Edu-Guider Carrier Assistance using Machine Learning

Sandesh Digambar Raut¹, Govind Biradar², Shubham Dudhe³, Shritika Wayker⁴

¹⁻⁴Department Of Electronics and Telecommunication Engineering, Dr. D. Y. Patil Institute of Engineering, Management & Research, Akurdi, Pune-44

Abstract - In this modern era everything is moving towards an automation, to make work accurate and fast. As a technology is developing, the number of areas moving towards the automation is increasing and finally poses the need to develop in the examination segment too. This research work proposes different machine learning based the model the automation of this task will increase the efficiency of the answer evaluation on a large scale and generate a pie chart based on good or bad performance the MCQ exam is divided into the number of sections, so marks also be calculated based on different sections. This application system provides an automatic evaluation and the expertise of students based on marks to reduce time and the manpower.

Key Words: Carrier Counselling, Classification

1.INTRODUCTION -

Machine learning (ML) is a form of artificial intelligence (AI) that allows software applications to be more accurate in predicting results without explicitly planning to do so. Machine learning algorithms use historical data as input to predict new output values. Recommendation engines are a common way to use a reading machine. Other popular uses include fraud detection, spam filtering, malware threat detection, business process automation (BPA) and predictive mainte-Nance. When it comes to choosing a career, it is not just what course you choose, it is more than what you want to be after graduation. Career counseling is about knowing and understanding about yourself and your skills and abilities. It is during this time that each student gets a lot of guidance from the various circles (parents, teachers, other educational professionals, etc.) and appropriately the student decides which subject he or she wants to join. Most of the time, we encounter a situation where a student selects a subject / stream and turns around by choosing one. Citing an example, there is a myth that the one who does best and gets high marks in grade 12chemistry will often choose. Chemical engineering because they are good at chemistry

2. SCOPE OF THE SURVEY

In this modern age, where the world is moving towards self-transformation, there is a need for automation in the MCQ assessment system. The teacher in person evaluates the answer and assigns marks. The current system takes a lot of energy and time to test feedback.

This project can also be used for student counseling. By adding certain features such as adding an additional section

of personality-related questions, this project can be used to assess the personality of a person or students.

3. PRAPOSED SYSTEM

Most students around the world remain confused after they finish high school and the stage where they have to choose the right career. At the age of 18, students do not have the maturity to know exactly what one has to do to choose a career path. As we go through the stages, we see that every student has a series of doubts or thought processes about what to follow after 12 which is one very long question. Then comes the next tragedy that they have important broadcasting skills of their choice. Our computerbased counselling system is used to predict the appropriate performance of a person based on his or her skills tested for targeted testing. If someone completes their online test that we have created in our system, then they will automatically end up choosing the right subject that will also reduce the failure rate by choosing the wrong method of work.

Manual response testing is a very tedious task. Manual testing is a time-consuming process and requires a lot of staff. Also, the paper checker cannot give marks equally. Therefore, our system will test the response based on keyword and employees will be saved. This application provides an automated test based on different categories will provide equitable distribution of marks and will reduce staff time and energy

4.0. BLOCK DIAGRAM: -

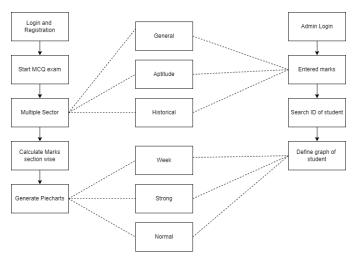


Fig 4.0.1: - system Architectural

- First User or Student Register and login to the system
- Then MCQ exam will start. MCQ exam contain different sections like general, aptitude and historical.
- After exam end system calculate marks section wise and generate the pie charts whether student or user is week/strong/normal for their future career.
- Admin can search the student by the third and enter the marks of mcq exam to generate graphs

4.1. DATA FLOW DIAGRAM:-

In the Data Flow diagram, we show that the data flow in our system in DFD0 shows that the DFD base where rectangular current inputs and outbound circuits reflect our system. In DFD1 we display real input and actual output inputs for our system. system text or image and output are the same hearings in DFD 2 introducing user functionality and management.



