Career Guidance System

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ABSTRACT

In moment's world selection of the right career is veritably important. It is a veritably complicated and difficult task for the scholar. While choosing the right bone should suppose with respect to their chops, area of interest, capacities and capabilities. This isn't as simple a task as it sounds, as utmost of the scholars get confused. Our application is a solution for all these problems. It's an approach to give proper guidance to the scholars by recommending them careers after10thand12thgrade.Thescholarsareevaluatedonthebase of the aptitude test and a proper career guidance is given to them to achieve the heights of success in their life. In this system we've used different data mining algorithms for better visualization.

Key Words: Data Mining, Career, Education, Web Development, k-means.

[1] INTRODUCTION

Choosing a career has always been challenging for everyonesinceveritablylong.WebGroundedCareerGuidanceSystemhasbeen developed for the scholars who have completed their10th grade and 12th grade. This system is developed to clear all the confusion in the minds of the scholars.

Our website is a true relief for scholars and their parents. The scholars will first need to register with our website and also login with the same credentials and then elect the grade

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after which they're looking for career guidance (i.e after 10th or after 12th). After opting the grade the scholars can proceed with the aptitude test. The aptitude test consists of different sections like quantitative, logical and verbal. After successful completion of the test the scholars will receive a report which has a detailed analysis of the test and the appropriate career recommendation. The scholars can then explore more about the particular career option from our website. The scholars can also view all the colleges for that particular field along with the city in which they' relocated, fees and ratings on our website.

We've used Data Mining Algorithm, k-means which gives us a pictorial presentation for better visual analysis. The output of the same is stored in the Backend and again displayed to the user in Frontend. Classification and data mining algorithms similar as k-means for graphical visualization. This system doesn't require the involvement of man power .A contact form has also been integrated into the system. In case of any difficulty or query the scholars can communicate with us and get their dubieties answered. They can contact us on thee-mail id provided in the website.

[2] RELATED WORK

The existing system involves one to one counselling, or pen and paper guidance. This has numerous downsides similar as less accuracy, unavailability of the counsellor and numerous further. There are also some websites available which guides the scholars based only on their academic marks without considering their aptitude. The GUI of some websites is not user-friendly, which makes it difficult for the students. There is no similar website which takes the input from the scholars and provides them with a detailed report and an appropriate career a long with the explanation of why to move ahead with there commended career and a list of colleges.

In the modern age, choosing the right career option is a veritably tough assignment for students. In the last decade, the number of career options increased tremendously. Most of the scholars are of these career options. Many career counsellor platforms charge high fees which are not affordable for everyone. So the reasoned for a career counselling website which is free and user friendly. The main idea of our system is to give right guidance to the scholars by recommending the appropriate career. Along with this our system also gives brief perceptivity to the scholars about the recommended career option. The scholars also get a complete list of colleges which will reduce their time and efforts.

[3] Proposed System

The existing system has numerous downsides. In the proposedsystemwe'veusedadvancedtechnologiessimilarasDataminingalgorithmsand

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Webdevelopment.Thisapplicationhas been developed using various languages such as HTML5,CSS, Javascript, PHP. For database store house ware using XAMPP Server i.e MYSQL and APACHE. This application has different modules like Login, Registration, Aptitude test, Result, Report Generation and List of Colleges. In our system we have used data mining technique such as clustering.

