

INDIRA GANDHI NATIONAL OPEN UNIVERSITY

BCSP-064

(Online Home Tuition Web Portal)

Submitted By: Manish Kumar

Enrolment No: 197287392

Regional Centre: Delhi-3

Ph.No: 9599640737, Email Id: manish.kumar62647457@gmail.com

Under Guidance

Of

Ashok Kumar

**Submitted to the School of Computer and Information
Sciences, IGNOU**

**in partial fulfillment of the requirements
for the award of the degree Bachelor of Computer
Applications (BCA)**

Year of Submission: 2021

**Delhi Library Association Building,
Ranganathan Bhawan, C-Block, Community Centre,
Naraina Vihar, New Delhi-110028**



SCHOOL OF COMPUTER AND INFORMATION SCIENCES
IGNOU, MAIDAN GARHI, NEW DELHI – 110 068

II. PROFORMA OF BCA PROJECT PROPOSAL (BCSP-064)
(Project's Title and Guide's Details)

Enrolment No.: 197287392 Regional Centre Code: DELHI/3 Study Centre: LSC-1029

1. Name of Student: MANISH KUMAR
2. Address of the student: HNO575, MATA WALI GALI, NEAR INDIAN BANK SAMALKHA, NEW DELHI -110037
- 3.(a) E-mail: manish.yojput62647457@gmail.com 3.(b) Telephone/ Mobile No.: 9599640737
4. Title of the Project : ONLINE HOME TUITION WEB PORTAL
5. Name of Project Guide: ASHOK KUMAR 5.(b) Designation of Project Guide: Technical IT Support Executive
6. Address of Project Guide: HNO- 385, STREET NO-1, KAPASHERA NEW DELHI-110037

7. Qualification of the Guide*
(Compulsory to Attach bio-data of Guide)

*Note : 1. All the above mentioned Degrees must have been awarded in Computer Science/IT only ii. A Guide should not guide more than 8 students of BCA at any point of time.

8. Industrial / Teaching experience of the Guide (in Years) 4 year

9. Software Used for this Project: TSP, Oracle, MySQL, SQL Server

Note : 1. Use of Visual Basic and MS-Access as Front End and Back End respectively is forbidden. But, you are permitted to use Visual Basic with other Software. Also, you can use MS-Access with other software.

2. Use of C or C++ Programming Language for Project Related to Database Management is strictly forbidden.

Signature of the Student: *Manish*
Date: 05/12/2021

Signature of the Guide: *Ashok*
Date: 08/12/2021

Important:

1. Attach this Proforma along with Guide's Bio-data and Project Synopsis in the Project Report.
2. Not more than one student is permitted to work on a project.
3. Complete project as per the comments of Synopsis evaluator, then only submit your Project Report.

For Office Use Only

Approved
Not approved

Signature, Designation, Stamp of the
Project Proposal Evaluator
Date:

Suggestions for reformulating the Project:

- 1.
- 2.
- 3.
- 4.
- 5.

Synopsis Approval



(Dec2021) Session
SCHOOL OF COMPUTER AND INFORMATION SCIENCES
IGNOU, MAIDAN GARHI, NEW DELHI – 110 068

II. PROFORMA OF BCA PROJECT PROPOSAL (BCSP-064) (Project's Title and Guide's Details)

PP No. B38S21034

Enrolment No.: 197287392 Regional Centre Code: 38 Study Centre: 1029

➤ Name **MANISH KUMAR**

Email ID: manish.rajput62647457@gmail.com

Telephone No. 9599640737

➤ Title of the Project **ONLINE HOME TUITION WEB PORTAL**

➤ Name and Address of the Guide **ASHOK KUMAR**

Email ID: esc.kendra221@gmail.com

Mobile No. 7701873425

 Ph.D. M.Tech. B.Tech. MCA Any other

➤ Qualification of the Guide

(Attach bio-data also)

*(Note : i. All the above mentioned Degrees must have been awarded in Computer Science/IT only
ii. A Guide should not guide more than 8 students of BCA at any point of time)*

➤ Industrial / Teaching experience of the Guide (in Years)

➤ Software Used for this Project:

(Note :

- Use of Visual Basic and MS-Access as Front End and Back End respectively is forbidden. But, you are permitted to use Visual Basic with other Software. Also, you can use MS-Access with other software)
- Use of C or C++ Programming Language for Project Related to Database Management is strictly forbidden.

