



STUDENT MANAGEMENT SYSTEM

A Report for the Evaluation of Project 2

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BONAFIDE CERTIFICATE

Certified that this project report “.....**STUDENT MANAGEMENT
SYSTEM**.....” is the bonafide work of “.....**KAISER BASHIR**....”
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INTRODUCTION

this project is to design a system where rationalize the admission belong to particular courses in the university; in helping to solve problems of overlays of different institutions and minimize the physical, the mental and financial burden of getting an admission to the guardians and their students due to the fact that nowadays there are multiple entrance examinations taking places all over the country, to allow a student to workout choices for a division and institutes several times during off-campus online counselling.

There is series of steps is taken in that procedure like first thing, allotment of institution and branch as per the merit of the candidates and then display the vacancies available online after that to create a transparent system in the admission process it should display the total seats which already has been allotted and the result should be displayed online.

The following key points are considered for systems:

- Online Registrations from any internet point for counselling
- Publishing of inter-se-merit on website
- Online choice filling on the based-on merit

- Change, delete, alter choices with respect to courses and institution
- Seat allotment and updating of data in institutions' database.

ABSTRACT

To ensure the quality teaching-learning process in Institutions, right from the entry of the student through competition, streamlining of admissions is one of the important parameters.

With this view and to resolve the generic problems faced by the candidates, their parents and state administration during Entrance test/counselling/admissions in all courses during admissions of student it is decided to be made based on the merit of entrance tests.

To bring in 100% transparency and to make the admissions highly cost effective and to minimize the travel by the candidates and parents, The Student Counseling System is designed to enhance counselling experience during the admission process. This system will provide the great help not to the students but also to the parents who are there to invest money on children education. The Student Counseling System is developing to improve the counselling, which fully works as an online software.

Through this system, the student will be able to report then register for the counselling as he is eligible after if the student is qualifying the criteria then it will get the information regarding the colleges and the universities in which he can apply. A student can also get the information regarding how many seats have been booked and vacant seats available in the institution. This will help a student in selecting their branch in which they are interested and

not the what the colleges are offering. All this information will give in sort interval time to the student which speeds up the process reduce the institutes time.

This software is not only providing ease to the students but also help the institution to manage their whole procedure of the counselling by minimizing the paper work which decreases their carbon footprint on the environment and the time factor will also get minimized as all the process is happening online.

EXISTING SYSTEM

Talking about the current system which presently used in the institutes is basically manually working or even if it is computerized restricted to a place or building thus all work of maintenance is also done in the same building.

So, we can say that Existing system of “Student Counseling System” working computerized in a building or manually with pen-paper.

he creates a very hectic procedure to organize as well as everything is on spreadsheets, file and binders, same situation will occur in offline computerize method though everything is on the system, to get the information one has to get to personal point of contact and ask him for the data which leads to nuance in the institution as well as among the students.

If one approaches to get the admission in Institute where manual system is followed then he would go to report the venue or location of the university which will add cost to the student,

then to report and get form he/she require to stand in queue where students from other places have also come to get the same thing done, this wastes the valuable time of the parent.

While filling the forms if the student has a query or he has done some mistakes he/she would have to again go and stand in the queue of help desk which may or may not helps in resolving it. Then according to form University will verify which branch he/she eligible for and then maintain this record in a computer or in the register.

Following this kind of system does not only require a lot of human resources but also budget for maintaining them and stationery required. This will incur the weight on the Guardian's wallet.

The manual or offline system brings lot chaos for students and the university as who is eligible for them or not. If a student is eligible there is enough seat to accumulate him/her.

As this requires the student to travel from one place to venue, it can create a dilemma in mind which university to join without prior knowledge of how many vacancies are there in it and how much is already allotted this creates a faced for getting admission.

As all the data is at one place if anyhow this gets destroyed, it will huge loss for the student as well as the institutions. Thus, the care taking of information will become a very difficult job, if not, at the least a messy task.

Apart from this university also has to maintain a different record for each process which is being done manually. This shows us various drawback in this system which are:

- All the process is time-consuming.