The Web Grounded Career Guidance System is easier to access anywhere and anytime. This system provides the scholars a right career path by suggesting appropriate careers.
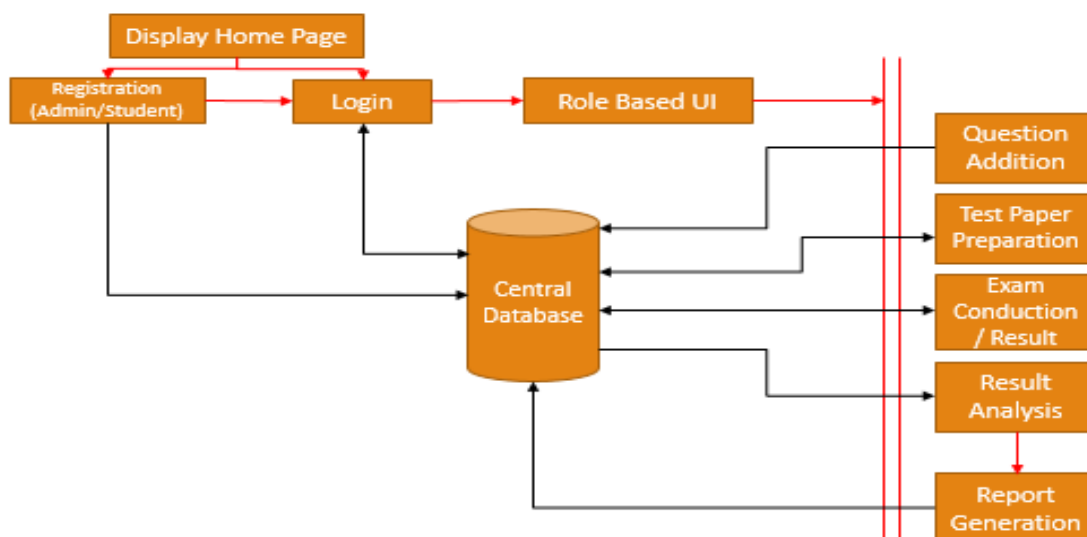

Fig1. System Architecture

The design methodology involves taking input from thescholarsanddisplayingtheoutputafterperformingtheanalysis.Forscholars'inputwe'veconcentratedonPersonaldetails, Academic details and Aptitude tests. When the scholars visit the Career Guidance Website they will be first prompted with a welcome screen and landing page where the scholars get brief ideas about the website. If the scholars are visiting the website for the first time he/she would need to register to enjoy all the services offered. After registering the scholars will be handed with username and password.

The same credentials should be used by the scholars to login to the website. The scholar then needs to appropriate grade (10thgradeor12thgrade)after which he/she is looking for career guidance. When the scholars elect the standard he/she is needed to enter the Academic details. Where the scholar needs to enter all the academic details including curricular as well as extracurricular activities. The scholar's area of interest plays a vital role in the selection or guidance of career path. Then the scholars supposed to enter his or her area of interest which can be arts, science or commerce after 10th grade or Engineering, Doctor, Architecture, Fashion Designing etc after12thgrade.

The scholar is now prompted with a quiz window. The difficulty level of both the quizzes is different. At the end of the quiz, the scholar will be handed with a report along with

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career recommendations. The scholars can also browse through all the colleges of the recommended stream.

