

SOCIAL FORUM FRAMEWORK FOR ALUMINI AND STUDENT FOR CAREER RECOMMENDATION

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Abstract: - The importance of web-based student career guidance in our educational system cannot be overstated. As a result of the requirement for all Alumni to be connected to the Institute, they were able to share their experiences, perspectives, ideas, guidance, motives, and tactics. A discussion forum is a place where people may talk about anything on the internet where people may share their thoughts and opinions on any topic of interest subjects. Students use the online discussion forum to help them learn. Learning through doing. For students to develop their skills, internet forums are a vital learning tool. Information technology plays an important role in bridging the gap between alumni and universities. Today, information technology is used not just by businesses, but also by numerous colleges utilizing this technique. To assist the professional, a text-based one-way discussion is used.

Key words: online discussion forum(ODF), learning, hiring process, information technology.

I. INTRODUCTION

Abstract - The importance of web-based student career guidance in our educational system cannot be overstated. As a result of the requirement for all Alumni to be connected to the Institute, they were able to share their experiences, perspectives, ideas, guidance, motives, and tactics. A discussion forum is a place where people may talk about anything on the internet where people may share their thoughts and opinions on any topic of interest subjects. Students use the online discussion forum to help them learn. Learning through doing. For students to develop their skills, internet forums are a vital learning tool. Information technology plays an important role in bridging the gap between alumni and universities. Today, information technology is used not just by businesses, but also by numerous colleges utilizing this technique. To assist the professional, a text-based one-way discussion is used.

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I. 1.INTRODUCTION

1.1 MASSIVE DATA

Big data refers to high-volume, high-velocity, and/or high-variety information assets that necessitate cost-effective, creative data processing methods to enable better performance. Insight, decision-making, and process automation are all things that can be automated.

CHARACTERISTICS OF BIG DATA:

Big data is a term that refers to large, complicated, structured, and unstructured data sources that are rapidly accumulating. From a wide range of sources, data is generated and delivered. The

three characteristics are made up of these characteristics.
Big data vs. big data vs. big data vs. big

1. **Data volume:** The massive amounts of data that must be kept.

1. **Velocity:** The breakneck speed with which data streams must be handled and analyzed.

2. **Variety:** The various sources and formats in which data is collected

1.1.1 ANALYTICS OF LARGE AMOUNTS OF INFORMATION

Big data analytics looks at a lot of data to find hidden patterns, correlations, and other information. It is now possible to analyze your data using today's technology. acquire replies almost instantly - an effort that becomes slower and less efficient as the number of questions increases.

alternatives for traditional business intelligence. The study of vast volumes of data is known as big data analytics to find hidden patterns, connections, and other new information. It's possible with today's technology. It's feasible to evaluate your data and get answers practically instantly - an effort that's worth it. Traditional business intelligence systems are slower and less efficient. a lot of data. Analytics assists businesses in using their data and identifying new opportunities. As a result, smarter business decisions, more effective operations, higher revenues, and happier employees are the result.

1. **Cost savings.** Hadoop and cloud-based analytics are

examples of big data technology. They can uncover more effective ways of doing business and have considerable cost advantages when it comes to storing massive amounts of data.

2. Better decision-making in a shorter amount of time. Hadoop's speed and in-memory analytics make this possible. Businesses can examine new sources of data when they can assess old ones. They can access information quickly and make decisions based on what they've learned.

3. Novelty in terms of new products and services. the ability to assess consumer satisfaction and wants Analytics gives you the ability to provide your customers with exactly what they want. Davenport makes a point More businesses are developing new goods as a result of big data analytics customers' requirements.

1.1.2 BIG DATA TECHNOLOGIES

Machine Learning is a term that refers to the study of Machine learning, a subset of AI that teaches a machine to learn and allows for the rapid and automatic creation of models that can analyze more, more complex data and offer faster, more accurate answers - even on a massive scale. An organization's chances of recognizing profitable possibilities - or avoiding unforeseen risks - are improved by developing detailed models.

Management of information. Before data can be successfully evaluated, it must be of high quality and well-governed. With so much data coming in and out of a business, it's critical to have repeatable processes for establishing and maintaining data quality standards. Once data is dependable, businesses should implement a master data management program to bring the entire organization up to speed.