Signature of the Student
Date:

Signature of the Guide
Date:

Important: 1. Attach this Proforma along with Guide's Bio-data and Project Synopsis in the Project Report.
2. Not more than one student is permitted to work on a project.

Date: 4th Feb, 2022

Approved

Suggestions for reformulating the Project:

Approved.

Include the video conferencing module and feedback module.

Introduce the sample session for the new/potential entrants.

Strengthen the enquiry module. May use an automated CHATBOT for this purpose.

Follow BCSP-064 project guidelines for project documentation.

IX. Certificate of Originality

This is certified that the Project Report entitled Online Home Tuition Web Portal submitted to **Indira Gandhi National Open University** in partial fulfillment of the requirement for the award of **Bachelor Of Computer Application (BCA)**, is an original work carried out by **Mr. Manish Kumar, Enrolment No. 197287392** under the guidance of **Mr. Ashok Kumar**. The matter embodies in this project is a genuine work done by the student and has not been submitted whether to this university or to any other University/Institute for the fulfillment of the requirement of any course of study.

Signature of Student



Date: 16/05/2022

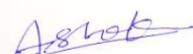
Name: Manish Kumar

Address of the Guide:

H.no 575, Mata Wali Gali,
Near Indian Bank, Samalka,
New Delhi -110037

Enrolment No: 197287392

Signature of the guide



Date: 16/05/2022

Name: Ashok Kumar

Address of the Guide:

H.no 385, Street no.1,
Exc.Tel. Kapashera,
New Delhi-110037

ACKNOWLEDGEMENT

I , **Manish Kumar**, Enrolment No: 197287392 Student of **BCA** express my sincere thanks to **the “Indira Gandhi National Open University”** which has given me the opportunity to pursue the BCA course. I would like to express my wholehearted thanks to **Mr. Ashok Kumar**, My project guide for his encouragement and guidance, which helped me in completing my project.

Finally, I would like to thank my colleagues and friends who helped me.

.....



manish

Name: Manish Kumar

Program Code: BCA

Enrolment No: 197287392

Signature:

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GUIDE-BIODATA

ASHOK KUMAR

MOBILE: +91-77018 73425

Profile in Brief:

- Overall 3 years of experience.
- Technical experience in Java, J2EE, Struts, Spring, Hibernate, CSS, JavaScript, PostgreSQL, Oracle DB.

Professional Summary:

- Currently working as **Tech Lead Level-1 in Silver Touch Technologies Ltd(CMMI-5 Level Company)**.
- Worked as **Software Engineer in C1 India Pvt Ltd(CMMI-5 Level Company)** 15-MAY-2017 to 02-NOV-2019.

Academic Qualifications:

- **MCA** from Indraprastha University in 2014 (Delhi).
- **BSC(IT)** from Delhi University in 2011 (Delhi).
- **Sr. Secondary** from GBSS School Samalkha in 2010 (Delhi).
- **Secondary** from GBSS School Samalkha in 2008 (Delhi).

Skills set:

Languages	:Java, HTML, SQL, JavaScript, jQuery, XML.
Technologies	:Core Java, J2EE, JSP, JDBC.
Frameworks.	:Struts, Spring, Hibernate, Log 4j.
Databases	:Oracle 12c, PostgreSQL 9.6.
Application Server	:Apache Tomcat 8.0, WebSphere 8.0.
Operating Systems	:Linux (Ubuntu 16.4), Windows 7/10/XP.

Project Experience:

Project	TENDER MANAGEMENT SYSTEM (TMS)
Organization	C1 India Pvt. Ltd.
Client	OMAN GOVT TENDER BOARD
Technologies	Core Java, Struts 2.0, JSP, Servlet, Java Script, Oracle 12c, Hibernate 2.0.
Web Server	Web Sphere, Tomcat 7.
Tools	Eclipse

Descriptions

TMS is an application, which provides complete life cycle of Tendering from Tender Creation to Tender Awardness.