USECASEDIAGRAM

The use case diagram for Web Grounded Career Guidance System is as shown below.
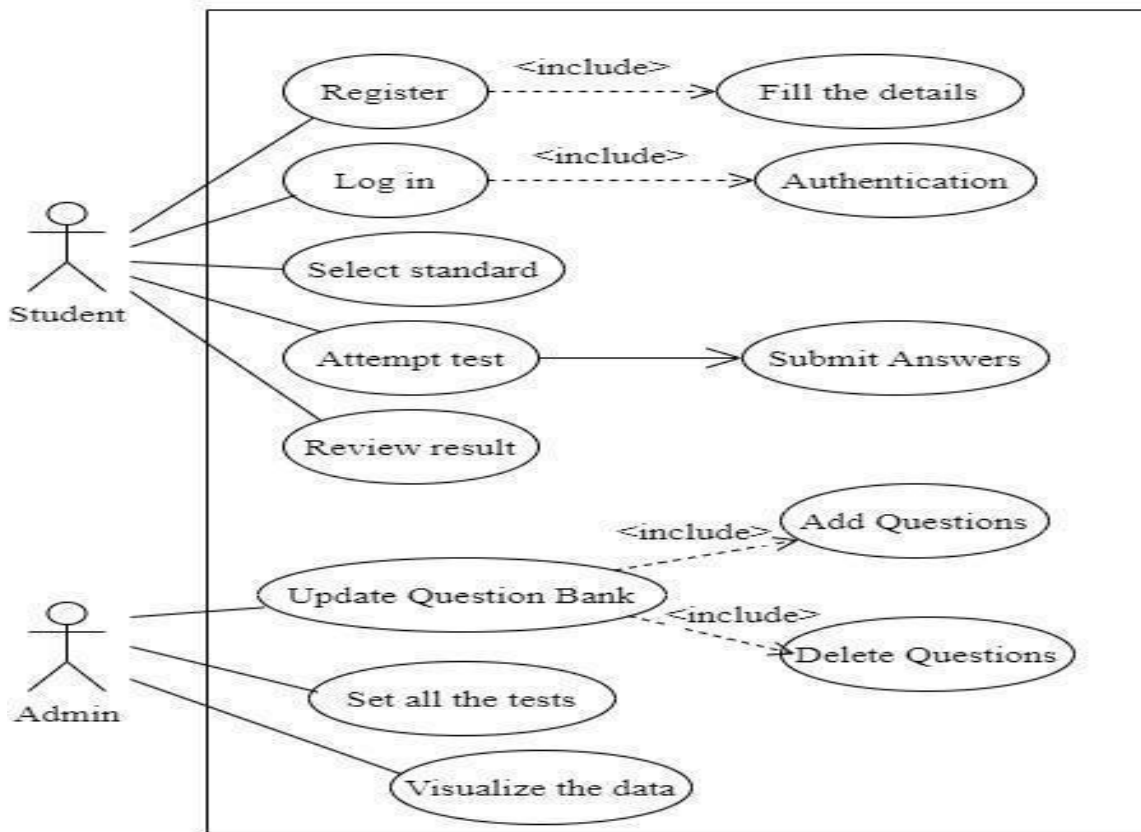
Figure -2:Use Case Diagram

- Register : Fill in the needed details and register to the system

- Login: On logging on, the user is prompted for the username and password. The user enters the username & password to enjoy the services of the career guidance system.

- Elect standard: The scholar needs to select an appropriate grade(10thgradeor12thgrade)for which he/she is looking for career guidance.

- Enter academic marks: Here user needs to enter all the academics related details including curriculum as well as extracurricular activities.

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- Elect Favourite Subject from Academics: The user needs to select his or her favourite subject from the academics.

- Attempt tests: The user needs to essay all the tests to get a proper career path.

- Review result: Both the scholar as well as the acdmincan review the final result.

- Update Question bank: Administrators can update the question bank by adding or removing questions.

- Configure all tests : Administrator must create surveys for all tests.

- Fantasize the data: The academician then fantasize the data for better understanding.

4. RESULTANALYSIS

Career selection has always been a vital aspect in everybody's life. By using our project we have successfullyassuredcareerrecommendationtoscholars.Careerrecommendation is the main highlight of our design. Another point is suggesting colleges to scholars as per the recommendation. This operation will help to solve the issues with the help of great technology and ideas.
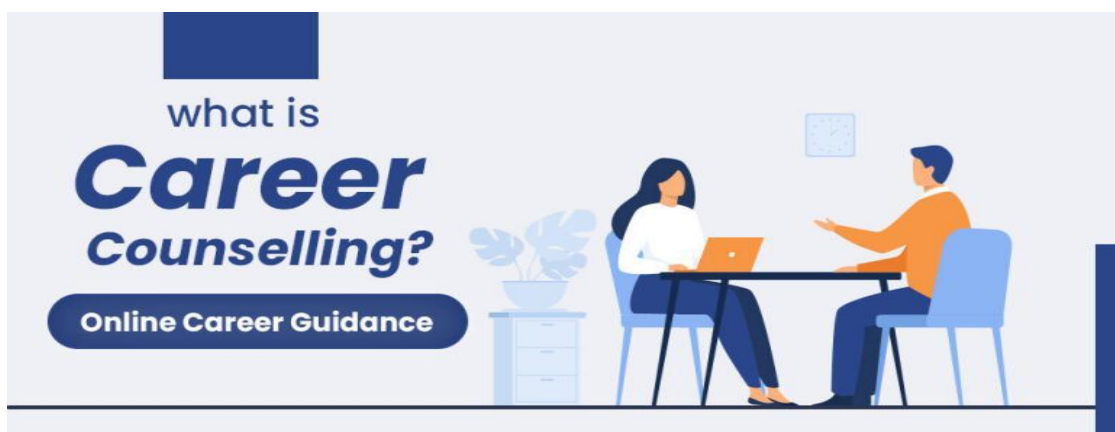

