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# My Choice My Career

(Interest Based Career Guidance)

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**Abstract**— *Students undergo a series of monotonous tests like: Aptitude round, Technical HR and Personal HR. This testing method has been followed by all the recruiters. This method of recruitment makes students who are not interested or sound in the aptitude tests to still clear these tests in order to get the opportunity to establish their skills for the required job role which is not exactly the requirement to get placed in the corresponding designation. This leads to missing out opportunities for the graduates and also, the companies miss out the best fit who can perform the actual job better than those students who clear the first few online tests and fail in the further HR rounds.*

**Keywords**— *authentication, machine-learning, keyword-extraction*

## I. INTRODUCTION

To provide Graduate students with early and ongoing exposure to experiences and knowledge necessary to form informed decisions when selecting employment that connects to academic interests and future aspirations. This application helps the Graduates from various streams, explore their interests and map their interest to the available professions. The application uses Machine learning algorithms to research the user's interests and strengths through a series of Psychometric tests and list out the highest matching career options using GUI in the front end.

### WEB DEVELOPMENT

- ❖ It's the method related to developing an internet site for hosting via the web.
- ❖ This process includes web designing, web page development, client and server side scripting, network security configuration, etc.

### Boot Straping:

- ❖ Bootstrap is a collection of scripts, resources and styles that you simply can use to make your own site.

### MACHINE LEARNING:

Machine learning is a computer's ability to find out something that wasn't explicitly programmed into it. Essentially, it's about machines making sense out of knowledge in much an equivalent way that we humans do.

The essential premise of machine learning is to build algorithm which will receive input file and use statistical analysis to predict an output value within a suitable range.

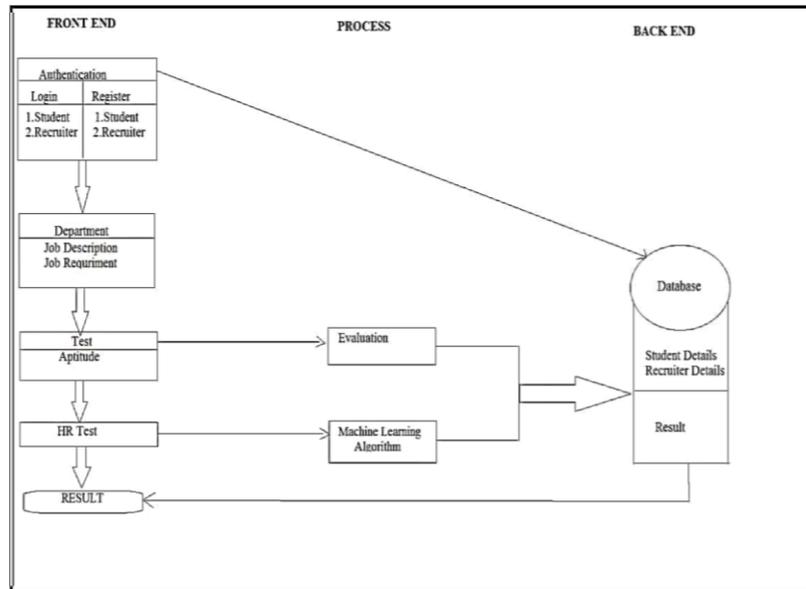
### KEYWORD EXTRACTION ALGORITHM:

Keyword Extraction is a text analysis technique that consists of automatically extracting the most important words and expressions in a text.