Roles and Responsibilities:

- Properly resolve live issues.
- Implemented the CR (Change Request) as per client requirement.
- Develop new functionalities and add into the existing project.
- Implement client and server side validations.
- Coordination with other team members.

Personal Information

Name Ashok Kumar
DOB 20-JAN-1992
Gender Male
Married Status Married
Nationality Indian
Father's Name Shiv Kishore

Date : 05-Dec-2021

Signature :



Place : New Delhi

Title of Project:- Online Home Tuition Web Portal

Introduction:-

Home-tuition is becoming basic need for mostly school going students. In today's context every parent is looking for a good home tuition which is no so far from their home and they need safe home tuition. Some tutors want to give home tuition. So, those who are looking for a home tuition or who wants to provide home tuition, this web portal is a complete solution. Online Home tuition Web Portal is an internet portal dedicated to meet every aspect of the consumers needs in the home tuition service. It is a forum where Parents, home tutors can exchange information, quickly, effectively and inexpensively. It features complete solution for every category of home tuition and availability of more than one tutor of one subject and also area wise or distance wise are the highlights of this portal. Our motive is to provide user friendly interface, satisfying the needs of the, employs a new strategy that facilitates easy management of home tuitions. This portal is designed to meet every aspect of the parents and students.

Mission:

Our mission is to touch the horizon where our capabilities may successfully meet with the requirements of our clients, that too with ultimate transparency and cost-effectiveness.

Vision:

To sow the seeds of par-excellence services with customer centric approach and reap the trust of clients.

Carving a vent for your right home tuition we strive hard to embellish your dreams by providing you the end to end solution related to home tuition searching problem. Clubbing of the trust of our patrons and firm determination of our deft team has resulted in the exponential growth of home tuition service in DELHI NCR. We want to pass our path from the headwind and to cover the entire DELHI NCR. Acquainted well with the nitty-gritty of this field we provide solutions keeping in mind the requirement of both home tuition seekers as well as tutors. Vast database of potential tutors has assisted many home tuition seekers to choose the best from the pool of equals. Moreover, this platform also shows light to various home tutors to reach their perfect destination. So, connect with our child to shape your dreams into reality.

OBJECTIVES:-

We want to become one of the leading home tuition service provider systems into market participants of the industry; we are undertaking various research studies for home tuition service as per market standards. The website should have following features which are given below:



Time Efficiency

- Data security and Reliability
- Fast Data Retrieval
- Huge Data Storage Capacity
- Simple Operation
- Online Demand Processing

User Satisfaction:

Our goal as a successful company in the field of Home tuition service is focused towards satisfaction of website user. With the confidence of quality services, we can obtain a wide base of Home tuition-seekers in the market. We also ascertain open line of communications with our home tuitions at all levels to ensure that they are left fully contented. This has helped us in attaining a trustworthy and satisfied Home tuition base across the DELHI NCR. We want to provide better Home tuition services with the help of computerized system, own company Website. The main motive of the website design is to provide the solution for Home tuition-seeker management, Home tuition management, and Home tuition service business management, generate reports, graphs based one Home tuition analysis, Clients analysis and market analysis etc.

DEMERITS OF THE EXISTING SYSTEM

- In the existing system, parent faces lots of problems due to conventional searching of home tuitions.
- In the existing system, right home tuition is not easily searched. Money and time loss due to not effective home tuition service.
- Home tutors face problems in searching multiple home tuitions according to price and time.
- It needs huge efforts for tutors to teach home tuitions.
- The home tuition prices are high.
- Lack of closeness of Home tuition and Home tuition seeker clients.
- Feedback handling is not done.