**Figure -3:** GUI of the website

A. ResultAnalysisfor10thgrade
Table-1: 10th Grade Student Analysis

SrNo.	Nameofthe Student	Marks	Result
1	Aaftab Khan	50	Science
2	Ishan Mittal	49	Science
3	Ujjwal Mittal	30	Commerce

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As we can see from the above table, the results are displayed with respect to the marks scored. From this, we can conclude that based on the marks scored in the aptitude test the system recommends the stream.
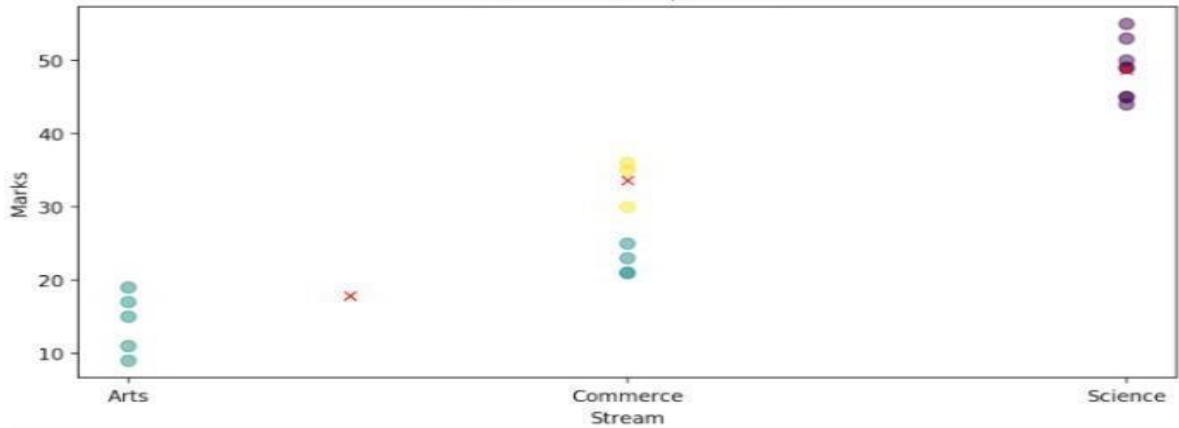
Figure-4: Visualizationof10th grade students

