

A Mini Project Report on
Institute Scouter

T.E. - I.T Engineering

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OF MUMBAI**

Academic year : 2022-23

CERTIFICATE

This to certify that the Mini Project report on Institute Scouter has been submitted by 20104109, 20104124 and 20104058 who are a Bonafide students of A. P. Shah Institute of Technology, Thane, Mumbai, as a partial fulfillment of the requirement for the degree in **Information Technology**, during the academic year **2022-23** in the satisfactory manner as per the curriculum laid down by University of Mumbai.

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ACKNOWLEDGEMENT

This project would not have come to fruition without the invaluable help of our guide Manasi Choche. Expressing gratitude towards our HoD, **Prof. Kiran Deshpande**, and the Department of Information Technology for providing us with the opportunity as well as the support required to pursue this project. We would also like to thank our teachers who gave us their valuable suggestions and ideas when we were in need of them. We would also like to thank our peers for their helpful suggestions.

ABSTRACT

Institute scouter – Online Recommendation management system mainly focuses on a simple interface for gaining and analyzing information of Colleges considering various aspects including Academic, Courses, Fees structure, Job Placements and other parameters. The Data can be retrieved in Statistical form which aids in Performance and Progress of the Department in the Institution. It can be used by students to the records of various colleges and university easily all in one place. The management of accurate and up-to-date information regarding colleges is critically important for the students aspiring studies. College Information Management system deals with all kinds of courses details, academic related reports, college information, placement details and other resource related details too. It will have information about college, previous academic years placements details, various academic notifications by the administrator. By searching college name, proctor can view the profile of any college. Weekly updation of project reports will include project status of candidate.

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Chapter 1

Introduction

The selection of an appropriate university or college plays an important role to the students for acquisition of proper educational experience. There are hundreds of universities and colleges. The information available to students about each college is plentiful but is rather tedious to be obtained.

In this technical world, many techniques are used by humans for some purpose. There are many software, many applications are developed for human being. In this software, we can generate a list of colleges in which a student is eligible. Data mining techniques are of great importance in present education and business system [2]. A data mining task can be defined or described in the form of a data mining query, which is input to the data mining system. [3].

Approach of Decision tree is proposed which may be taken as an important basis of selection of college during any course program [2]. In college recommendation system, the challenging task is to collect the database of all colleges [5]. Generating the list of colleges from all the colleges requires to eliminate those colleges in which the candidate is not eligible

◆ Problem Identified :

Students struggle gathering information about universities and colleges.

◆ Solution Proposed :

We are providing a user-friendly system for students, parents and educationalist that helps them make better decisions in the selection of university or college. Also, this project will help the student to get the college based on their career's perspective and also based on the field of interests.

1.1 Purpose

Nowadays in the society everyone wants convenience. They don't want to spend too much time searching on the internet. Therefore we have made it easier for them to get to know about multiple colleges on a single website.

Problem Statement

Students struggle gathering information about universities and colleges. It is not easy for them to find suitable colleges. It takes a lot of time to gather detailed information about colleges and universities.

Objective

- To make college selection easy for students looking to pursue undergraduate and postgraduate.
- To make the hectic admission procedure effortless by Suitable and specific information.
- To reduce paper work and time.

Scope

1. Can help students decide to choose suitable colleges and universities.
2. Can be useful to students and parents.
3. Students can see courses related to their stream.
4. Can be used to reduce paper work.
5. Can help students save time.
6. To help students make better decisions.
7. Easily accessible to users on the move through mobile site.

Chapter 2

Literature Review

- [1] Both technology as a whole and learning management systems specifically have had rapid transformations over the past 15 years. Initially introduced in the 1990s, course management systems have evolved over time into the current incarnation of learning management systems. Often times these words are still used interchangeably, but they have significant differences. Course management systems have a much more narrow focus of delivery and contents of courses. In contrast learning management systems allow for increased focus on the learning needs of the student and needs of the e-learning instructor regarding tasks (Iqbal & Qureshi, 2011).

- [2] In contrast, the European market is not dominated by the few big players in the American market. Most of the information management systems in Europe are sold by small commercial vendors or are developed by the institutions themselves (Falvo & Johnson, 2007).

- [3] The introduction of learning management systems, along with increased computer use in the home and in business has brought an increasing number of students and teachers to the online learning environment (Falvo & Johnson, 2007).

- [4] "College Recommendation System" by "Leena Deshpande, Nilesh Dikhale, Himanshu Shrivastava", in this paper they had proposed different data analysis and data mining techniques that can be used for college recommendation system. This system is made for students, parents and educationalist who aims to search engineering colleges. Recommendation systems solve the problem of information overload by searching through large volumes of data. There are different prediction techniques that help recommendation systems to obtain data.

- [5] Mohammad Aamir, Mamta Bhusri "Recommendation system: state of the art approach", International Journal of Computer Applications (0975-8887) Vol. 120-No.12, June 2015.