- Every process requires proper arrangements which will need a human resource.
- Managing the staff entails to spending the money increasing the budget.
- Counseling process increments the level of complexity as the number of student coming for counselling increases.
- Information is not available globally to both student and institutes.
- Universities manually evaluating the eligibility of student is susceptible to faults and mistakes.

PROPOSED SYSTEM

Once the planning as well as analysis of the project are completed, the design phase begins.

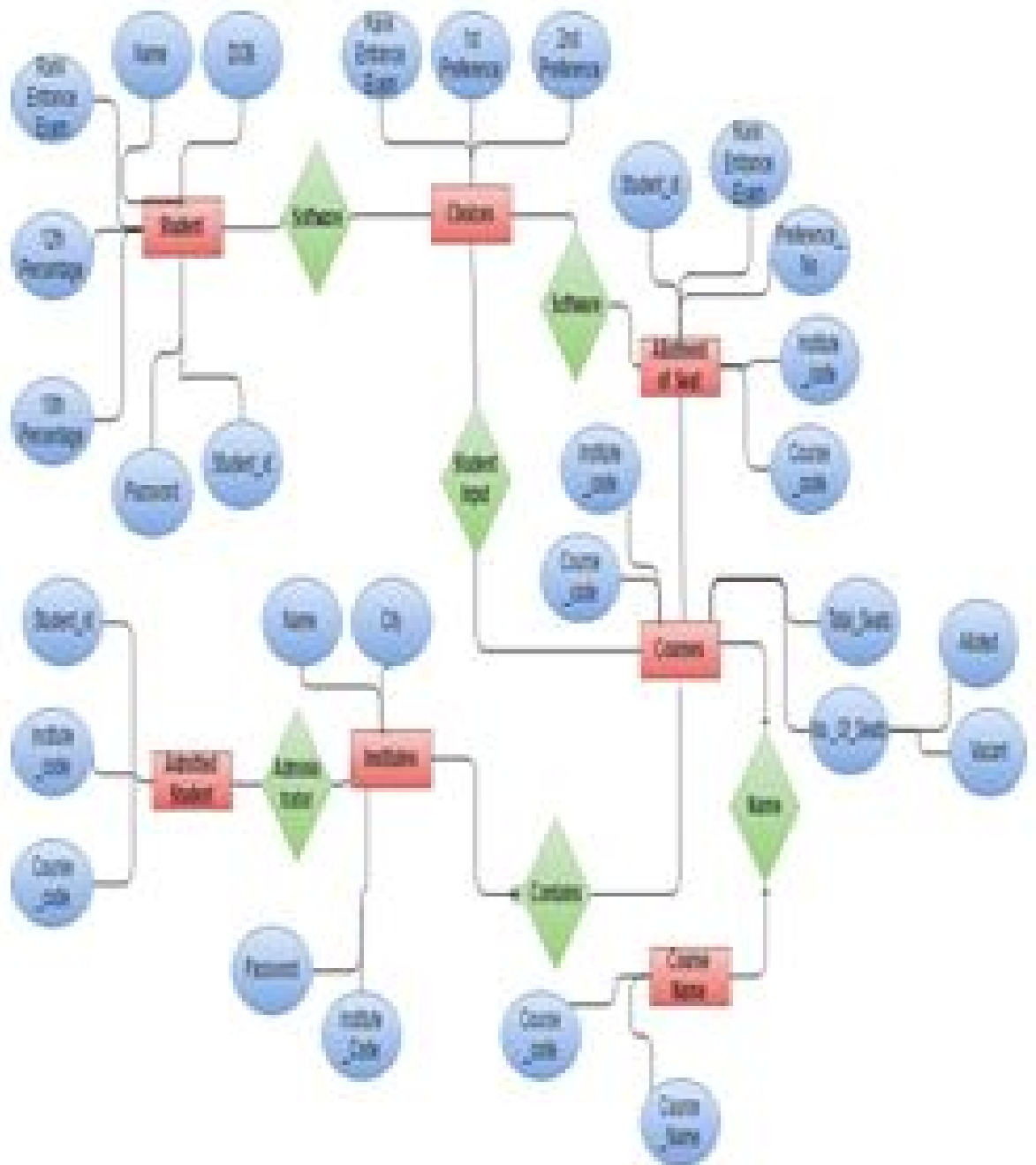
The goal of system design is to transform the information collected about the project into the blueprint structure which will serve as a base while constructing the system.

