call the function within the function. It provides code reusability for every function.

10.) **Extensible**

C++ language is extensible because it can easily adopt new features.

11.) **Object Oriented**

C++ is object oriented programming language. OOPs makes development and maintenance easier where as in Procedure-oriented programming language it is not easy to manage if code grows as project size grows.

12.) **Compiler based**

C++ is a compiler based programming language, it means without compilation no C++ program can be executed. First we need to compile our program using compiler and then we can execute our program.

3. EXISTING SYSTEM

The existing system describes the features of the previous working model and their drawback. Existing system does all process manually. If Grievance Redressal is implemented in anlocality it would be paper based system. This would take a lot of time and may result in many errors as well. If the number of users increases then it would lead to lot of work which could not be manageable. There is also probability of manipulation of the number of votes, which may lead to wrong results.

The existing pen and paper based system does not give the assurance of confidentiality. Every user would want to keep their name confidential, which is not supported by the existing system. One of the main threat is that duplication of votes can be possible that may worsen the process. After every user vote and post their problem it would be huge task to count the number of votes for each problem and then send it to the admin. If any errors are made in counting then the process would not be fair.

The already existing process does not implement posting of problems effectively as, if a person posts a problem it would not be visible for other users. So the number of posted problems would be equal to the number of users which has no use in itself, since all the posted problems cannot be solved. The purpose of posted problems is to let other users to vote for it if it is fair enough to get solved. In the conventional system posted problems have no scope get solved as it is paper based.

The project implemented overcomes all the above mentioned limitations. It has advantage over paper based systems as it is computerized. Not many people are needed to maintain the system. This project implements the feature of posting problems effectively. The interface maintains the record of every user very confidential and does not allow manipulation of votes. A user who has voted once would not be given a chance to vote again preventing duplication of votes. Each user will be having a unique login ID and password that makes the process even more systematic. It does not allow a user to register with an ID that already exists.Finally the project has three features:

1. Voting for the already existing problems.
2. Posting their problems.
3. Voting for the posted problems.

4. PROPOSED SYSTEM

4.1 Methodology

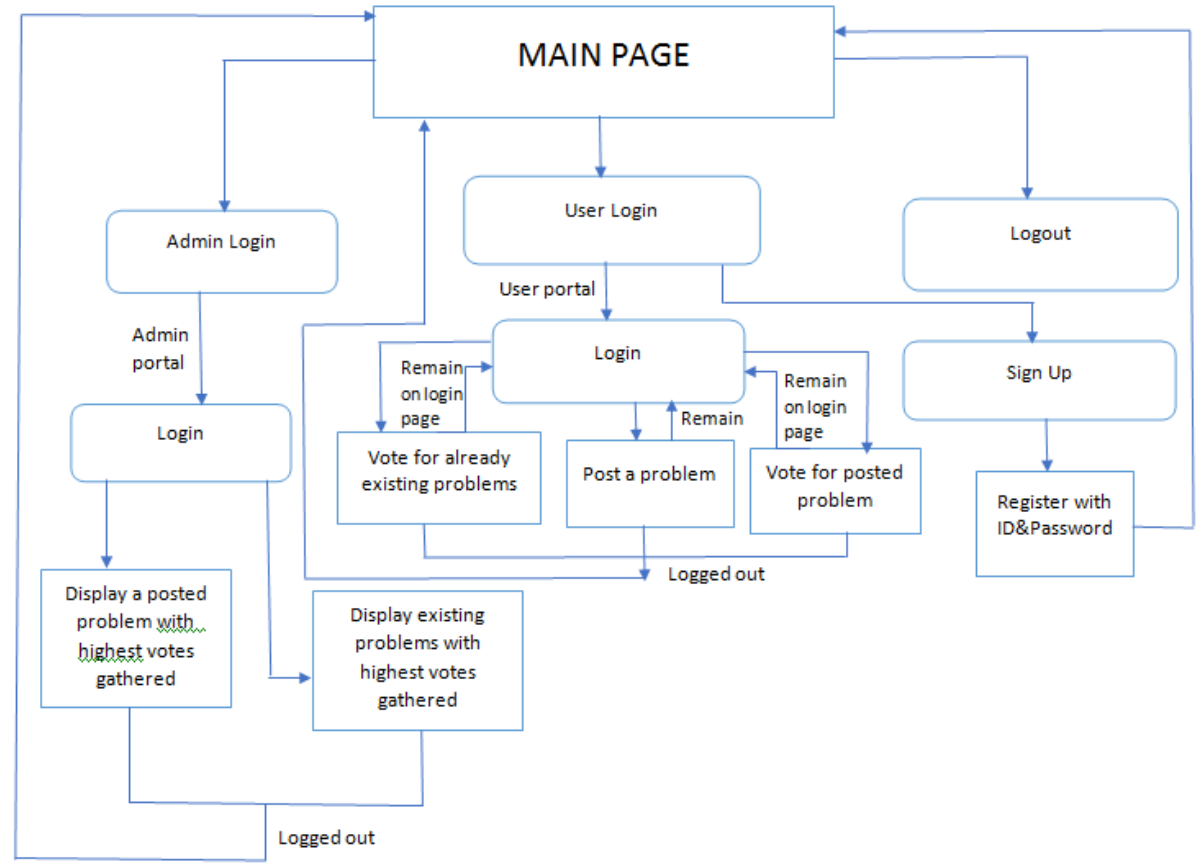
This application is used to solve the problems of the public effectively and comfortably and helps the admin to have the track of the highest voted problem so that it can be solved. The interface has two logins one for admin another for user. Each user will have their own unique ID's so that no two users have the same login ID. For the purpose of logging in a file named 'SignUpFile.txt' is created and while registering if a user tries to signup with an already existing ID then the program won't allow him/her to do so by popping a message.