Chapter 3

Proposed System

Our proposed system aims to develop a software for SSC passed students in order to help them in their admission process. This project will help the high school students to get the list of colleges based on their scores. The inputted student score will be compared with past year's college cut-offs and a list would be populated within the range of +5 and -5 of the student's score. The generated list would be ordered based on the best rated college and cut-off. The rating of the college will be collected from various students across different colleges. Along with cut-off the resulted list would be filtered based on various criteria like caste information, region and minority. This filters would be selected by the user based on his choice. Thus, the populated list can be used by the user to fill the junior college admission form hence reducing their stress of manually preparing the list or roaming everywhere to get information about admissions from their seniors.

Features and Functionality

◆ **College Info:**

User can get detailed information about the University/College.

◆ **Courses:**

User can get information about Undergraduate/Postgraduate Courses.

◆ **Fee Structure:**

User can get detailed information about the fee structure of colleges.

◆ **College reviews:**

User can see college review.

◆ **Placements :**

User can get information about Placement policy of colleges.

Chapter 4

Requirement Analysis

- **Performance Requirements**

The load time for the user interface screen should take no longer than 5 seconds.

- **Design Constraints**

The application should be able to run on any Pc or Laptop.

- **Availability**

The application should be available at all times whenever user wants to use.

Hardware requirements

- **RAM**

The application requires a device with a minimum of 512MB RAM while running.

- **Processor speed**

The application requires a device with a minimum processor speed of 1GHz while running.

Software requirements

- **Operating system**

The application must run on any Operation System.