MERITS OF THE PROPOSED WEBPORTAL

- The website is flexible and additional feature can be added at any moment of time.
- Effective web tools
- Website supports Robust Transaction.
- Company website will provide more information about our home tutors and clients easily.
- Web site supports the storing of large database.
 - Website supports Fast retrieval of data from the database.
 - Contents are easily searched and support multiple users at a time in the website.
 - Website maintains Strong security features as it uses the built in security framework of web.
 - 3-Tier architecture is followed by website while in backend Database.
 - Its user friendly, because there are some features like buttons, most of the work can be done by using mouse except entering data.
 - In this website, there are new advance thinks. So it will not be outdated for the coming 10 to 15 years.
- It avoids repeated working in excel and Pascal for making reports and graphs, which can be generated on mouse clicks.
- In this website there is no need to re-entering the whole database to update and converted existing data to SQL FORMAT.
- On a single click of button user get reports and graphs. And user can access all things easily.
- Able to store the data in centralized server and access through the network.

Project Category:

Internet technologies and RDBMS Category:-

The undergoing project falls under Internet technologies &RDBMS (Relational Database Management System) category. Since the project is mainly responsible for creation of the website with the online database at backend. As we know that, the Internet is huge client server architecture. The client is the web browser; it is requesting a web based data, a file, or whatever, from some computer somewhere – anywhere –in the world. The server is that computer that holds the information you want.

JSP (Java Server Pages) is a server page for building web-based applications. It offers outstanding support for both developers and administrators, providing improved ease-of-use, tool support, reliability, scalability, administration and security.

The Oracle includes following features



Queries

- ◆ Constraints
- ◆ Procedures
- ◆ Triggers
- ◆ Batch Implementation
- ◆ Functions
- ◆ Cursors
- ◆ Stored Procedures



MODULES:-

- ◆ Staff management system
- ◆ Client management system
- ◆ Home Tuition searching management system
- ◆ Home Tutor Management system
- ◆ Advertising and promotion system
- ◆ Security Management System
- ◆ Transaction management system

STAFF MANAGEMENT SYSTEM:-

In this module Staff designation, Home Tuition details are maintained. This module contains the information of Staff work, salary etc. This module used to find the performance analyzing of the Staff. This module facilitates insertion of new record, report generation, updating of records and deletion of records of Staffs. Using this module Staff attendance, total leave, payment details are managed. The company used this system as a performance and promotion notable system for its Staffs. It maintains details about the official Staffs. It provides information about time-period of job details of Staff. It provides information about the skills and specialization of Staff if any Staff is master in any field. It also provides details about best Staff of different months of the year. It uses different types of graphs to analyze the performance of Staffs.

WEB-PAGES:-

- ◆ Staff record entry form
- ◆ Staff updating /deletion form
- ◆ Staff performance view form
- ◆ Staff record analysis form
- ◆ Staff attendance and leave page

REPORTS:-

- ◆ Detailed Staff record entry report
- ◆ Annually Staff updating/deletion report
- ◆ Annually Staff performance view report
- ◆ Detailed Staff record analysis report
- ◆ Annually Staff attendance and leave report
 - ◆ Staff salary slip report
- ◆ Report about Staffs who have left the Home Tuition
 - ◆ Staff skills report

- ♦ Best Staffs of the project report

CLIENT MANAGEMENT SYSTEM:-

The Client management system is a tool to find, track and manage the best Clients for each Home Tuition requisition. This module keeps all the records of Clients of the system. By the help of this module manager can easily communicate with the Clients, schedule meetings and much more. This module facilitates insertion of new record updating of records of Clients. It facilitates individual house rental request tracking, automated request ranking, customized input forms, pre-screening question and response tracking, and multilingual capabilities.

WEB-PAGES:-

- ♦ Client creation form
- ♦ Client modification form
- ♦ Client login form
- ♦ Client log out form

REPORTS:-

- ♦ Weekly Client login report
- ♦ Monthly Client creation report
- ♦ Monthly Client updating report
- ♦ Monthly Client deletion report
- ♦ Client's monthly log out report

HOME TUITION SEARCHING MANAGEMENT SYSTEM:-

This module provides an easy way to keep track of all the necessary information that you collect during a Home Tuition search. Home Tuition search module can help simplify and manage your process. This module keeps all the necessary documents, details of the Clients. The Home Tuition search module is perfect for entering and managing multiple Home Tuitions while providing an easy, logical display for your visitors to search through. This module provides the answers to Client, management, Staff for their queries. This module provides the solutions for all submitted queries. This module has FAQ that reduces the searching operations.