## II. RELATED WORKS

1. A Web Based Career Guidance Information System for Pre-Tertiary Institution Students in Nigeria by Abisoye Opeyemi , Alabi I , Ganiyu Shefiu , Abisoye Blessing , Omokore Josiah. The problems addressed by the system is that it deploys a web site that helps pre-tertiary students make a better career choice. The following scripting languages were employed by the sys: PHP, MySQL, HTML, Java Script and CSS. A basic website with career options available. Inefficient in terms of choosing a Job in the Market.
2. Scrutinising AI based Career Guidance and Counselling Systems: an Appraisal by Tehseen Mehraj, Asifa Mehraj Baba. This paper begins with prominence of career guidance and counseling followed by scrutinizing the scope of various technologies in contributing a solution.
3. A new fuzzy logic based career guidance system: web-cgs Musa Peker, Huseyin Guruler, Baha Sen, Ayhan Istanbulu. Therefore, this study aims to develop an automated system for vocational guidance activities which can be applied to students in the final year of secondary school. It is an information-based system which transforms, through rules and membership functions, the linguistic expressions to rule-based data. The system is amateur and is restricted to secondary school level. Uses statistical data to predict.
4. Using ahp for the evaluation of the event of career education in latvia by Veronika Bikse, Una Libkovska, Peteris Rivza, Baiba Rivza. The aim of this study is to explore and substantiate the probabilities of improving students' professional interests in career education in Latvia. The Analytic Hierarchy Process (AHP) and thus the PEST method were used to analyze the possible development scenarios of career education in Latvia. The youth have insufficient access to information on the probabilities of career education in other regions.
5. An integrated e-recruitment system for cv ranking based on ahp by Giannis Tzimas, Eleanna Kafeza, Evanthia Faliagka, Konstantinos Ramantas. A system that models the candidate's CVs in HR-XML, and ranks the candidates supported AHP (Analytic Hierarchy Process).Finally, it presents the results to the recruiter who evaluates the highest candidates and takes the final decision. Only filters the CV's of candidates based on the minimum criteria but does not evaluate the candidate actual skill. Lack of testing skill.

### III. ARCHITECTURE DIAGRAM



### IV. SYSTEM DESIGN

#### Credential authentication

These modules contains the scholar login and thus the recruiter login.

The signup function: When a user registers for an account, the user must create an ID and key and when the credentials are entered it'll allow them to access their account afterward. Generally, a username and password are used because the ID and key. Users will input their credentials on the website's login form. That information is then sent to the authentication server where the knowledge is compared with all the user credentials on file. When a match is found, the system will authorize users and grant them access to their account.

If a match isn't found, users are going to be prompted to re-enter their credentials and check out again. The whole process takes just a few of seconds to finish.

The sign-in function in both student login and recruiter login allows the user to provide credentials which are compared to those on a file in the database of the authorized user information. This process always runs at the start of the application, before the actual operation takes place. Authentication phase in this system has two distinct phases- identification and actual authentication. Identification phase provides a user identity to the safety system. The security system will search for the specific one who is currently applying for. Since the user is mapped as existing user, he is granted rights and permission to access the website. The process of determining claimed user identity by checking User-provided evidence is known as authentication and therefore the evidence which is provided by the user during process of

Authentication is named a credential.

#### Job description

This module present in the student login allows the user to get an idea about the job role and responsibility and allows them to take the test. The job description is drawn up by the user responsible for overseeing the selection process for the role. It helps applicants to determine whether the role is in line with their skill set and whether it is a job they actually want to take up.

From the purpose of a recruiter, the job description is significant in ensuring that the applications received for the position closely match their needs of the role itself.

### Test modules

The testing module present in student login contains a set of multiple choice questions prepared by the recruitment team with a timer. This page gets automatically logged off after the given time lapse. The testing questions has three major divisions – verbal ability, Quantitative ability & core related questions based on the department and category the applicant chooses.

### Test evaluation

The applicant who scores less than 60% will get notifications that they cannot proceed to HR round as they have scored less marks than the expectation of the recruiters.

The applicant who scores more than 60% will directly go on to the HR round.