The user can login and has the following options:

a. VOTE FOR THE ALREADY EXISTING PROBLEMS
b. POST THEIR PROBLEMS
c. VOTE FOR THE POSTED PROBLEMS

A user can vote only once this avoids duplication of votes. Similarly a user can post only one problem and can only vote once for the posted problems. The feature of posting problems helps others users to have multiple options to vote rather than sticking only to already existing problems. This makes the project more appealing. Files used are 'PostedProblems.txt' which has the list of posted problems along with their votes, 'Problem.txt' which has the list of already existing problems along with their votes and 'AdminProblemPosted.txt' which has the highest voted problem from the already existing problem section and posted problem section.

4.2 Architecture of Proposed System



Afterexecuting the project two logins would be available User and Admin. In the User login page a new user can register himself with an ID. After registering when the user logs in, he would be able to post their problems, vote for the already existing and posted problems. After doing so he can remain in the page or logout to reach the main page. When admin logs in, he would be having the list of problems that have received the highest number of votes, so that he can look into solving it.

5. SOFTWARE REQIREMENT SPECIFICATIONS

5.1 INTRODUCTION

The requirements specification is a technical specification of requirements for the software products. It is the first step in the requirements analysis process it lists the requirements of a software system including functional, performance and security requirements. The requirements also provide usage scenarios from a user, an operational and an administrative perspective. The purpose of software requirements specification is to provide a detailed overview of the software project, its parameters and goals. This describes the project target audience and its user interface, hardware and software requirements. It defines how the client, team and audience see the project and its functionality.

5.2 USERS AND THEIR CHARACTERISTICS

The project is done for the responsible users only. Keeping in mind that the public is responsible and gives the correct input to the application and uses it for their benefit, and also keeping in mind that the general and local managers are responsible and will work on the complaints as fast as possible and be flexible to the public this project is designed.

5.3 SOFTWARE AND HARDWARE REQUIREMENTS

Software Requirements:

Operating systems: Windows* 7 or later, macOS, and Linux.

Included development tools: Dev C++, Notepad.

Hardware Requirements:

Processors: Intel Atom® processor or Intel® Core™ i3 processor.

32 – 64 bit processor

Hard Disk: (min)100 GB

Input device (mouse /keyboard) to select options

Sufficient RAM to run the program (Minimum 2GB)

6. IMPLEMENTATION OF PROJECT

6.1 Introduction

The success of the software product is determined only when it is successfully implemented according to the requirements. The analysis and the design of the proposed system provide a perfect platform to implement the idea using the specified technology in the desired environment. The implementation of our system is made user friendly.

Any software project is designed in modules and the project is said to be successfully implemented when each of the module is executed individually to obtain the expected result and, when all the modules are integrated and run together without any errors.

This model has been implemented using object oriented concepts that mainly uses files to store data that has been manipulated and implemented in the process of execution. The project made use of the following files:

a.) Problem.txt : It contains the details of the already existing problems along with their corresponding votes.

b.) SignUpFile.txt : It contains the login ID's and passwords of all the users who have registered.

c.) PostedProblems.txt : It contains all the problems which have been posted by the users to get solved.

d.) AdminProblemPosted.txt : It contains the problem which has received the highest number of votes from the problems in posted problems' section.

e.) AdminProblem.txt : It contains the problem which has received the highest number of votes from the problems in already existing problems' section.

The already existing problems are stored in a file Problem.txt in the form of records with the initially all votes initialized with zero. Whenever a user votes, the corresponding problems' vote would be incremented accordingly.

When a user registers his/her details it would be stored in the file SignUpFile.txt also in the form of a record (Object). When the user tries to login with a correct ID and password the code would be matching the entered ID and password with each record, when a match is found user is directed to the User Login Main page if not then a message would be popped on the console saying that a wrong ID or password were entered.

After a user logs in, they would be given an option to post a problem. After they post a problem the posted problem would be saved in the form of a record in the PostedProblems.txt file.