Fig 4.1.1: - Data Flow diagram

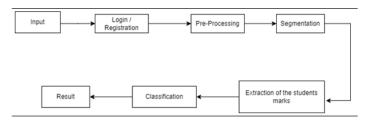


Fig 4.1.2: - Data Flow diagram

4.2. UML DIAGRAM: -

Integrated Model Language is a standard programming language for programming. UML can be used to visualize, specify, construct and document deep-seated software system artifacts is a stand-alone process, although appropriately it should be used in an operational, architecture-centric, duplicate and evolving process. UML drawing number is available.

4.2.1. Use case Diagram

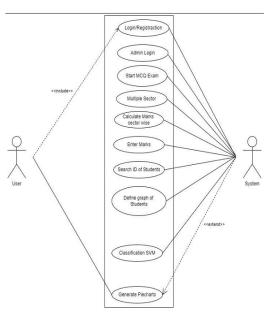


Fig 4.2.1: Use case Diagram

4.2.2. Activity Diagram.

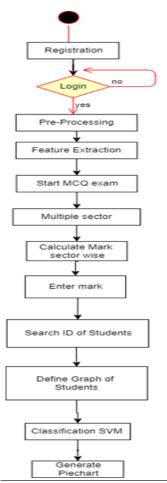


Fig 42.2. Activity Diagram.

4.2.3. Sequence Diagram: -

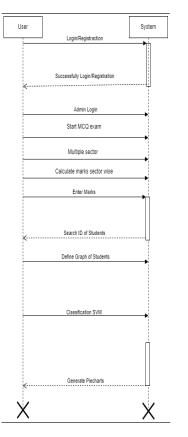


Fig 4.2.3 Sequence Diagram

5. SYSTEM REQUIREMENTS: -

5.1 SOFTWARE REQUIREMENT: -

Python: Interpreters are available for most operating systems. A global community of programmers develops and maintains Python, a free and open source implementation. A non-profit organization, the Python Software Foundation, manages and directs Python and Python development resources

Anaconda: boa could be a free distribution and open supply for Python and R . Distribution includes information science packages appropriate for Windows, Linux, and macOS. Developed and maintained by boa, Inc., supported by Peter Wang and Travis Oliphant in 2012. As a product of boa, Inc., it's additionally called boa Distribution or boa Individual Edition, and alternative product from the corporate boa cluster Edition and boa Enterprise Edition, each area unit free.

PyCharm: PyCharm is an integrated development platform (IDE) used for computer programs, especially the Python language. Developed by

Czech company JetBrains. Provides code analysis, graphic debugger, integrated unit explorer, integration with translation control systems (VCS), and supports web

development with Django and Data Science and Anaconda. PyCharm is a cross-platform platform, with versions of Windows, macOS and Linux. The Community Edition is released under the Apache License, and there is also a Professional Edition with additional features.

6. SOFTWARE HOMEPAGE: -



7. CONCLUSION: -

Our application provides a cheap solution for evaluating MCQ exam in different ways for career guidance or assistance. Our application will be very useful in the day-to-day small-scale examinations held in schools and colleges. Most of the process performs adequately. The Performance of the analysis is expected to be very good in any MCQ exam on that bases different section wise pi-chart of the marks will generate

ACKNOWLEDGEMENT: -

The Authors gratefully thank **Prof. Shritika Wayker** for providing constant support throughout Project

REFERENCES: -

- 1) "Education board Bangladesh computer center ata glance." http://www.educationboard.gov lance.php.
- 2) Chinnasarn and Y.Rangsanseri, "Image-processingorientedoptical mark reader," Proceedings of SPIE -The InternationalSociety for Optical Engineering
- 3) R.S, K. Atal, and A. Arora, "Cost effective optical mark reader," International Journal of Computer Science and Artificial Intelligence, vol. 3, pp
- A. Spadaccini and V. Rizzo, "A multiple-choice test recognitionsystem based on the gamera framework," Computing Research Repository - CORR,
- 5) K. Chinnasarn and Y. Rangsanseri, "Imageprocessing-oriented optical mark reader," in Applications of digital image processing XXII, vol. 3808, pp. 702–708, International Society for Optics and Photonics



- 6) F. Zampirolli, V. Ramos Batista, and J. Artur Quilici-Gonzalez, "Anautomatic generator and corrector of multiple-choice tests with random answer keys," pp.
- N. Karunanayake, "Omr sheet evaluation by web camera using template matching approach," International Journal for Research in Emerging Science and Technology, vol. 2, no. 8
- 8) S. Gaikwad, "Image processing based omr sheet scanning," Int J AdvRes Electron Commun Eng, vol. 4, no. 3, pp. 519–522.