# **SYNOPSIS**

# Table of Contents

- 1. Title of the project.
- 2. Introduction and objectives of the Project.
- 3. Project category.
- 4. A complete structure Which includes:
  - (i) Number of modules and their description to provide an estimation of the student's effort on the project.
  - (ii) Process Logic of each module.
  - (iii) Data Structures as per the project requirements for all the modules.

- 5. Analysis (DFD, ER Diagrams, Class Diagrams etc.)
- 6. Tools / Platform, Hardware and Software Requirement specification
- 7. Security and Validation Checks.
- 8. Scope of future application.
- 9. Dependencies
- 10.Limitations
- 11.Bibliography

# Title of the project.

# Counselling System

# Introduction of the project

Most of the educational institutions use a manual counseling system to allocate the college/institute according to the choice made by the candidate. At the time of counseling, counselors according the rules laid by the educational body for seat allocation to allocate the colleges to right candidate. While making allocation, they have to consider the ranks obtained by the student, availability of seats in the college filled as choice by the student. To perform this, large numbers of records have to be maintained indicating the college status, students' choice etc, also to perform these activities lot of man power is required. Also this manual counseling system consumes a lot of time. Despite of all this efforts made both the counselor's and student's have to face the problem such as student has allotted the college which he/she had not selected in choice or the college in which no seat is available. Software focuses on the following points-

- 1. This software is deliberately focused on various reports and slips produced by counsellors at the time of counselling.
- 2. This document will make clear the design which not only capture the counselling information but efficiently sorts, retrieve and deliver this critical information where it is needed by counsellors.

- 3. The benefit of having accurate, complete and timely counselling information that is it will inevitably save precious time of both counsellors and candidates attending the counselling.
- 4. The main purpose of this project is to automate the counselling process.

### Objective of the project

The sole objective of this project is to design an Automated Counseling System that gives total fulfillment towards the efficient functioning of a counselor's involved in the process of counseling and total satisfaction to students by reducing the time involved in counseling. It will also provide the facility for maintaining records of all the students who participated in the counseling and also provide accurate status of seat availability in each college. This system is user friendly due to its Graphical User Interface (GUI) provided by the forms made in Java Swings. Even the user who does not have proper knowledge about the computer can easily handle it. Some of the facilities provided by the system are as follows —

- Helps in maintaining records of all students who participated in counseling.
- Provides facilities to check the status of available seats for each course in the specific college before filling it as a choice.
- In special cases administrator can also allocate the seat to the student.
- Allotment of seat to student is done immediately as soon as student submits the required details.

# PROJECT CATEGORY:-

Window based -application.

# TOOLS/PLATFORM USED:

# Front End

- User friendly
- GUI
- Separation of work (designing & coding)
- Written once run anywhere Middle-Tier

# Back End MS-ACCESS

# Hardware:-

**❖** Processor Pentium 4<sup>th</sup>

**❖ RAM** 128MB

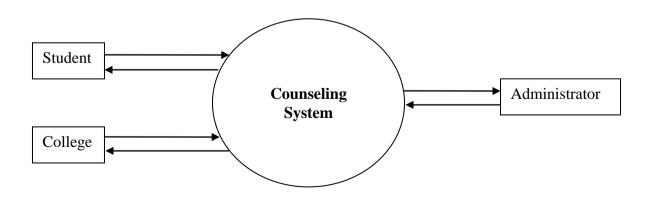
❖ Hard Disk 20GB/40GB.