The admin can log in into the main admin portal after entering the correct ID and password, after which he can have access to the highest voted posted problem and existing problem which have been done internally done through random access files from the PostedProblems.txt file and Problem.txt file. Finally before printing those contents onto the console the problem along with the corresponding vote would be stored in the AdminProblem.txt file and AdminProblemPosted.txt file according to the problem being an already existing problem or posted problem.

6.2 TESTING RESULTS

Introduction:

Software testing is a critical element of software quality assurance and represents the ultimate review of specification, design and coding. In fact, testing is the one step in the software engineering process that could be viewed as destructive rather than constructive.

A strategy for software testing integrates software test case design methods into a well-planned series of steps that result in the successful construction of software. Testing is the set of activities that can be planned and conducted systematically. The underlying motivation of program testing is to affirm software quality with methods that can economically and effectively apply to both strategic to both large and small-scale systems.

Testing Objectives:

The main objective of performance testing is designedmainly to test whether the highest voted problem moves to the admin section or not.As the test results are gathered and evaluated they begin to give a qualitative indication of the reliability of the project.If proper output is not obtained, the overall quality of the app is questioned. The testing includes:

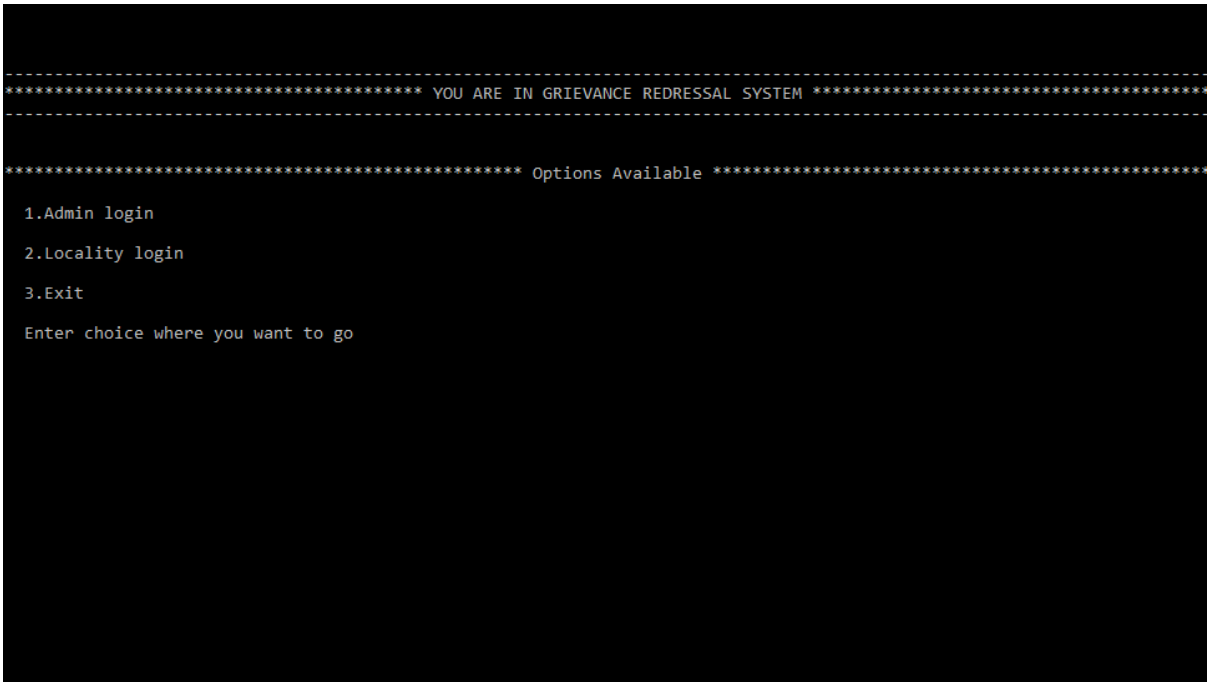
- Checking whether the problem that got the highest number of votes has been sent to admin or not.
- Checking whether Duplication of votes is avoided.
- Checking whether a user can’t register with the ID if it already exists.
- Checking whether a person can post only one problem.

- Checking whether the votes get incremented properly without throwing garbage values.
- Checking whether incremented vote remains in the file even when the program is closed.

Screenshots:

First of all you have to implement the project code in Dev C++. The output initially looks as follows:

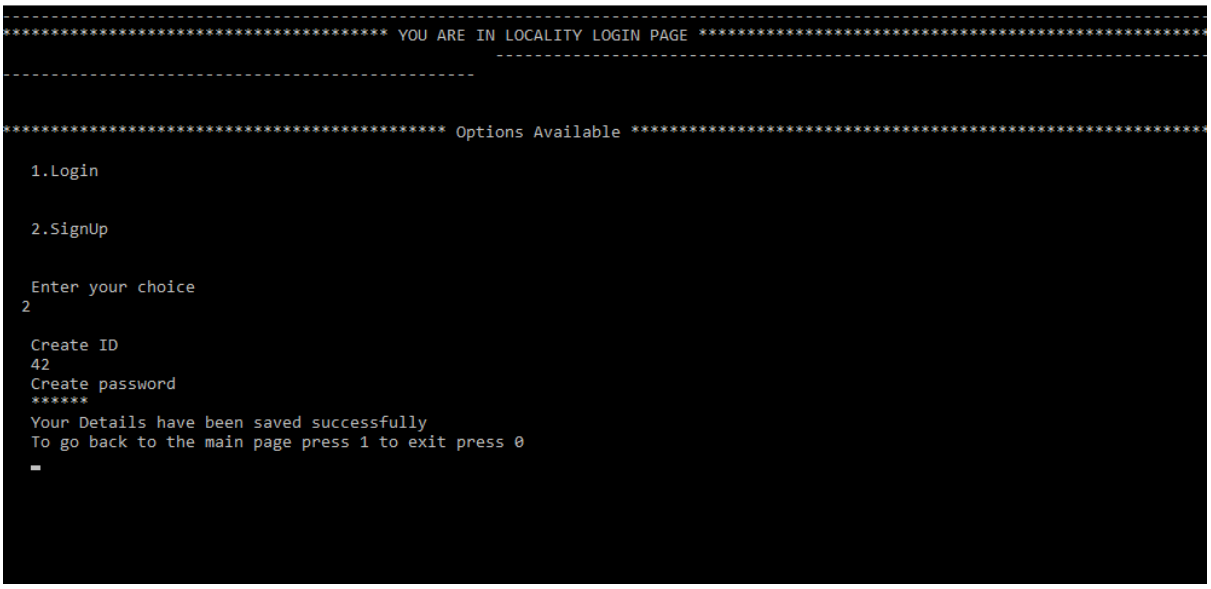
Main portal:



Screenshot 6.2.1

The Grievance Redressal Systems' main portal has two logins : User and Admin. The admin has to login with a unique ID and Password which only he knows. Whereas the user first has to register himself and then login to make use of the features in the locality portal.

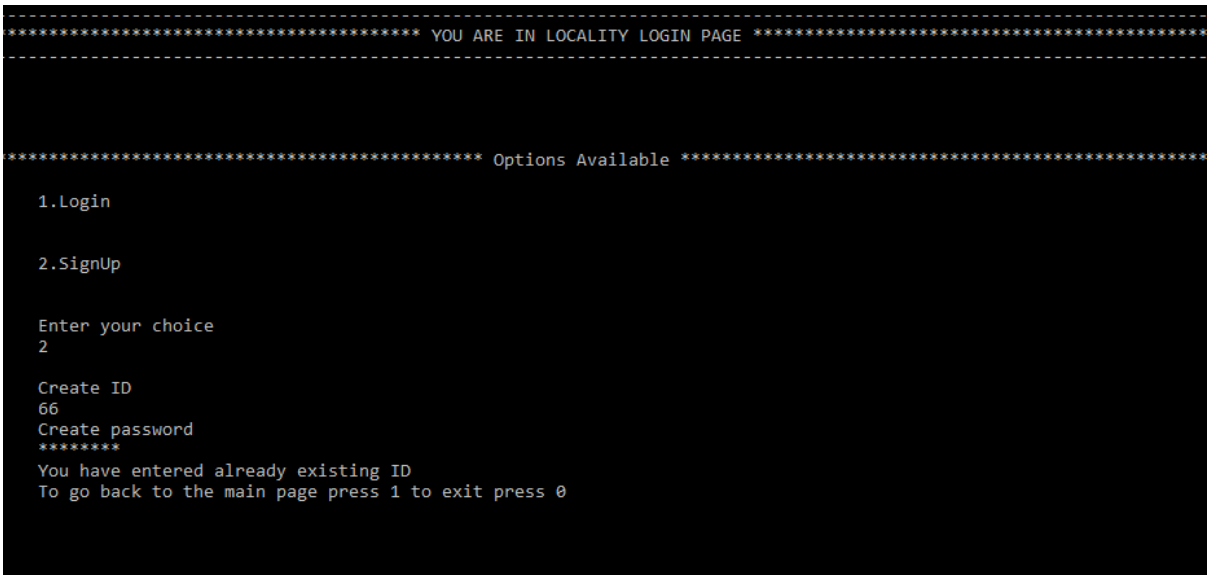
User Registration:



Screenshot 6.2.2

The user can register with a unique login id so that he can access the locality login page. The password he sets for the login has to be minimum of 6 characters. Each user will be having a unique ID.