It is considered to be an unwieldy process as most of the errors are introduced in this phase.

However, if an error gets unnoticed in the later process it may become difficult to track them down. In our system, we are developing a system which helps in student counselling during the admission process.

It will minimize the problems faces by both students and the institutes for the duration. Let's discuss the system in detail:

E-R MODEL OF STUDENT COUNSELLING MANAGEMENT SYSTEM



● DESCRIPTION OF STUDENT COUNSELING MANAGEMENT SYSTEM

Above figure shows the E-R diagram of the student counselling management system proposed system. The ER model defines the conceptual view of a database. It works around

real-world entities and the associations among them. At view level, the ER model is considered a good option for designing databases. So, let's see each entity in closure-:

Student:

This entity will store the record of the student registered for the counselling. It is essential for the system as we need a separate unit which has all the information regarding the student and their personal and professional data.

So, it will have the 10th and 12th percentage, rank in the entrance exam will also be asked from student to give the preferences according to it.

To provide security to the system a password field is there which led to the student authorization while entering the system. This help circumvents anonymous user entering the system who can harm the structure. It has following attributes:

Name:

This will store the name of the child as it needed while saving the required.

DOB:

Date of Birth of the child as mention in the high school certificate and will act as the candidate key in the database model and in case of confusion help in differentiating.

Student_id:

It is a unique alpha()numeric number assigned to every student who registers for the counselling. It will be the primary key of the entity and will be referenced in different entities through this attribute.

It will be given to the student at the time of entrance exam.

Password:

It is an alpha()numeric field which has the constraint of having minimum 8 digits and at least one alphabet with numbers.

This field will provide security to the student portal as only the student who knows the password can log in to their account and no anonymous person can change their information.

10th Percentage:

This is used to get the student's percentage in high school which some universities check before giving the admission to the student.

12th Percentage:

It is an academic field which requires student to give information about the 12th standard. Some institutes require this field to have a background check of the student.

Rank_Entrance_Exam:

This attribute gets the entrance exam rank from the student which they have got according to their performance in the exam. It will help the software to allow choices to the student to select a preference for the college and course.

Student entity has relationship with the choice entity as the system will provide the opportunity to every student to select the preferences based on their rank in the entrance exam.

As the student register for the counselling, the system checks his/her rank and give them choices to select the preferences which suit their rank.

Choices:

The entity is needed to get the preferences from the student based on their rank in the entrance exam. The number of choices given to the student can be multiple based on the institution requires the seats available for the courses.

These preferences will go to the courses entity which then checks which selection is eligible for the student, this evaluation will be based on the number of seats available and the rank of the student.

This is also will be referenced in allotment of the seats where the allotted seats are recorded.

It has the following attribute:

Rank_Entrance_Exam:

This attribute gets the entrance exam rank from the student which they have got according to their performance in the exam. It will help the software to allow choices to the student to select preference for the college and course

1stPreference:

This will be a simple attribute which holds the first preference of the student which he/she will select from the pool of choices.

2nd Preference:

It will hold the second preference of the student as it is not always possible to get the first selected choice as it may have got filled or the student with higher rank got that seat.

This entity has relationship 'student input' with the courses entity.

As the student enters his/her preferences it goes to the course where it is checked whether this student is eligible for which preference based on the total seat vacant and the rank he/she got in the exam.

It is also connected to the allotment of the seat as preference number and rank will be transferred to that entity once a student is allotted with the seat.

Courses:

It will have the all the courses provided by the institutes. All the courses will have institute code will differentiate if same courses are provided by the different institution.