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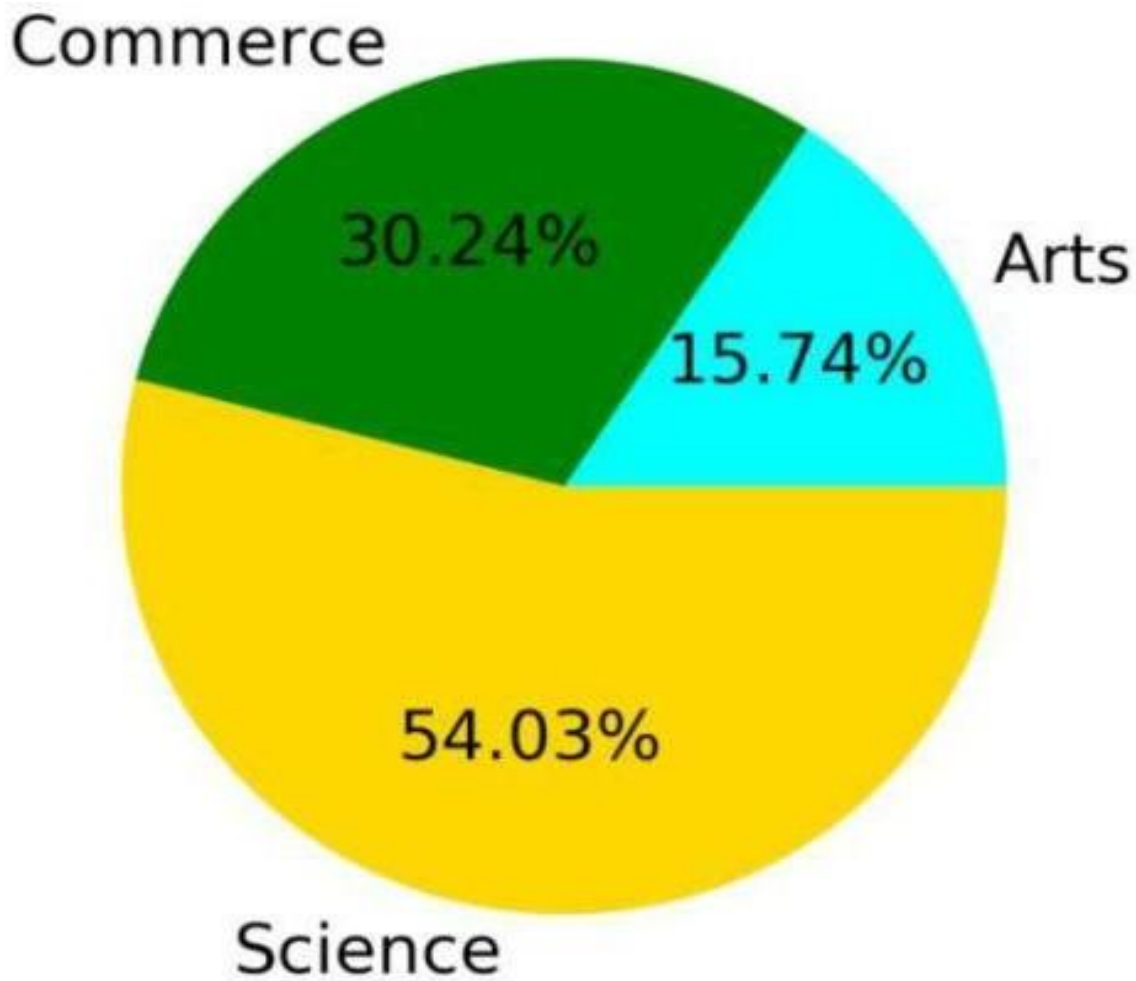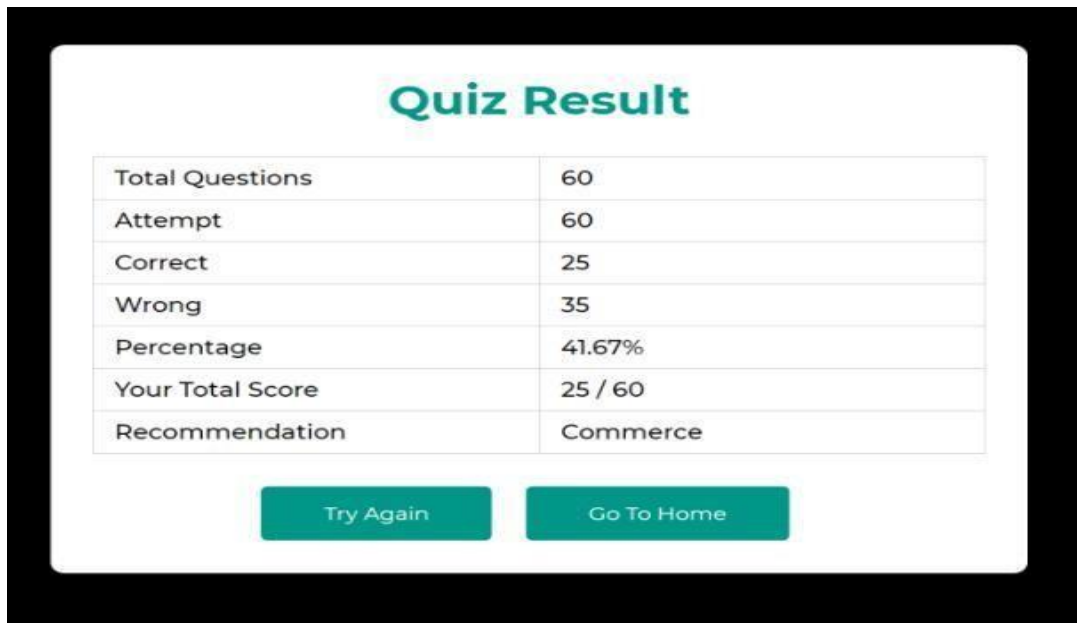
Figure-5: Pie Chart illustrating the recommended streams
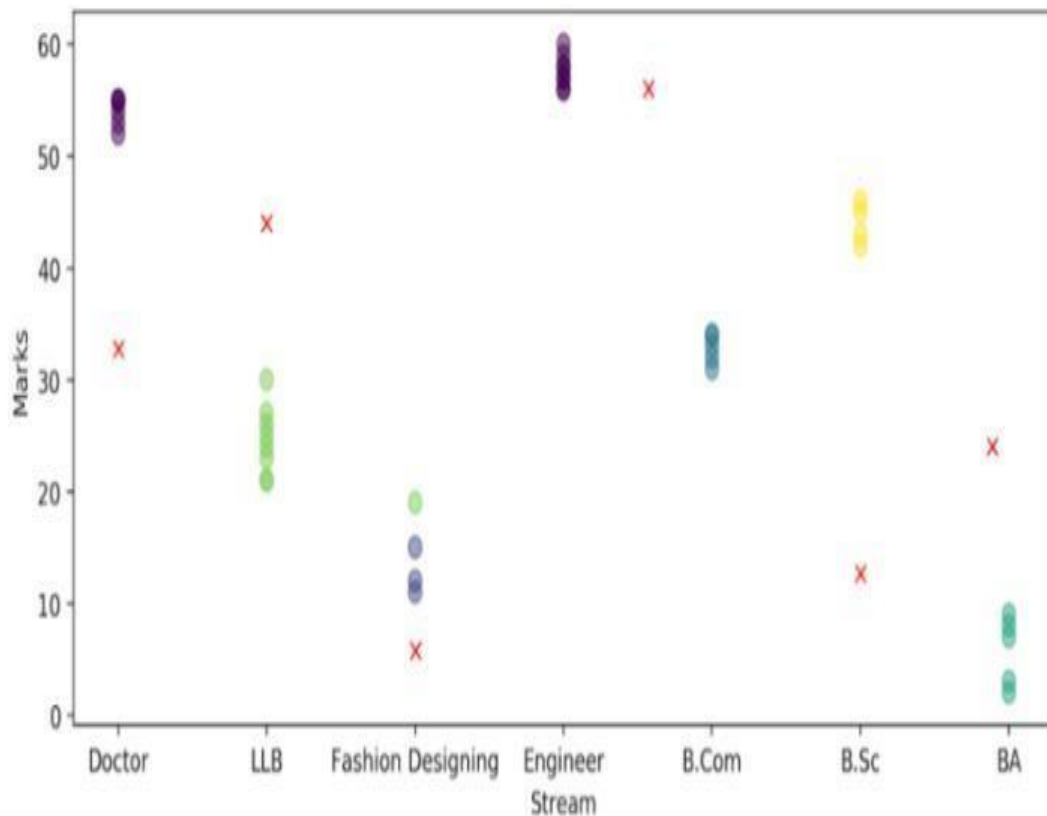
Figure-6: Website Result