1.2 ALGORITHM

1.2.1 Support Vector Machine (SVM)

A Support vector machine is a supervised algorithm based on machine learning which can be used for both classification and regression problems. However, it's far ordinarily used in classification work. In this work, plot each data item as a point in n-dimensional space with the value of every feature being the count of a particular coordinate. Then, we perform classification by finding the hyper-plane that differentiates the two classes very well. Support Vectors are simply the coordinates of individual observation. Support Vector Machine is best for segregating the two classes (hyper- plane/ line). The hyperplane is the line with the biggest margin for both groups.

1.2.2 TEXT MINING ALGORITHM

Text mining, also known as information data mining, is the act of converting unstructured text into a structured format to uncover new insights and patterns. Companies can investigate and find hidden associations with their unstructured data by using advanced analytical approaches such as Naive Bayes, Support Vector Machines (SVM), and other deep learning algorithms.

1.3 THE MAIN OBJECTIVE

The use of machine learning to predict student performance or dropout is a topic that appears frequently in academic research. Students' interests are served as a result of this can be quantified Job opportunities in information technology (IT) are expanding in a variety of fields. Cloud computing, cyber security, mobile applications, and big data analytics are just a few examples. Companies Increasingly rely on highly qualified and specialized. IT personnel even though the rising availability of IT jobs is a positive sign for IT graduates, may nevertheless face challenges and

.find themselves perplexed as to what career path they should pursue in the future. As a result, there is a requirement to build and construct a system that can help IT graduates choose a career path based on their interests their abilities Recommendation systems have been a subject of study for a long time.

1.4 LITERATURE

This section examines educational expert recommender systems in-depth, with a focus on career-path recommenders. There are many different sorts and categories of recommender systems that are used to help students and teachers learn. This review, however, will concentrate on personalized fuzzy recommender systems for various disciplines and educational levels. We advise the reader to some good reviews from the literature [17]–[19] for further information on different sorts of recommenders. The deployment of tailored recommender systems is influenced by several elements, including the target users' profiles, gender, environmental and cultural background, and personality type. Table 1 summarizes the different forms of personalized recommender systems and their implementation for a better understanding of the different types of personalized recommender systems.

2. SYSTEM ANALYSIS

2.1 EXISTING SYSTEM

Because of the rapid advancement of technology, new skills and expertise will be required for future occupations. Artificial intelligence and the internet of things are examples of workplace technology. Future job opportunities will almost certainly necessitate talents that aren't taught in schools or traditional training programs. Instead, workers will have to either upgrade their skills when they move to other jobs within the same industry or find new ways to make a living and may reskill themselves to work in a different field through lifelong learning. The existing system is made up of a plethora of excel sheets that each user creates. An alumni organization may compile sheets and distribute them to all alumni, but this is not a required activity. It's possible that it won't happen often. This apparent omission

2.2 STATEMENT OF THE PROBLEM

In today's world, competition is increasing at an exponential rate. In today's world, it is especially difficult to deal with the technical world. Students must

plan and organize themselves from the beginning to the end of their education to compete and achieve their goals. As a result, it's vital to continually evaluate their performance, identify their interests, and measure how close they're to their goal, as well as whether or not they're on the correct road that leads to their goal. This aids individuals in bettering themselves, motivating themselves to pursue a better job route if their abilities aren't up to par, and pre-evaluating themselves before reaching the career peak point.