Every Course has the define the seats available and the allotted seats along with the total seats available which will provide the transparency in the system. Its attributes are:

Course_code:

A unique number given to every course not depends on which university to it belongs, it helps in maintaining the record unique and distinct so act as the primary key for the entity.

Institute_code:

Every institute who has register themselves for the system of counselling has given a unique code which differentiates it from other institutes which have same courses.

Total_seats:

It will have the total seats available for that course provided by the Institute.

No_of_seats:

It is a composite attribute which has the further information about a number of seats allotted and the vacant seat left for the course.

It has a relationship with the allotment of the seats as the preference is checked the seat will be allotted to the student.

It also has relation with choices entity as discussed above.

Course_Name:

This an entity will contain the name of the course and the unique id of that course. As the many institutes provide the same course it would be a difficult job to assign the different code to the same course.

So, this field will be normalized and created a new entity out of it. It has the following attribute:

Course_code:

A unique number is given to every unique course

Course_name:

Name of the course will be stored in this attribute

This entity will have the only relationship with the courses entity as it is derived from it. The degree of relation will be one too many as various Institute can have the same course.

Allotment of Seat:

This entity will store the information of the student after the seat is confirmed for allotment.

It has the following attribute:

Student_id:

Student unique id number

Rank_Entrance_exam:

Rank gave to the student as per his/her performance in the entrance exam.

Prefernece_no.:

The preference which got allotted, as per the choices are given to him.

Course_code:

The course code which got selected for.

Institute_code:

The institute which allotted the seat.

Courses have relation with this entity as the preference is picked which is eligible for that student is sent to this entity for allotting the seat after updating its own record.

Institutes:

This entity will store the information regarding the institutes which are participating in the counselling. Each one of it has to publish their courses for which they want students with the number of the total seats.

It has the following attributes:

Institute_code:

Every institute who has register themselves for the system of counselling has given a unique code which differentiates it from other institutes which have same courses.

Institute_name:

It will hold the name of the institute as mention by them in the registration process.

City:

It depicts the city to which the institute belongs to as it helps as a candidate key.

Password:

It is an alphanumeric field which has the constraint of having minimum 8 digits and at least one alphabet with numbers. This field will provide security to the Institute portal as only the authorized person who knows the password can log in to the account and no anonymous person can change their information.

It will have the relation 'Contains' with the courses as the institutes will offer various courses to the student.

Admitted_Student:

Once the student got allotted the seats and it gets confirmed by them Institute maintains their own record of which student has admitted in their institute and the courses what courses they have opted.

It has the following attributes:

Student_id:

Student unique id number

Course_code:

The course code which got selected for.

Institute_code:

The Institute for which the seat is allotted.

Institute is related to this entity as every university will have the database of how many students have been admitted to its courses. It will be maintained by the administrator of the institute as he will be responsible to track the student once they report for the further admission process.

STUDENT COUNSELLING MANAGEMENT PROJECT DOCUMENTATION

USER-INTERFACE DESIGN OF STUDENT COUNSELLING MANAGEMENT SYSTEM

The Student Counseling System hassles out all the complication of conventional method which is a combination of the folders, spreadsheets, the emails and for the student travelling, queues.

It has a unified system in which all the process from registration, selection of preferences and allotment of seats takes place in one system. Here's how the system manages to keep it simple for student and institutes:

Online student registration of student counselling management system:

The student will be able to register by themselves without travelling to a centre or university. They will also be able to select the preferences.

University Registration of student counselling management system:

Institutes will be able to provide the courses they want the admission form and the select the total amount seats available for that. They also track the student who all gets selected for the courses which their Institute is providing.

Counseling of student counselling management system:

This is a system part were based on their rank in the exam student will be given the choices to select the preferences. It will also keep the surveillance on how many seats is vacant and how much is allotted for a course belong to an institute.

This system will provide relief to not only the student who earlier has to deal with the problem of getting admission but also to the institutes who has to invest a portion of the budget to organize and maintain the counselling process

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