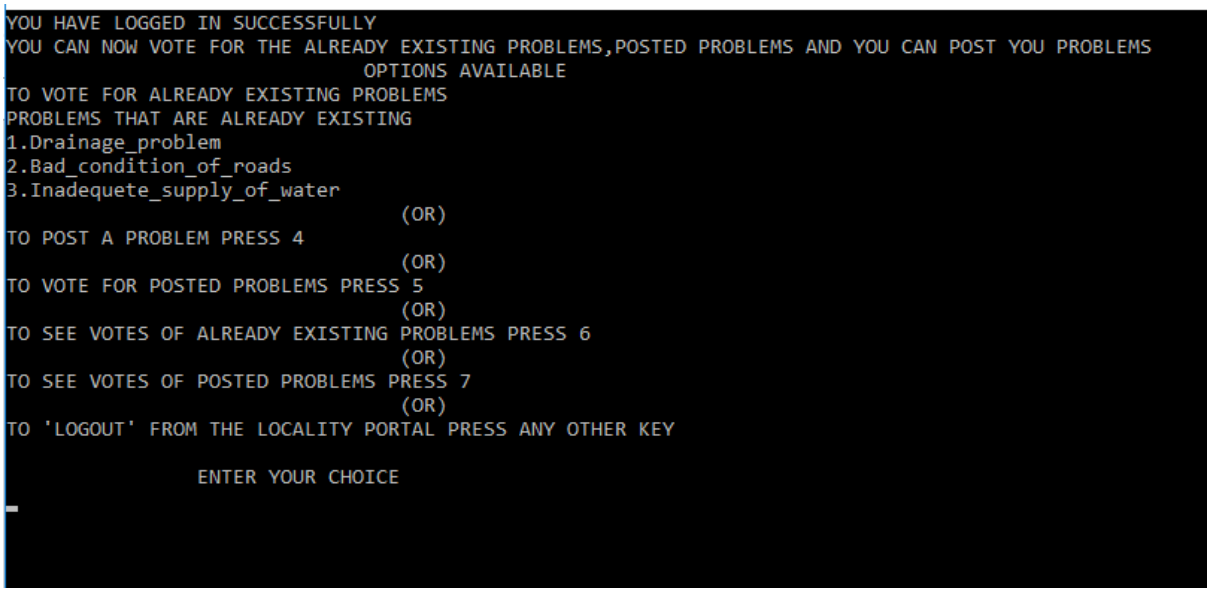
User Registration (To avoid duplication):



Screenshot 6.2.3

In the process of registration if a user tries to register with an already existing id, the System will pop a message not allowing him to do so. This method allows the project to have records (Logins) of each person designated with a unique ID.

User Login Main Page:

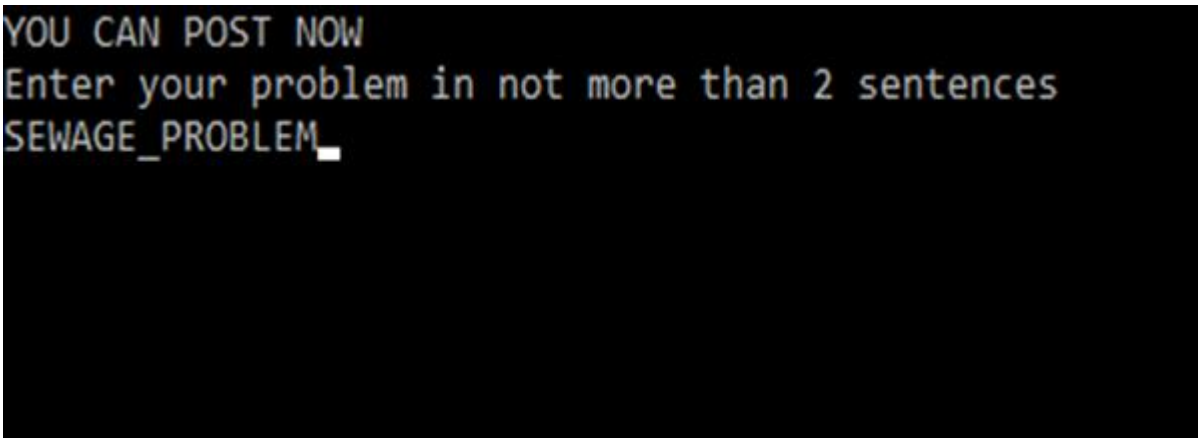


Screenshot 6.2.4

After successful login of user via User Login, the main locality login page would look as the above given screenshot of the execution. The user will have a chance to vote for already existing problems, posted problems and post problems.

The user can also track the count of the votes of the problems by clicking an appropriate option.