Figure-6 shows the website results including number of questions attempted, total number of correct answers, total no of incorrect answers, percentage, total score, and recommendation.

A. ResultAnalysisof Grade 12th outcome Table-2: Grade 12th Student Analysis

SrNo.	Nameofthe Student	Marks	Result
1	Jaanvi Pandey	11	FashionDesigning
2	Khushi Vijay	42	B.Sc
3	Aditya Goyal	5	BA
4	Ananya Jain	55	Doctor
5	IshaRamtirth	9	BA
6	Manas Gaur	45	B.Sc
7	AsifBoomrah	54	Doctor
8	Akshat Jain	7	BA

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9	Nehal Jain	31	B.Com
10	Nishant Jain	52	Doctor
11	Priyanshi jain	58	Engineering
12	Prerna Pareek	51	Doctor
13	DollyKothari	53	Doctor
14	Samay Gupta	56	Engineering
15	SmitaAgarwal	58	Engineering
16	Aditya Kadam	26	LLB
17	MehulMehta	57	Engineering

As we can see from the table above, the results are displayed in terms of grades obtained. From this, we can conclude that based on the marks scored in the aptitude test the system recommends the stream. The above table is a sample of the data sets used for analysis. The data sets consist of three different fields such as name of the student, marks scored and the result.