Chapter 5

Project Design

5.1 Use Case Diagram

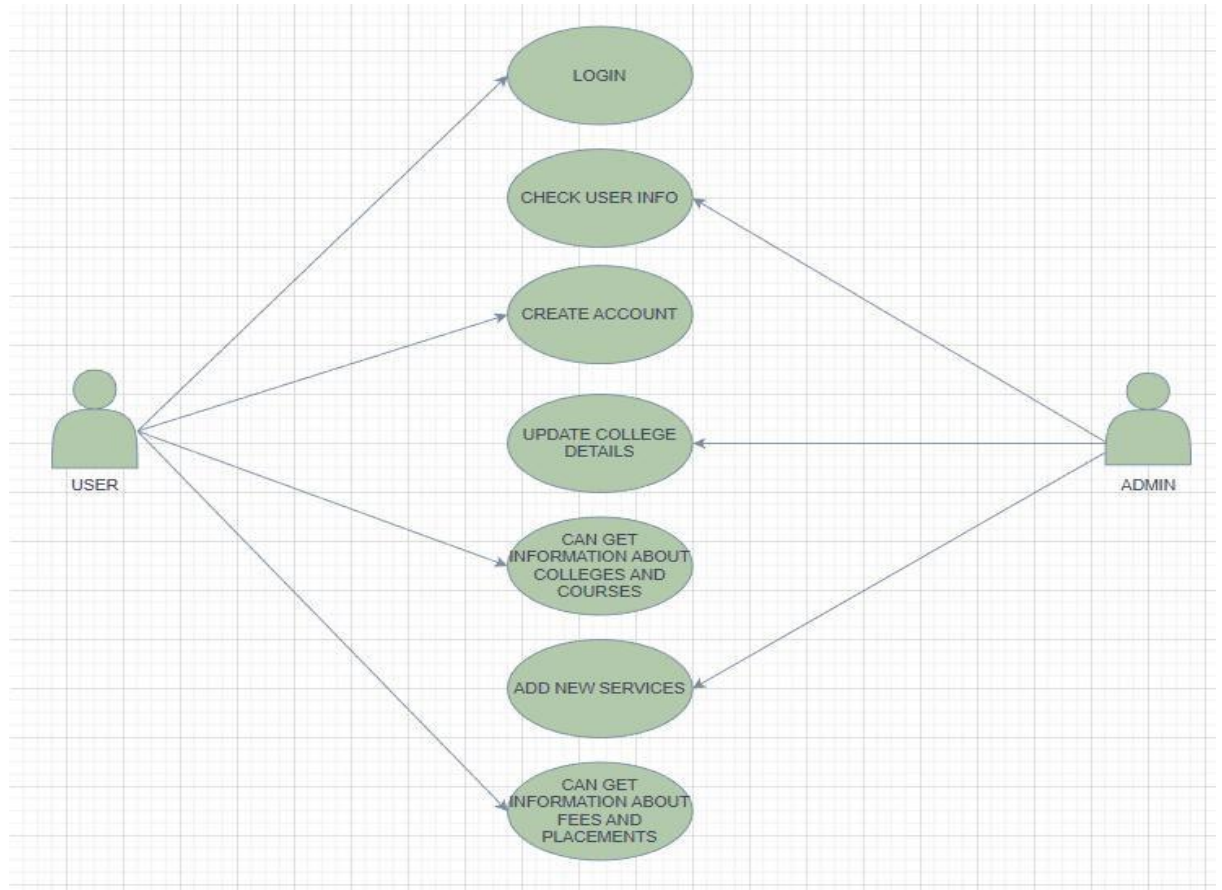


Fig. 1 Use Case Diagram

5.2 DFD

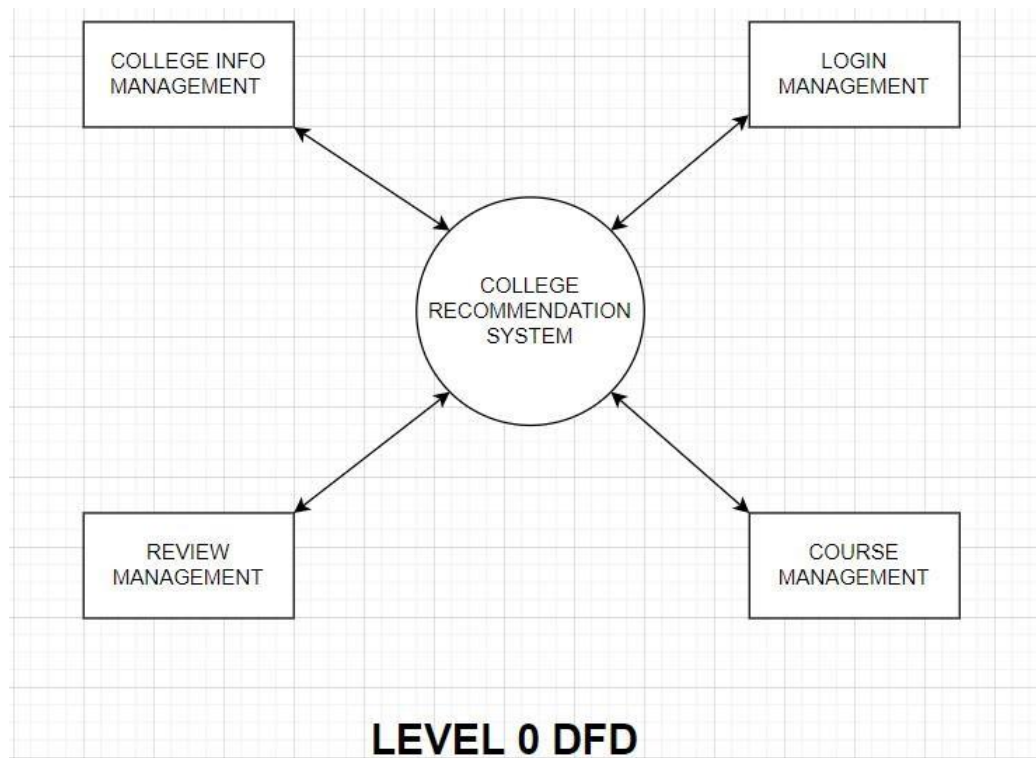


Fig 2. LEVEL 0 DFD

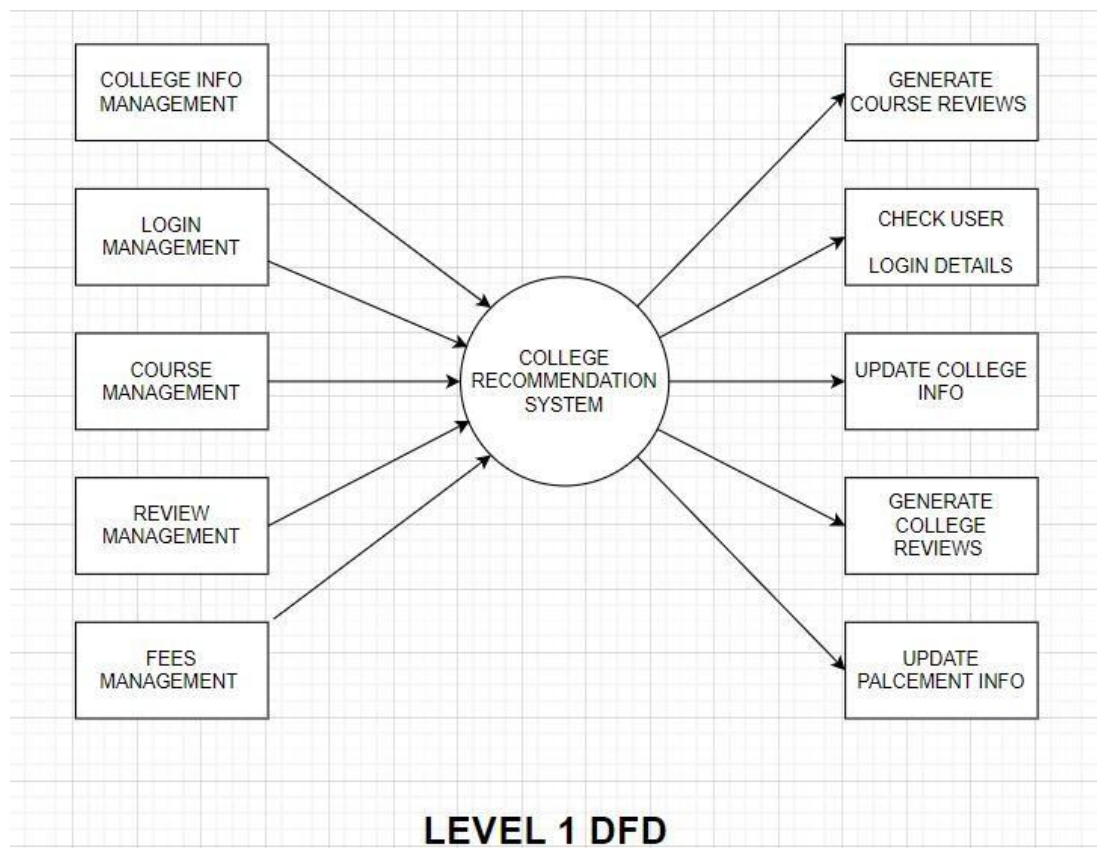


Fig 3. LEVEL 1 DFD

5.3 System Architecture

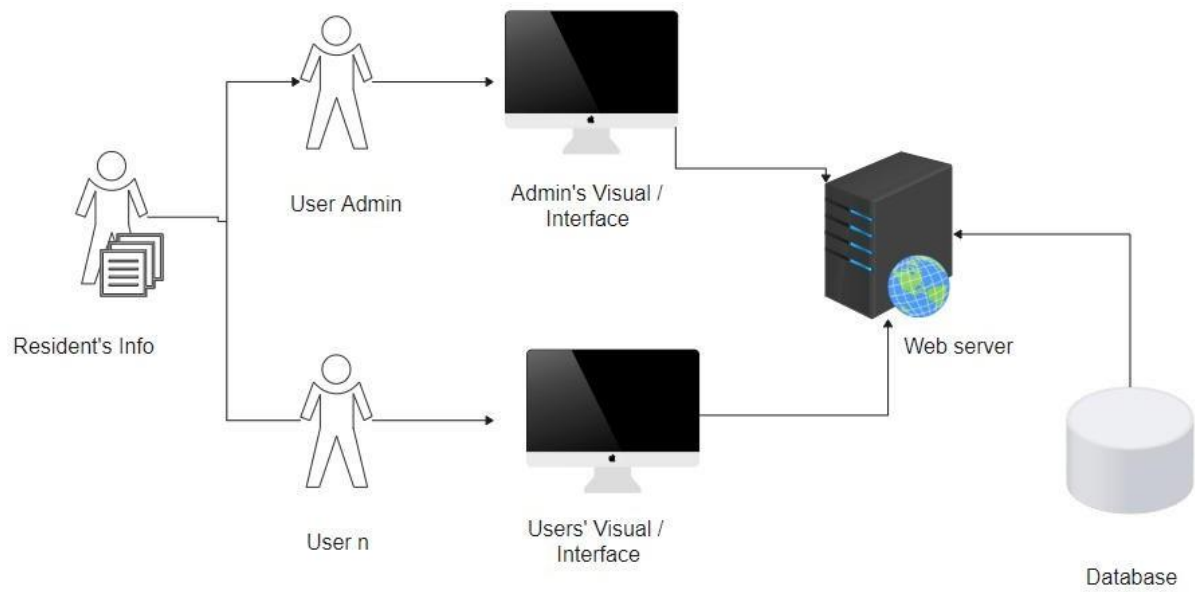


Fig 4. SYSTEM ARCHITECTURE

Chapter 6

Technical Specification

Development: VS Code

VS Code also known as Visual Studio Code is a source code editor made by Microsoft for Windows, Linux, MacOS. It has various features such as Debugging, Syntax highlighting, extension, intelligent code completion.

Frontend: Html, CSS, JavaScript

As a web developer, the three main languages we use to build websites are HTML, CSS, and JavaScript. JavaScript is the programming language, we use HTML to structure the site, and we use CSS to design and layout the web page. These days, CSS has become more than just a design language, though. You can actually implement animations and smooth transitions with just CSS.

OS : Windows

Windows is a graphical operating system developed by Microsoft. It allows users to view and store files, run the software, play games, watch videos, and provides a way to connect to the internet. It was released for both home computing and professional works.

Backend: Firebase

Firebase is a product of Google which helps developers to build, manage, and grow their apps easily. It helps developers to build their apps faster and in a more secure way. No programming is required on the firebase side which makes it easy to use its features more efficiently. It provides services to android, ios, web, and unity. It provides cloud storage. It uses NoSQL for the database for the storage of data.

Chapter 7

Project Scheduling

Sr no	Group member	Time Duration	Work to be done
1.	Jemin Bhanushali Maaz Mirza Hamza Ansari	2nd week of July 3 rd week of July	Implementing 1 st module/ functionality (designing of the login and registration pages) Testing module 1 (linking the login & registration pages, creating home page)
2.	Jemin Bhanushali Maaz Mirza Hamza Ansari	1 st week of september	Implementing 2 nd module / functionality (Creating admin and user modules and implementing them)
3.	Jemin Bhanushali Maaz Mirza Hamza Ansari	By the end of september	Implementing 3 rd module functionality (connecting all the pages and backend connectivity)

