**Project Proposal Idea**

**Navlakhi® Tutorials Database Management System**

**1.Business description**

Navlakhi® Tutorials is an educational service running for the past 25 years in Mumbai, India. Mumbai being the core hub of multiple engineering colleges, this organization is a huge and a renowned one in the Education Sector specializing in Engineering courses. Till date, they have coached more than 10,000 students. In totality, they not only teach more than ten Engineering courses to undergraduate students, but they also teach courses dealing with Math and Physics to junior college students. Alongside they provide other services to students like a series of mock tests and one on one tutoring according to the need of the student.

The organization is administered and owned by a team of two who are also the primary faculty members. They are assisted by two other assistant faculty members. An intern is also hired every year for daily maintenance and other clerical work.

**2. Problem statement**

There are approximately 100 students who enroll in the tutorials every semester. Each student enrolls for a total of 2 to 4 subjects depending on the number of subjects they have opted for. These students come from over 15 colleges across Mumbai. As of today, there is no automated database management system to store the details of the incoming students. Also, it is very difficult for a student to know the availability of a seat for each course since each class has a limit of 10 students.

Currently, the entire registration process is either done over the phone or in person. A major problem while communicating over the phone is the miscommunication that could happen in what was being said and heard. Another employee needs to be hired to attend these phone calls and carry out the registration which is a waste of the revenue. Each student is registered manually in an excel sheet which can lead to inconsistency and duplication of the data. Coming in person is also a very inconvenient option for both the members of the organization as well as the student. There yet lies the requirement of an employee to be present for the registration to be done in person. Therefore, implementing a database system would no longer require another employee and simplify the registration process.

**3. Proposed solution**

A relational database will be able to store the data of the incoming students who want to register for the tutorials automatically and in a logical format. The data stored would consist of student information like his name, phone number, the college he goes to, the major he is studying, the desired course which he would like to enroll for in the tutorials. The database would include a table of all those colleges across Mumbai selected by the tutorials and the respective majors available in those colleges. The student should be part of one of those colleges and majors.

Data can be drawn out of the system easily regarding who is enrolled in which course. The students can also easily view the availability of each course he wants to enroll in and can register for the course without having to talk to anyone. Combining all these aspects solves the data management problem easily.

**4. Users**

Our database will have three main types of users. Each of thee users would have different access rights and would be using the system to query different tasks.

1. Owner

All rights to view the data of each student and update the data about the colleges, majors, semesters and branches.

1. Students

Rights to add their information to the database while registering for the tutorials.

**5. Potential entities and attributes**

1. Account

* Uname - PK
* Password
* Status
* CID - FK
* BID - FK
* Start\_date
* End\_date

2.Branch

* BID - PK
* Name
* Status

3.College

* CID - PK
* Name
* Description
* Status

4.Subjects

* SrNo - PK
* Name
* Status

5.Subject Associate

* Uname – PK, FK
* SID – PK, FK
* Dom
* Status

6.Subject Details

* SID - PK
* SrNo - FK
* Description
* Weightage
* Status

7.Subject\_Sem\_Branch

* ID - PK
* SrNo - FK
* Sem
* Branch -FK
* Cid - FK
* Status