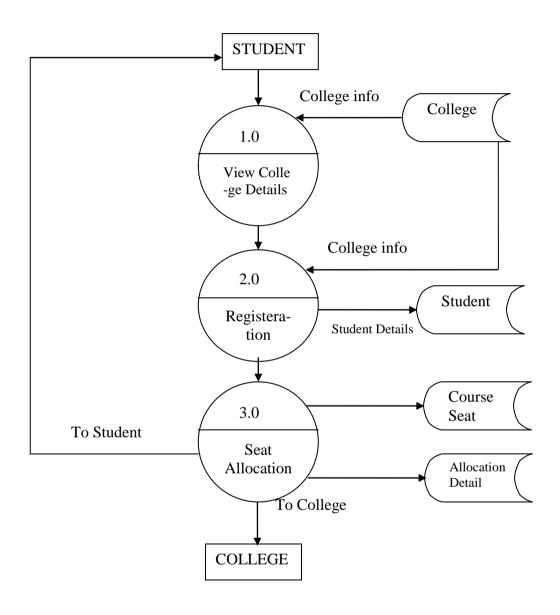
# Software:-

# Counselling System ❖ Operating System Windows 98/2000/XP,UNIX

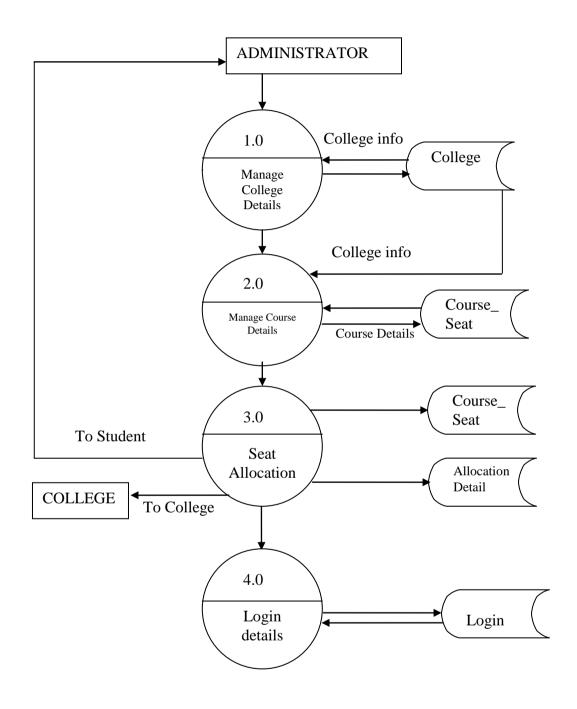
# DATA FLOW DIAGRAMS

**Zero level DFD (Context level DFD)** 

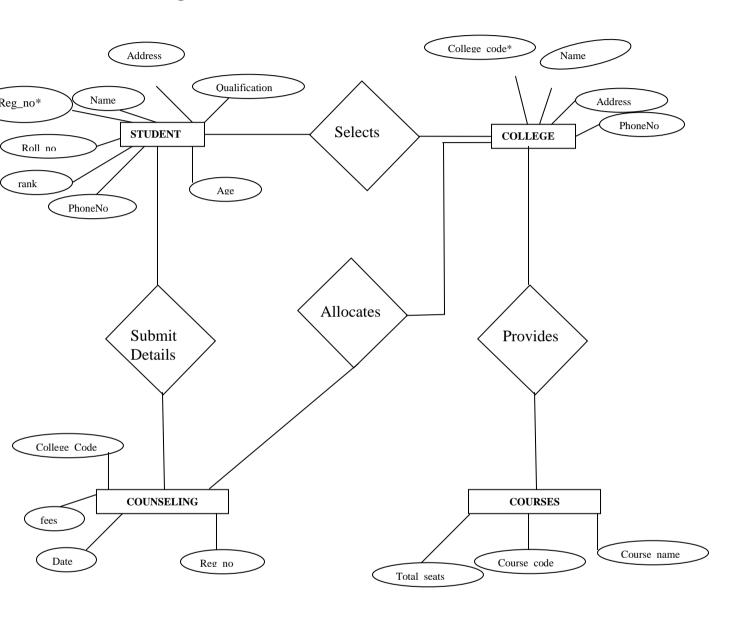




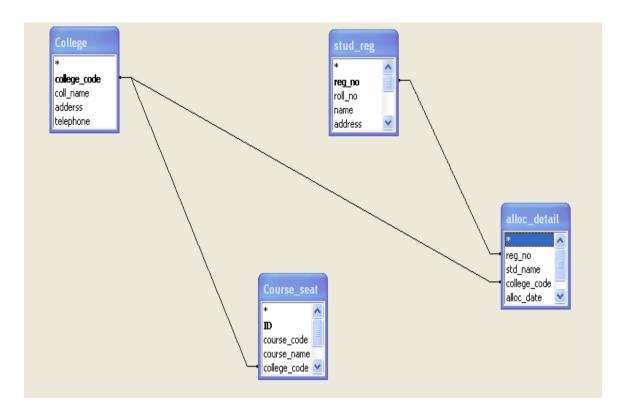
### Single level DFD for administrator



# E-R Diagram



### 3.4 Database Schema



### 3.5 Database Design

A database that conforms to an ER database schema can be represented by a collection of tables. For each entity set and for each relationship set in the database, there is a unique set. Each table has multiple columns, each of which has a unique name.

