

E-Admission System

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Abstract: Directorate of technical education (DTE) conducts online admissions for engineering colleges but they don't have software to help students to select college and branch. They give data in the form of tables in pdf file and a student has to go through it. Many students don't understand the data and many parents who come from rural area and uneducated but want their ward to study in engineering fail to fill options form. Whatever may be the CET score they try to fill best colleges known. Hence, our proposed computer aided system will help the students to get the list of all colleges in which they could get the admission at the click of a button. The students only have to enter their marks of CET, AIEEE etc. With this software, the students can very easily obtain the list of colleges even branch wise and category wise. This will not only make the admission process easy but also minimizes stress of students. The main objective of our system is to make right choice of colleges, so that maximum of the students get selected in the first attempt itself.

Keywords: DTE, CET, AIEEE, C4.5 algorithm, Centralized data handling

I. Introduction

After XIIth students desiring to take admission in professional colleges like engineering face lots of problems. Admissions to engineering colleges in the state of Maharashtra or any state is based upon common entrance test (CET) and since more than 1.5lakh seats are to be allotted in more than 200 engineering colleges and over 35 different branches of engineering, for students belong to many categories like open, home university, outside home university, reserved category(SC,ST, OBC etc) the problem becomes more serious and students fail to understand which college they are likely to get admission even after going through cut-off data of previous years. Many students fill wrong options and fail in getting admission. To minimize the stress of students we come up with an idea of this computer aided method which will help the students to get the list of all colleges in which they could get the admission at the click of a button making, the admission process fast and easy.

II. Literature Survey

The system first analyzes student's academic merit, student records, and the college admission criteria. [2] Then, it predicts the likelihood university college that a student may enter. This s/w presents a new college admission system based on data mining techniques and knowledge discovery rules, for tackling college admissions prediction problems quickly and fairly. [2] If the student does not get admission in the desired branch of engineering, then they find it difficult to take decision which will be the suitable branch for them. The proposed knowledge based decision technique will guide the student for admission in proper branch of engineering. In addition to the high prediction accuracy rate, flexibility is an advantage, as the system can predict suitable colleges that match the students' profiles and the suitable track channels through which the students are advised to enter.

III. Existing System

The current system consists of a mock round in which students come to know about the colleges in which he/she cannot get admission. So in the first round the student does not enter those colleges. Basically, the mock round introduced in the current DTE system is about rejecting the colleges in which the students will not get the admission. There are more three rounds in this admission process but still people are not satisfied with the results at the end.

IV. Proposed System

Our E-admission system will make it possible to finish up the admission process in the first attempt itself. And bring students the satisfaction that they are studying in the right college according to the marks obtained. Basically, this system will select and present only those colleges in which the student can get admission. And,

thus it will not only make the process faster and easier, but also will reduce the stress of students. To improve the accuracy rate of our system, we are implementing it with C4.5 algorithm.

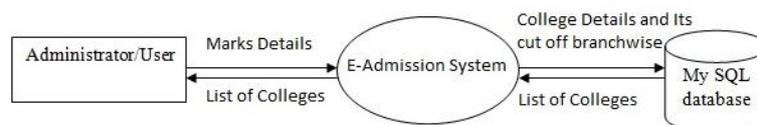


Fig . Data Flow Diagram

4.1 Implementation details

We have collected the cutoff details of all the colleges for creating the database .Using these previous year cutoff marks we have calculated the range in which the college may fall. Accordingly, the comparison will be made between the marks entered by the user and the list of colleges will be displayed in which the user may get admission. In this way, our system is fair and quick. For improving the performance we have used c4.5 algorithm. C4.5 algorithm is a widely used data mining tool. C4.5 builds decision trees from a set of training data using the concept of information entropy. At each node of the tree, C4.5 chooses the attribute of the data that most effectively splits its set of samples into subsets enriched in one class or the other. The splitting criterion is the normalized information gain (difference in entropy). The attribute with the highest normalized information gain is chosen to make the decision. The C4.5 algorithm then recurses on the smaller sub lists.

V. System Features

1. Immediate Feedback: The System must try to answer all the queries of the students and it should provide immediate feedback after getting any request from the students.
2. Reduce the Cost of Admission Process: The main aim of the System is to reduce the cost needed for Admission Process, so it automatically reduces the manual power needed to perform the entire task and improve the quality of the work.
3. Make the Interface Simple as Possible: The System must provide the simple and easy interface for beginners and also provide facilities for technical peoples who are using the system.
4. Reduced Time: To perform any task time is one of the important factors to consider. If the system not utilize properly time, than the entire aim of system is fails and the system is fails to reach its goal.
5. Reach to geographically scattered students: One of the important objectives of the admission system is communicate with all the students scattered geographically.
6. Centralized data handling: Transfer the data smoothly to all the departments involved and handle the data centralized way.
7. Paperless admission with reduced manpower: Reduce the manpower needed to perform all the admission and administration task by reducing the paper works needed.

VI. Conclusion

Admissions to engineering colleges in the Maharashtra state is based upon score in common entrance test (CET) .Many students get confused while filling the option form. So our system will reduce stress of students while filling the option form. On one click of button student will get list of possible colleges in which they can get admission and it will be easy for them to give preferences. Using our system all students will get admission most probably in the first round itself. Also cost and time required for admission process will also get reduced.

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