Chapter 8

Result and Discussions

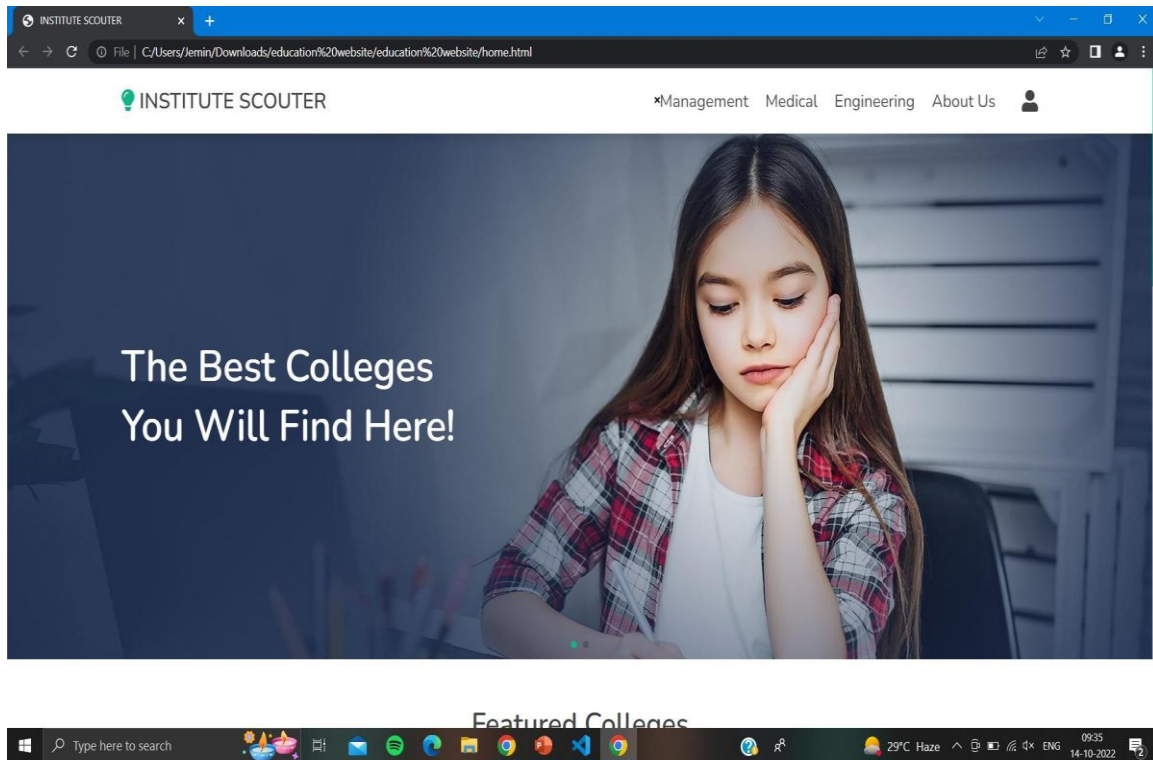


Fig 5 Homepage

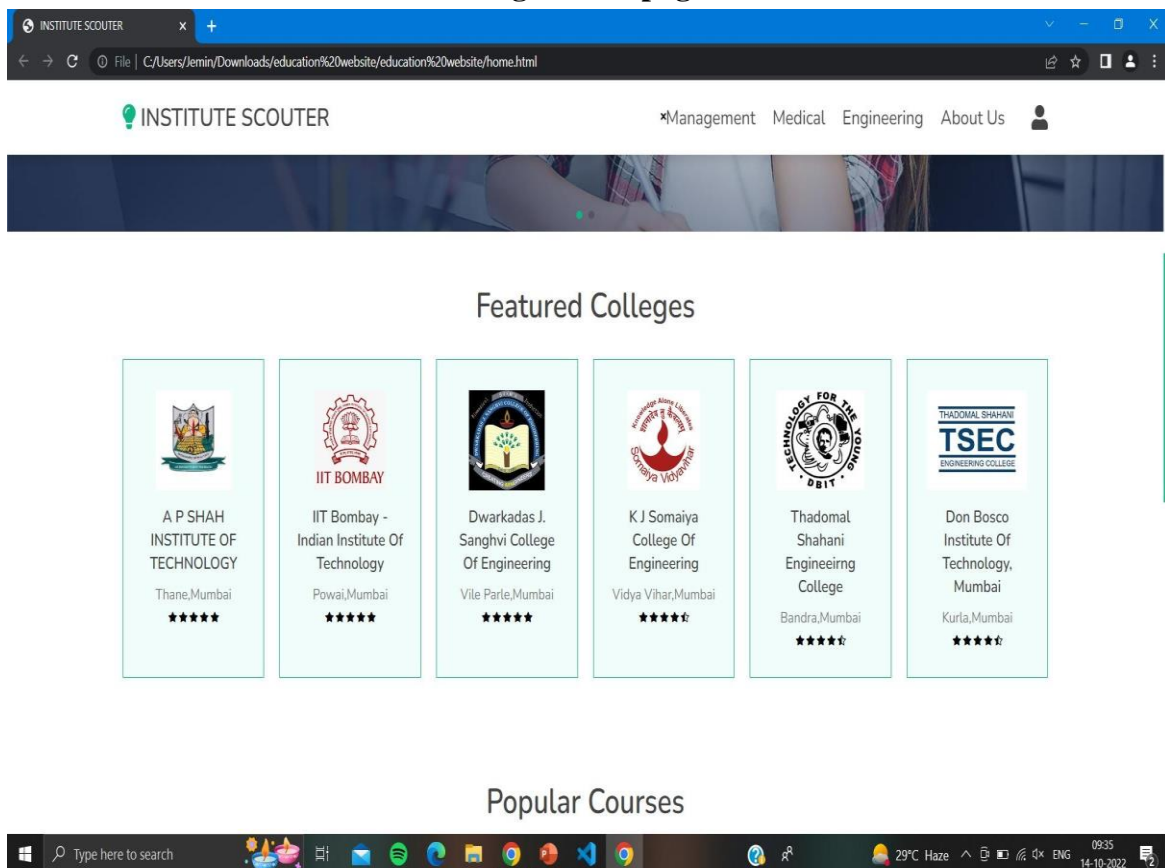


Fig 6 Homepage

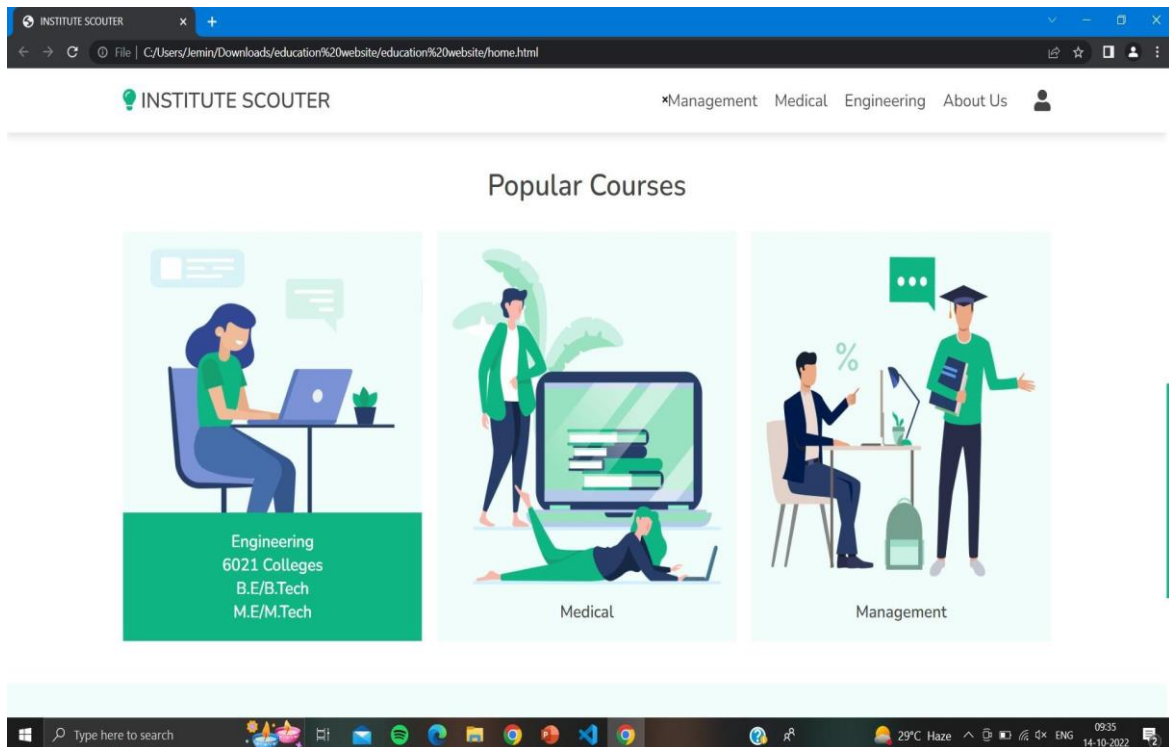


Fig 7 Homepage

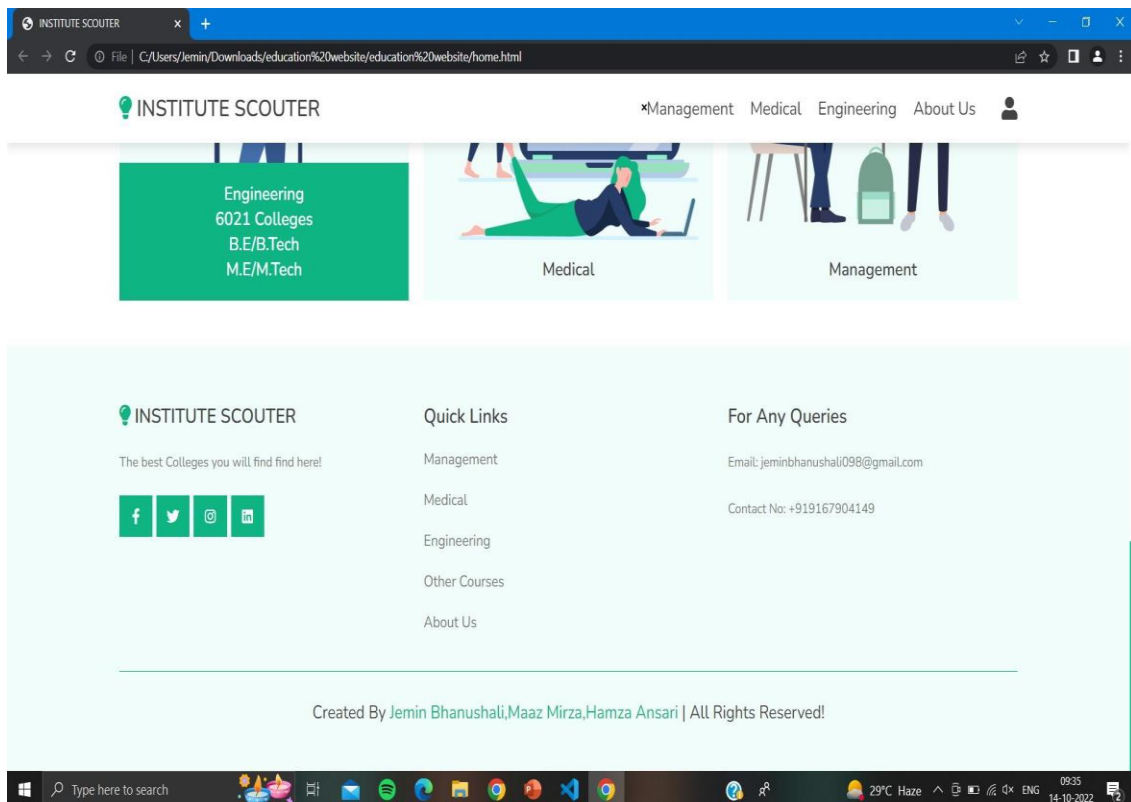


Fig 8 Homepage

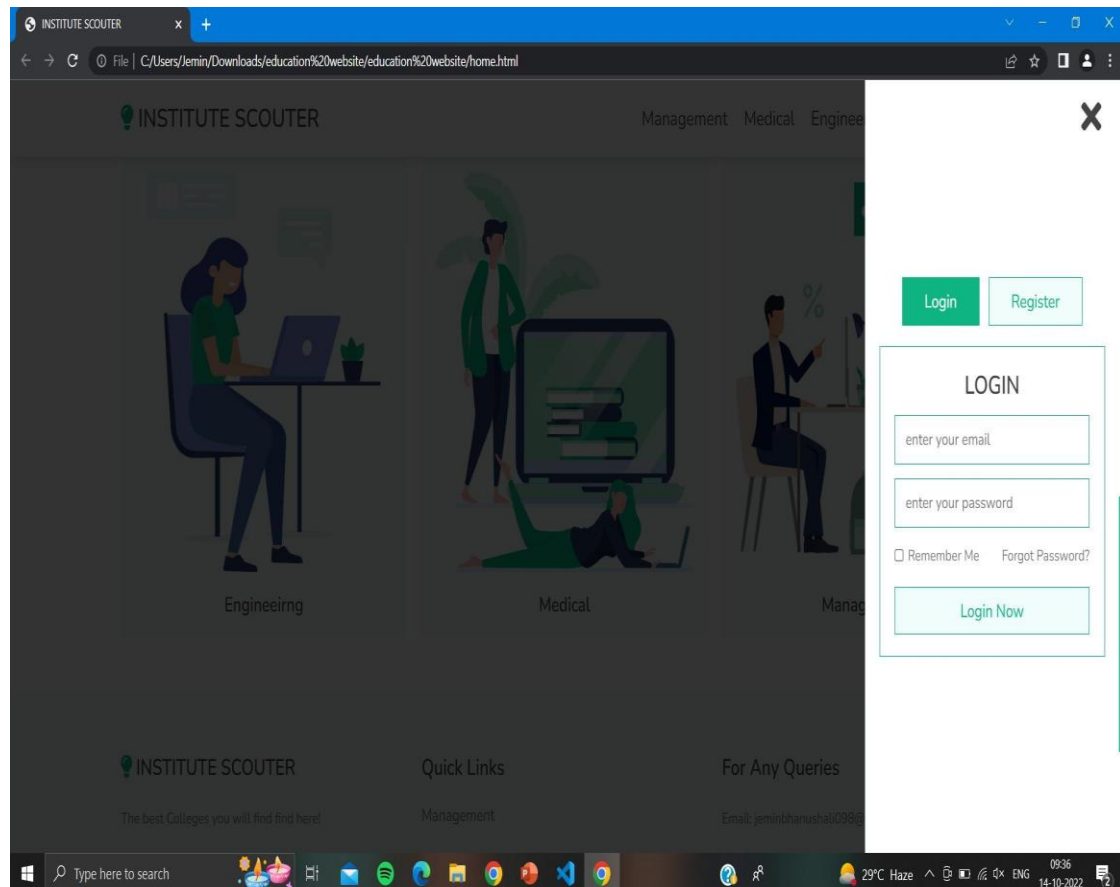