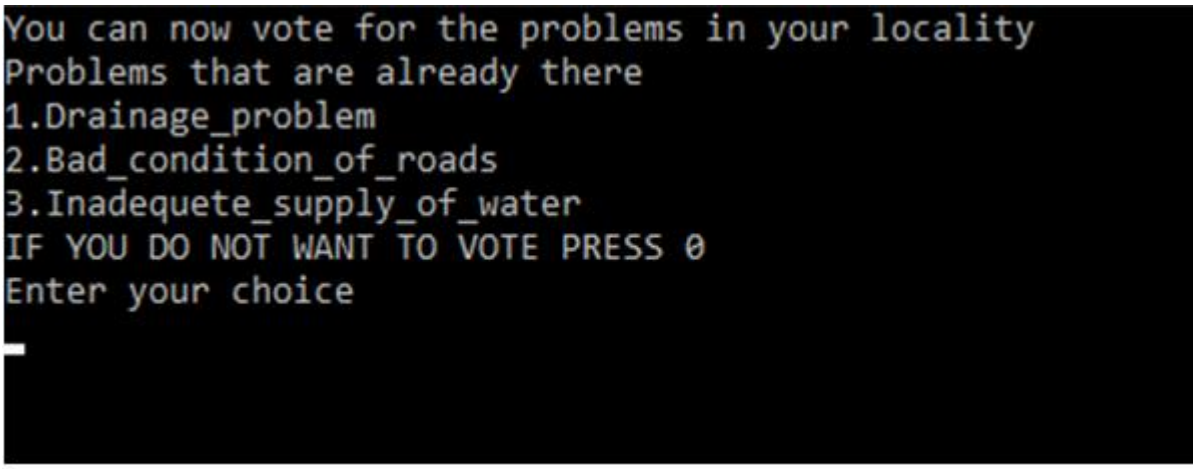
Posting a Problem:



Screenshot 6.2.5

If the user after logging in wishes to post a problem then the output would as the above given screenshot. The user can post a problem which will be visible to other users when they login so that they can vote for the posted problems along with already existing problems. This makes the code largely dynamic so that there will not be only static number of problems.

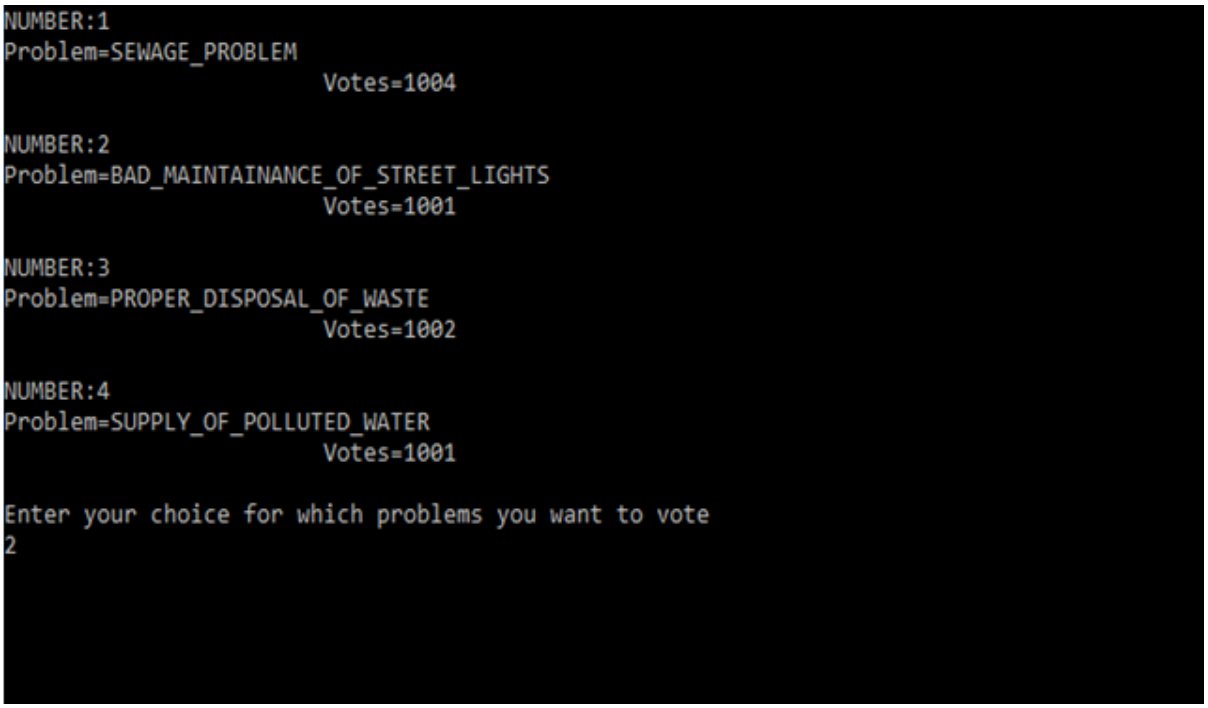
Vote for already existing problems:



Screenshot 6.2.6

If the user after logging in wishes to vote for the already existing problems then the output would be as the above given screenshot. The user will be given only one chance to vote for the already existing problems in the locality. Once voted he won't be able to vote again. This does not allow duplication of the number of votes.