#### 1. Login

Field Name	Data Type	Length	
login_id	Text	50	
password	Text	50	2. College

Field Name	Data Type	Length
college_code	Number	
college_name	Text	50
address	Text	50
telephone	Text	20
Field Name	Data Type ~ 11 ~	Length

3. Course\_seat

course_code	Text	20	
course_name	Text	20	
college_code	Number	50	
branch	Text	20	
total_seats	Number		
allocated_seats	Number		
Field Name	Data Type	Length	
reg_no	Number		
roll_no	Text	20	
name	Text	50	
address	Text	50	
contact_no	Text	20	
course_code	Text	20	
course_name	Text	50	
Rank	Number		
college_ch1	Text	50	
college_ch2	Text	50	
college_ch3	Text	50	
Field Name	Data Type	Length	
reg_no	Number		
std_name	Text	50	
college_code	Text	20	
college_name	Text	50	
alloc_date	Date/Time		

4. Stud\_reg

5. Alloc\_detail

## 7. LIMITATION & CONCLUSION

# Limitation of the Proposed System:

- Database used is MS Access and every database has a stack limit.
- ➤ Manual Errors at the time of entering the data can't be check, only by the validation required with respect to proposed system is checked
- > The major limitation of this project is that it does not provide online communication using internet and user have to come to specific place to access the system.

#### Future Enhancement

There must be scope left for the modification of project in order to meet the changing business requirement. As the project follows object oriented principles and modular designing approach, it can be easily modified to meet the changing requirement. The proposed system can be enhanced by migrating its database from MS-Access to Oracle 9i which is more efficient and able to meet all the requirements of

educational bodies from storing large amount of record as well as images of various students and colleges. To provide online banking facilities to the candidates, it is proposed to develop the Counseling Website and move the user segment of the current project to the website which can be easily done by using java technologies – java servlets and java server pages.

#### Conclusion

The objective of this project was to build a program for maintaining the details of all transactions of Bank .The system developed is able to meet all the basic requirements. It will provide the facility to the user so that they can keep tracks of all the transactions it made. The management of the customer records will be also benefited by the proposed system, as it will automate the whole banking procedure, which will reduce the workload on bank staff and improve the overall efficiency. The security of the system is also one of the prime concerns.

There is always a room for improvement in any software, however efficient the system may be. The important thing is that the system should be flexible enough for future modifications. The system has been factored into different modules to make system adapt to the further changes. Every effort has been made to cover all user requirements and make it user friendly.

- ➤ Goal achieved: The System is able provide the interface to the user so that he can replicate his desired data. .
- ➤ User friendliness: Though the most part of the system is supposed to act in the background, efforts have been made to make the foreground interaction with user as smooth as possible. Also the integration of the system with Web portal has been kept in mind throughout the development phase.

### **DEPENDENCIES**

- → It doesn't matter how efficiently the application works, if the Bandwidth is not sufficient the transaction will take more time then expected.
- → Oracle and Oracle JDBC-ODBC drivers for connectivity.

- → Java Web server is required for the application.
- → Although this software is architecturally independent but following

  Hardware resources are required. For i.e. any IBM compatible PC or any other

  workstation with mouse support and relevant software.

### **Limitations**

Since, every system has some limitations so our proposed system is also not untouchable in this regard. Although it includes every kind of features, but it can't be used in a huge organization where number of networks are very large, because the database used in this system is an average one. Also it doesn't have different kind of access feature for different users.

Though it was planned for this system to be absolutely perfect but everything as such has some limitations, so does the System. Following may be the drawback in this system.

- Though this system is developed as a multi user system but it is not a real time system.
- The interaction with the database, every time they are loaded thus the system tends to be a bit slow.

### BIBILIOGRAPHY

### **BOOKS**

- Java-2 Complete Reference - by Patrick Naughton

- Java Servlet Programming - by O'Reilly

- Pure JavaScript - by Jason Gilliam, Charlton

Try, R.Allen Wyke

- HTML complete - BPB publications.

- Java Server Programming - by Apress publication.

### **REFERENCES**

- http://www.sun.com
- http://www.coreservlets.com
- http://www.serverside.com

- http://www.w3schools.com
- <a href="http://www.google.com">http://www.google.com</a>
- http://www.webopedia.com