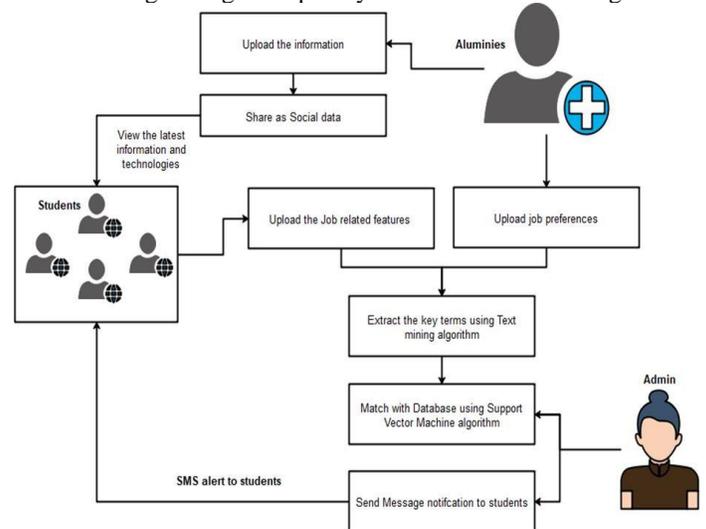
3. PROPOSED SYSTEM

The planned system will be online, allowing graduates to access it from anywhere. It is going to happen to allow for rapid and simple communication. Each user will be accountable for their updated information. Each user will also have the option of remaining anonymous. It does not necessitate the maintenance of which requires the ongoing attention of a group of students. Alumni will be able to participate in a variety of activities. Using this technology, they can schedule meetings and find out about career prospects on their own. Provide factual and conceptual knowledge as well as an explanation of concepts in educational establishments.

3.1 SYSTEM ARCHITECTURE

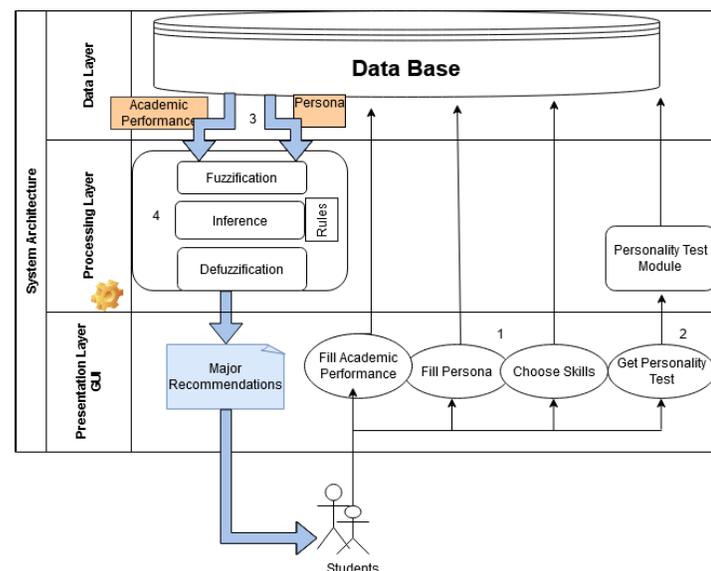
This architecture diagram describes the proposed system. Aluminizes and students are used in this system. Aluminizes have uploaded the information and shared it into the social framework. Then user uploads the profile and implements text mining with a machine-learning algorithm to extract the job profiles. Finally provide the alert about job notifications developing a Model Career Path Recommendation Expert System (CPRES), to create competitive new knowledge to improve and develop the knowledge of students and lecturers about information related to career path recommendations from the point of view of Graduate Learning Outcomes (GLO) and competencies, graduate profiles, professions/fields of work and subjects that must be mastered. The CPRES model design using an expert system focuses on four components of a program, namely, data structures, architecture of expert system-based software, interface representations, and procedural details (algorithms).

Product design using an expert system is illustrated in Figure



3.2 FRAMEWORK OF THE RECOMMENDER SYSTEM

Providing high school pupils with career and educational specialty recommendations is a difficult task. Unfortunately, most Middle Eastern educational institutions do not provide career analysis for high school students to assist them in determining their future professional route. Students begin looking for a university subject after graduating from high school, primarily based on their academic performance, in the hopes that their pick will lead to a good career route. Students also seek assistance from their families, school social advisors, and their peers. However, in addition to academic success, the selections are subjective and do not take into consideration personality type or extracurricular skills. This paper offers a Personalized Career-path Recommendation System (PCRS) to assist high school students in selecting a career



3.3 ISCUSSION FORUM FRAMEWORK

MODULE DESCRIPTION

The use of an online discussion forum (ODF) has become a standard tool and an effective method of communication. Outside of the classroom, this is an effective technique to engage pupils. The Open Document Format (ODF) is an e-learning platform. This site allows students to find fantastic work opportunities. The applications of online learning Students and companies can communicate via tools. More information can be found in a discussion thread.

3.3.1 LOGIN FOR ADMINISTRATION

Admins can access the system and maintain and monitor all information in the database. This portal provides access to comprehensive information about the college campus and its facilities. Keep track of all details, such as student and company information, job openings, and so on.