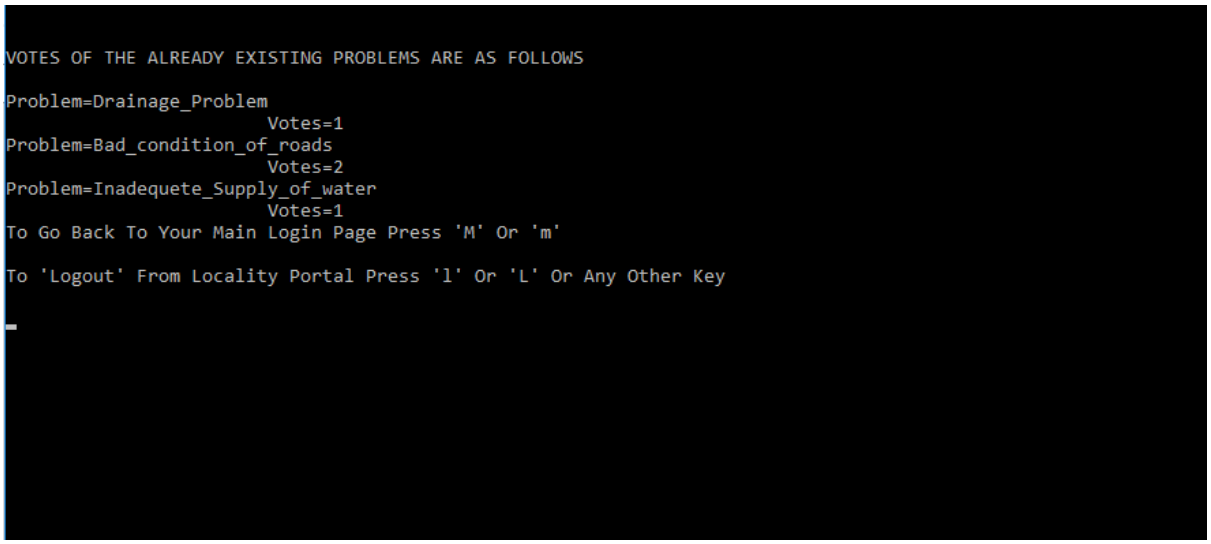
Voting for posted problems:



Screenshot 6.2.7

If the user after logging in wishes to vote for the posted problems then the output would be as the above given screenshot. After many users post their problems, we can vote for any one of the posted problems, thus making the execution and output more dynamic.

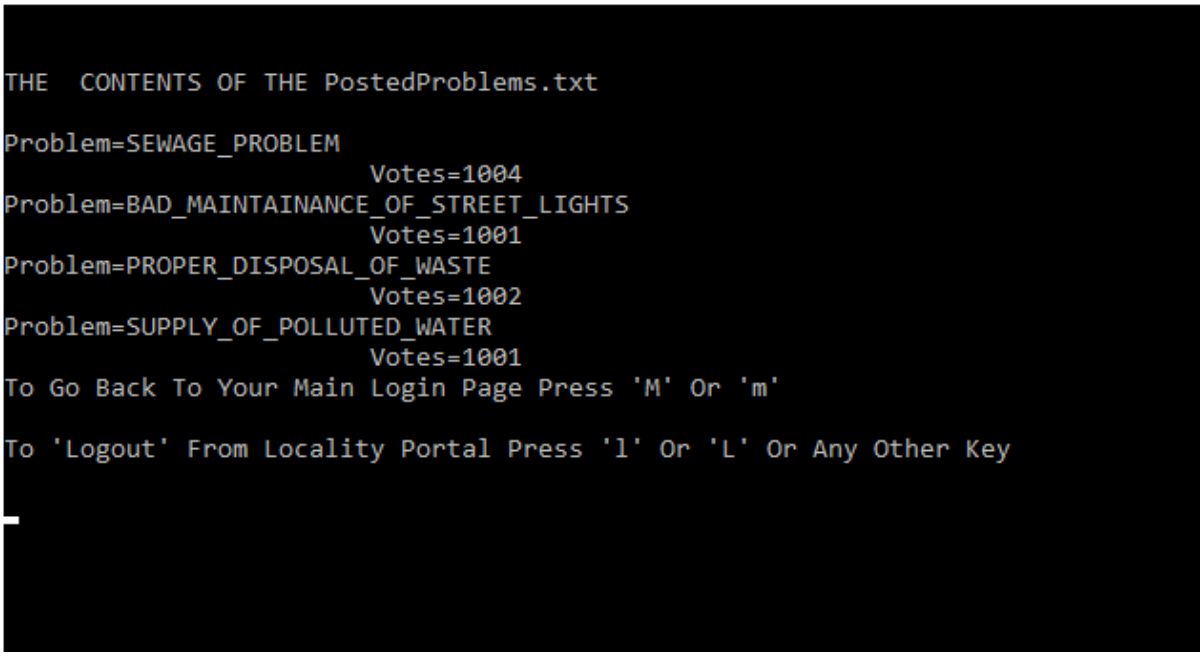
Votes of already existing problems:



Screenshot 6.2.8

If the user after logging in wishes to check the count of the number of votes of the already existing problems then the output would be as the above given screenshot. User can check the count of votes for the already existing problems after logging in. The code displays the number of votes of each problem just before the user has logged in.