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Figure-7: Visualization of 12th grade students
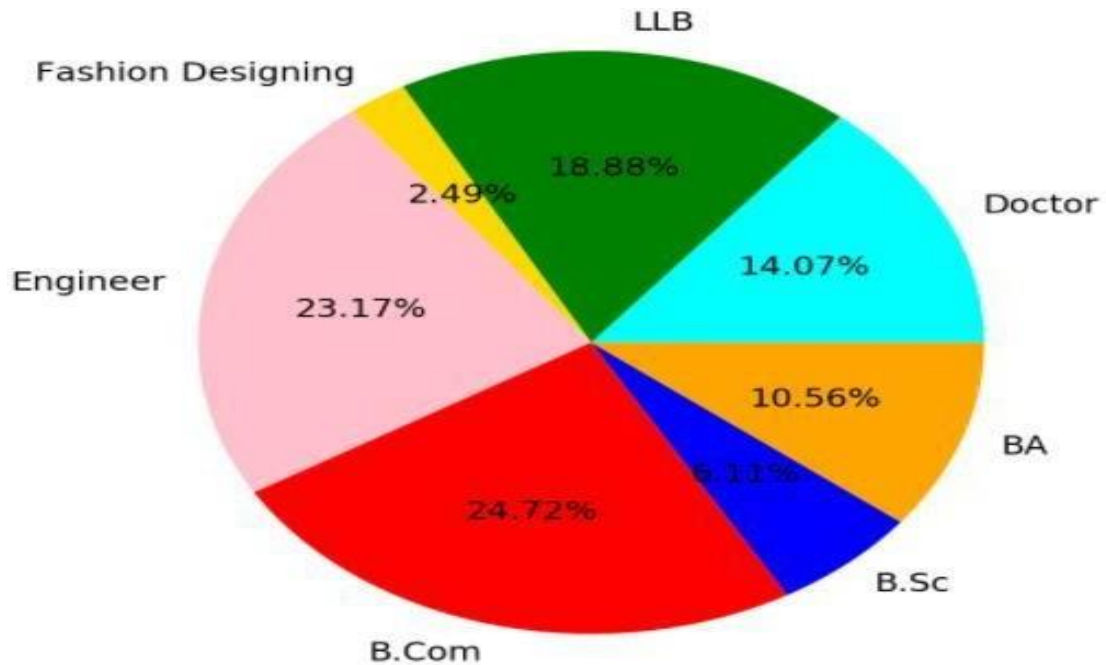
Figure-8: Pie Chart showing recommended streams

Figure-9: Website Result

Fig -9 shows the website result giving the count of attempted questions, total correct answers, total wrong answers, percentage, total score and there commendation.

5. CONCLUSION

The main aim of the Design is to make scholars understand their strengths, personality and chops. With the help of a career guidance system, scholars can choose a career path by directly interacting with the online counsellor. Also, it'll help them to follow their interest. This system lends a helping hand to 10th as well as 12th standard scholars. 10th standard scholars would be able to choose suit able streams for themselves. 12th standard scholars can elect suitable fields of their choice. This process not only depends on career experts, but information that is handed by parents and their children. This process is also veritably important and helpful to make up children's careers.

6. FUTURE SCOPE

As the Education system is arising day by day due to the internet we can give tutorials, learning videos, e books on our website. The compass of the website can be further expanded by giving guidance to Engineering scholars also our website will give the list of colleges along with the cut offs and number ofseatsavailable.Achatbotcanbeusedforinteractingdirectlywiththescholars.Videotapecamer asandmicrophonescanbe used.

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