3.3.2 ALUMINI LOGIN

Alumini can use his username and password to access the system. Aluminic to right to be forgotten, but also when the technical implementation through smart contracts might weaken the actual control over data, through automatic execution). One option to tackle this issue is 'dynamic consent management', which is fully in line with the GDPR provision regarding consent. In addition, it is considered that 'private blockchains', e.g., Enterprise Blockchain can easily comply with GDPR directives since the transactions of the digital records of the stored information can be modified and erased by private entities or authorities can own and control this platform, using a particular class of consensus algorithm.

3.3.3 STUDENT ENROLLMENT

There is a registration form available where a new user can create their account by providing the required information to the system. The registration form details are like name, email, gender, mobile number, address, etc. These details are stored in the database. And then can get to the username and password in the system. After, the Student can log in to the system

3.4 RECOMMENDATION

In this module, the student can post their resume into the system. The admin can verify their resume and academic details. Based on their qualifications admin can suggest job opportunities for students. Implement a Machine learning algorithm named Support Vector machine to check the details about job opportunities. Support vector machines is an algorithm that determines the best decision boundary between vectors that belong to a given group (or category) and vectors that do not belong to it. It can be applied to any kind of vector which encode any kind of data. This means that to leverage the power of SVM text classification, texts have to be transformed into vectors. Send the notification automatically to students about the jobs requirements

module working properly at the limits or restrictions set by the user. The control structure's separate pathways are all tested. All error-handling paths have been thoroughly tested.

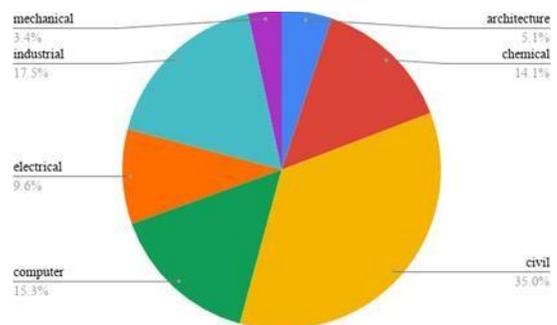
3.5 SYSTEM INSTALLATION

The project's implementation stage is when the theoretical design is translated into a workable system. This is the most crucial and last phase of the system life cycle. It is the process of turning the new system into a functioning system.

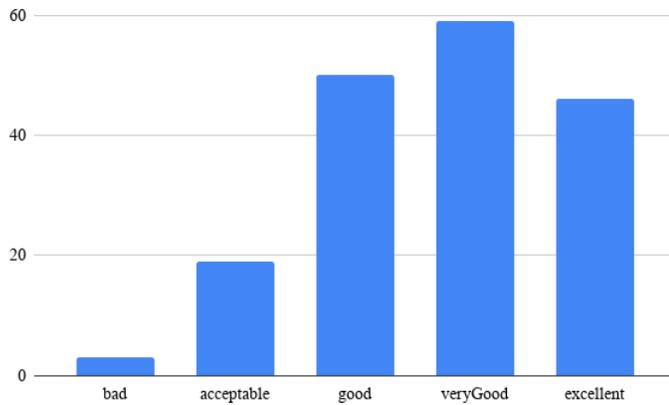
4. SYSTEM RESULT

This section presents the experiment carried out to evaluate the PCRS. The evaluation test was performed on a group of 177 engineers who volunteered to take part in the experiment. The sample was collected by broadcasting an email to undergraduates and graduate engineering students from An-Najah national university which explains the aim of the research study and encourages them to participate. The email had a questionnaire attached which participants used to fill their email addresses once they agreed to be

part of the research study. 177 undergraduate and graduate students filled out the questionnaire and showed their interest in participation. The sample consisted of 61% females and 39% males, and the participants specialized in different engineering disciplines (the distribution is shown in Figure 8). Participants answered a 5-point Likert scale (1: bad, to 5: excellent) question which aimed to assess their engineering



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5.CONCLUSION

The Alumni Information Database is mostly used to discuss opinions among app users, which is a great way to improve everyone's knowledge. The application can also be used to keep up with what's going on in our college and to learn about the numerous opportunities available in the outside world. The application can be further enhanced by following the above-mentioned future enhancements. It takes a long time to locate pupils from a specific batch. To address all of the shortcomings of the current system, we choose automated alumni software, in which all of the members' data is updated automatically by the student. Only after proper validation will job opportunities be made available.

5.1 FUTURE IMPROVEMENT

In the future, we can improve the accuracy rate by extending the framework to include additional machine learning or deep learning methods. The features were added, and the software was created as an Android application.

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