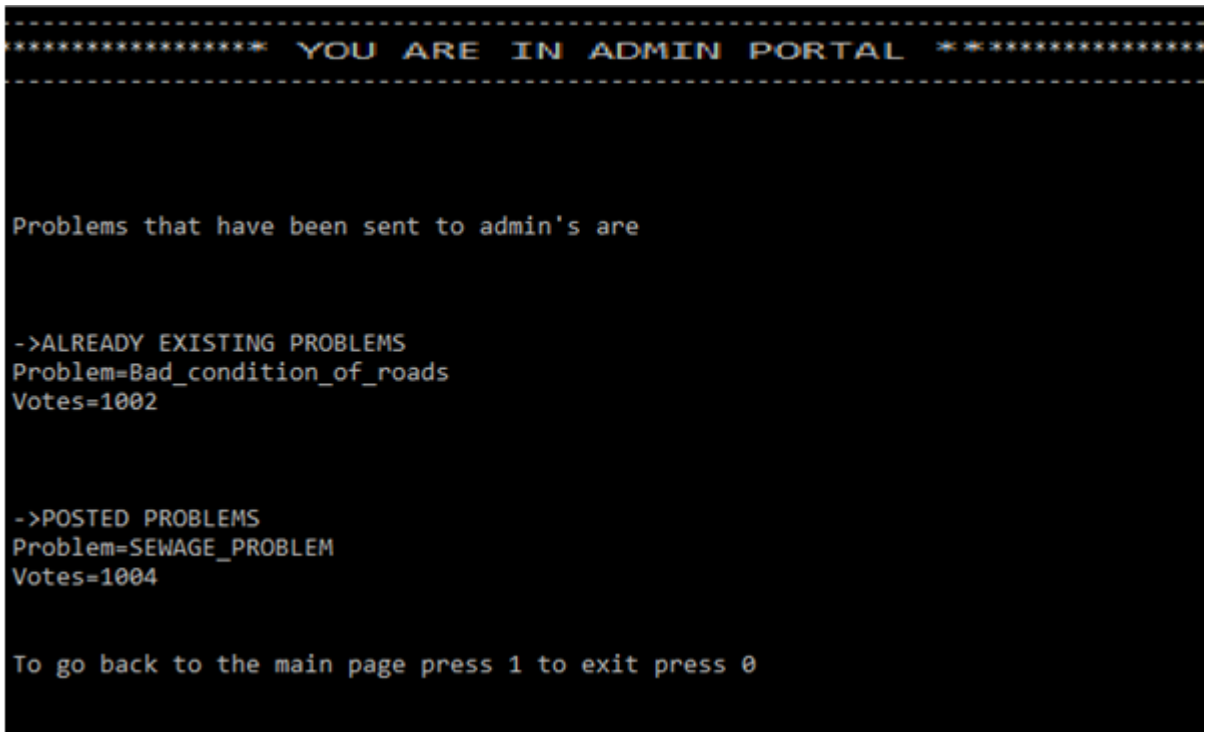
Votes of posted problems:



Screenshot 6.2.9

If the user after logging in wishes to check the count of the number of votes of the posted problems then the output would be as the above given screenshot. User can check the count of votes for the posted problems after logging in.The code displays the number of votes of each problem just before the user has logged in.

Admin Portal:



Screenshot 6.2.10

Finally when the admin has logged into the admin portal with a unique ID and Password which is predefined in the code can have access to the problems which need more attention. Admin after logging in will see the highest voted problems' from the already existing problem section and posted problems section.Thus the problem that has to be solved immediately would easily accessible for the admin.

7. CONCLUSION AND FUTURE SCOPE

This project has been developed using object oriented programming styles and files. It has succeeded in providing an interface between user and admin which lets the admin to track the highest voted problem and allows looking into it. The code keeps the track of who has voted and hence avoiding a single person to vote multiple times. It gives a person to post only ‘One’ problem which is visible for the other users and if the other users feel that the posted problem is fair enough a vote can be given for the posted problems as well. This mechanism not only is to solve the already existing problems but also to get the problems solved which have not been mentioned in the already existing list of problems. This increases the efficiency of the project thus making it more appealing.

The same problem statement can be implemented using front end web development languages like HTML 5, CSS 3, and JAVASCRIPT etc. A website having all the above features can make it easy to access for the users. Website also has the advantage of storing large data if the count of the users is high. Similarly an android app can also be developed for the problem statement mentioned. Android app has its own advantages. By this we can conclude that the future scope of this project is very high when implemented using advanced technologies.

BIBILOGRAPHY

[1] www.nptel.co.in : It has been used for learning basics of object oriented concepts.

[2] www.tutorialspoint.com : It is used to get all definitions for the project related data.

[3] www.wikipedia.com : It is used to get more information about STL's in C++.

[4] www.quora.com : It is used to get the queries answered if any.

[5] www.geeksforgeeks.com : Used to understand and implement few code snippets.