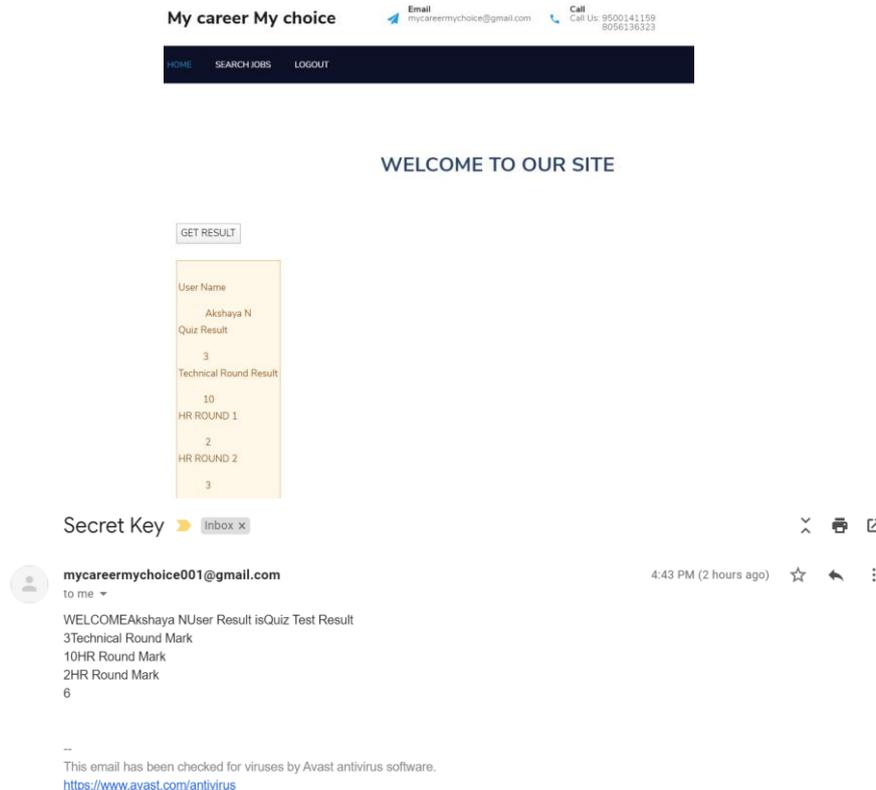
### HR Test

The other projects do not facilitate in providing HR round as a module. But this system provides HR round and helps recruiters in saving their time in the recruitment process. It helps in interviewing highly concentrated set of applicants after the whole process.

The HR test is based on two types which are technical HR and personal HR rounds. Both the rounds are question answer type where applicants have to write programs/ queries and answers according to questions (technical HR) and about their talents, skills and accomplishments. The candidates are shortlisted and the number is further more reduced which makes the rejection rate lower. Shortlisted candidate can either be called for a one on one meeting or directly recruited based on the recruiter’s wish and will.

## V. RESULT

The results are displayed immediately on both the website after finishing the entire test and also on the respective applicant’s mail ID.



## VI. MACHINE LEARNING ALGORITHM AND KEYWORD EXTRACTION MECHANISM

The technical and personal HR rounds requires keyword extraction mechanism to eliminate most of the text used to answer that is not necessary to the questions asked.

The technical HR round is a theory type round where the applicants are required to write short answers/ queries based on the questions. These answers are then separated into keywords which should match with some particular keywords generated by the recruiter team. Marks are allotted supported the amount of keywords matched. If the marks obtained by the applicant exceeds certain percentage fixed by the recruiter, then he can answer the last round.

The personal HR round is a mix of both MCQs and theory questions based on personality type which uses machine learning algorithm as to choose whether the applicant is suitable to that specific job role or not.

## VII. CONCLUSION

Graduates can choose their area of interest and give their best at it and expect to get placed in the right place with the right expectations of work and not regret later.

Easier for companies to identify the right talent for the required job roles since the main HR rounds are conducted beforehand. This saves large amount of time for the selection process for many applicants. Instead they can interview one or two applicants based on their wish.

# REFERENCES

- [1] Abisoye Opeyemi , Alabi I , Ganiyu Shefiu , Abisoye Blessing , Omokore Josiah, “A Web Based Career Guidance Information System for Pre-Tertiary Students”April 2010.
- [2] Tehseen Mehraj, Asifa Mehraj Baba, “Scrutinising Artificial Intelligence based Career Guidance and Counselling Systems”, June 2008.
- [3] Nilesh Rathod, Seema Shah, Kavita Shirsat, “An Interactive Online Training & Placement System”, International Journal of Advanced Research in Computer and Communication Engineering, December-2013.
- [4] Hitesh Kasture, Sumit Saraiyya, Abhishek Malviya, Preeti Bhagat, “Training & Placement Web Portal”, International Journal on Recent and Innovation Trends in Computing and Communication Volume: 2 Issue: 3, March-2014.
- [5] Mr. R. J. laird, Dr. C. R. turner mima, “Interactive Web based Placement Management – Principles and Practice using OPUS” CGU-WACE, 2008.
- [6] J. Nyamwange, —Influence of Student's Interest on Career Choice among First Year University Students in Public and Private Universities in Kisii County, Kenya, Journal of Education and Practice, Vol. 7, No. 4, pp. 96-102, 2016.
- [7] S. Saraswathi, M. H. K. Reddy, S. U. Kumar, M. Suraj, S. K, Shafi, —Design of an online expert system for career guidance”, The International Journal of Research in Engineering and Technology, Vol. 3, 2014.