Fig 9 Login

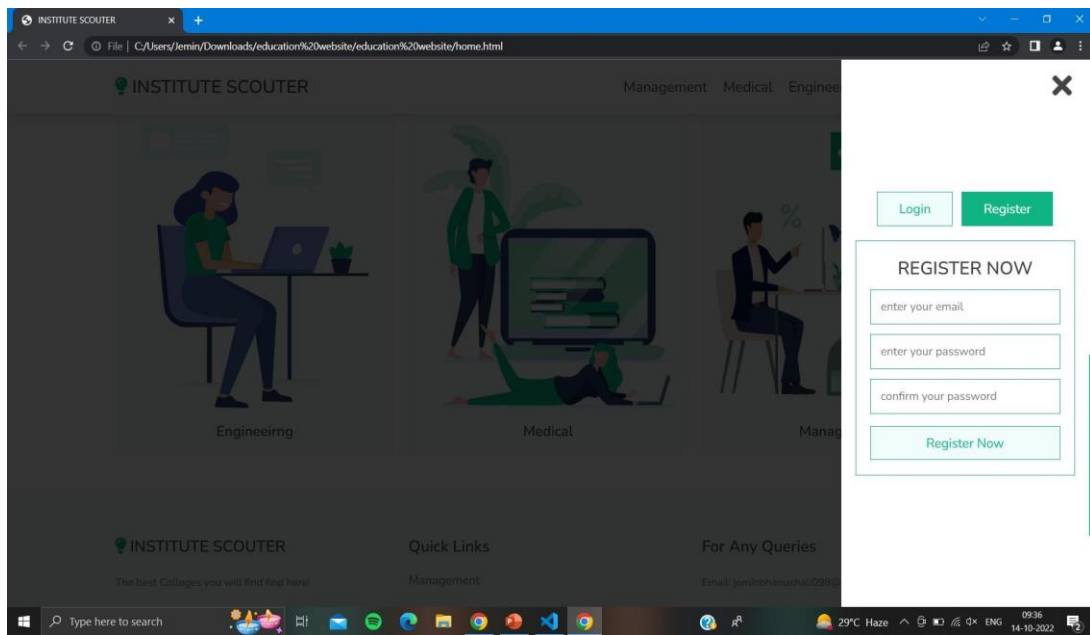


Fig 10 Registration

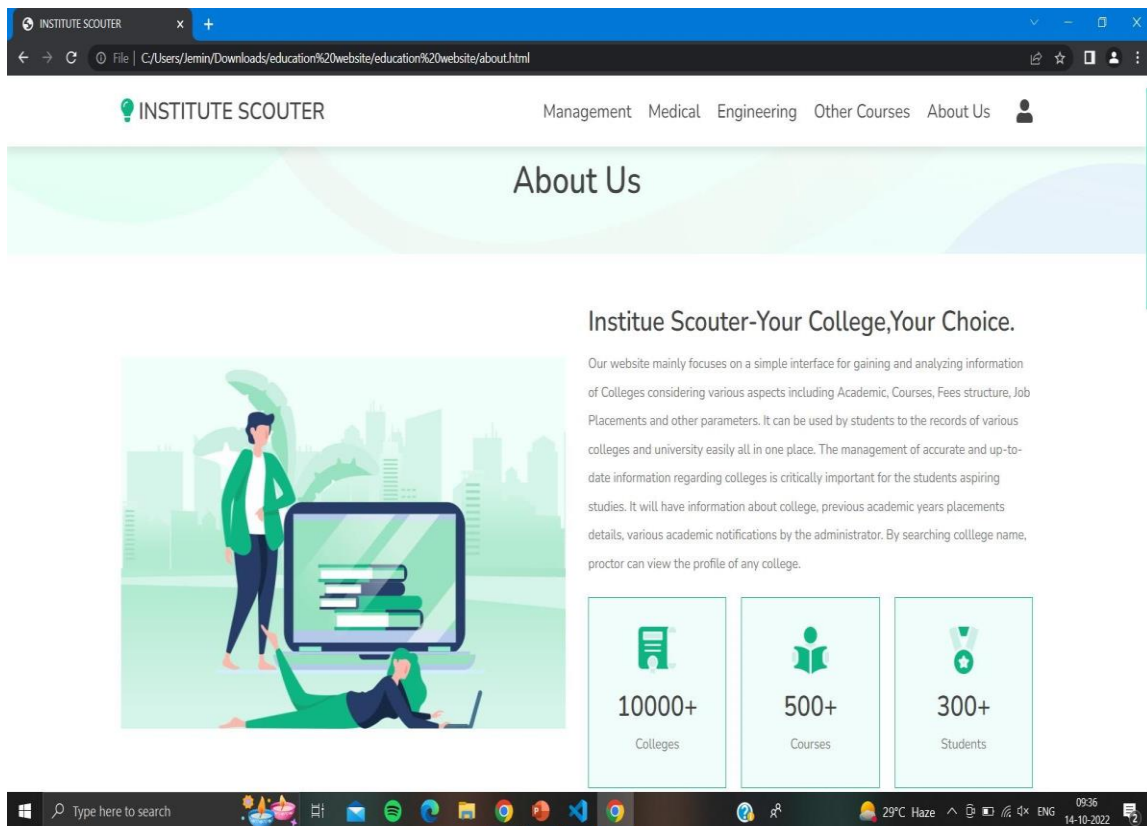


Fig 11 About us

Chapter 9

Conclusion and Future scope

- Since there is no such system available in present, our system will be beneficial for lot of students.
- Currently our system will be exclusive to only Under Graduate and Post Graduate students but in the future, higher education students will also be able to take advantage of our system.
- It can also be updated in the future as and when requirements for the same arises.

References

- [1] Web service api for student information and course management systems(US20080085502A1)
- [2] College specific Information System.(US20120237917A1)
- [3] <https://www.shiksha.com/>
- [4] <https://collegedunia.com/>
- [5] <https://www.ijert.org/college-recommendation-system>
- [6] <https://www.irjet.net/archives/V7/i3/IRJET-V7I31057.pdf>