The module includes:-

- † Upload an Excel file for mass import of Home Tuition s (perfect for search firms!)
- † Add / Edit / Delete Home Tuition s from the administration area
- † Upload PDF / Word document with full Home Tuition description
- † Visitor listing and Search Engine Search by keywords, city / state, category

WEB-PAGES:-

- ◆ Staff Home Tuition enquiry form
- ◆ Home Tutor Home Tuition enquiry form
- ◆ Client Home Tuition enquiry form
- ◆ Enquiry analysis form

REPORTS:-

- ◆ Daily Staff enquiry report
- ◆ Monthly Staff enquiry report
- ◆ City-wise Home Tutor enquiry report
- ◆ State-wise Home Tutor enquiry report
 - ◆ Daily Client enquiry report
 - ◆ Monthly Client enquiry report
 - ◆ Daily user enquiry report
 - ◆ Monthly user enquiry report

HOME TUTOR MANAGEMENT SYSTEM:-

The main functionality of this module is to keep the all details of Home Tuition Home Tutors and Client Home Tuitions. Interested Home Tutors can register himself/ herself. They can register as free service member or prime member. Free members will have least priority than prime members in terms of service. Prime members will have paid service so home tuition enquiry will go to him/her first. Although free service members will also get service as per conditions. This module generates various types of reports to manage the registered Home Tutors and their services. It keeps also tracks the payment process of Home Tutors.

WEB-PAGES:-

- ◆ Home Tutor registration page
- ◆ Home Tutor record modification page
- ◆ Home Tutor record deletion page
- ◆ Home Tutor payment page
- ◆ Updating page of Home Tutor profile details

- ◆ Deletion page of Home Tutor details

REPORTS:-

- ◆ Home Tutor registration annually report
- ◆ Home Tutor record modification report
- ◆ Home Tutor record deletion detailed report
- ◆ Home Tutor payment detailed report
- ◆ Annually Home Tutor service report
- ◆ Annually Home Tutor service vs payment report

ADVERTISING AND PROMOTION SYSTEM:-

This module will help the company to get the information of the Advertising team about their schemes which they are using for promotion. This will also have the information of the latest schemes the Advertising team will implement in future. This module helps in knowing the current technique for system promotion.

WEB-PAGES:-

- ◆ Advertising team log in page
- ◆ Advertising expenses page
- ◆ Advertising team attendance page
- ◆ Advertising team salary page
- ◆ Advertising team Leave page

REPORTS:-

- ◆ Weekly login report
- ◆ Weekly expenses report
- ◆ Weekly attendance report
- ◆ Weekly leave report

SECURITY MANAGEMENT SYSTEM:-

The security management system is maintained for the security of the system. In authentication system only authorized person can access the data. The authorized person (user) can change the password. In security management system user have the facility to change the password. In the case if the user forgets his/her password, the user can retrieve password from the forget password page. The manager can set some question and answer & the data will be in encrypted form.

WEB-PAGES:-

- ◆ User Login form
- ◆ User creation form
- ◆ User deletion form
- ◆ User modification form

REPORTS:-

- ◆ User daily login report
- ◆ User registration report
- ◆ Annually User record updating report
- ◆ Detailed User analysis report

TRANSACTION MANAGEMENT SYSTEM:-

This system will help to generate reports for the transaction during the following year. This will too help to maintain the proper records of all income and expenses of the company like the income received from the Clients, Home Tuition Home Tutors and the expenses paid for infrastructure or any other miscellaneous expenses. This will also maintain the transactions of Staff's salary and bonus. This module is used to maintain all transaction details of Staff, Client and Bank. It also handles payroll transaction. It has database to store every transaction of salary system. This system deals with maintaining the Staff's salary details, provision for ESI and PF, generating the salary slip and reports. It generates various types of reports related to official transaction. It helps in maintaining the financial status of the company.

WEB-PAGES:-

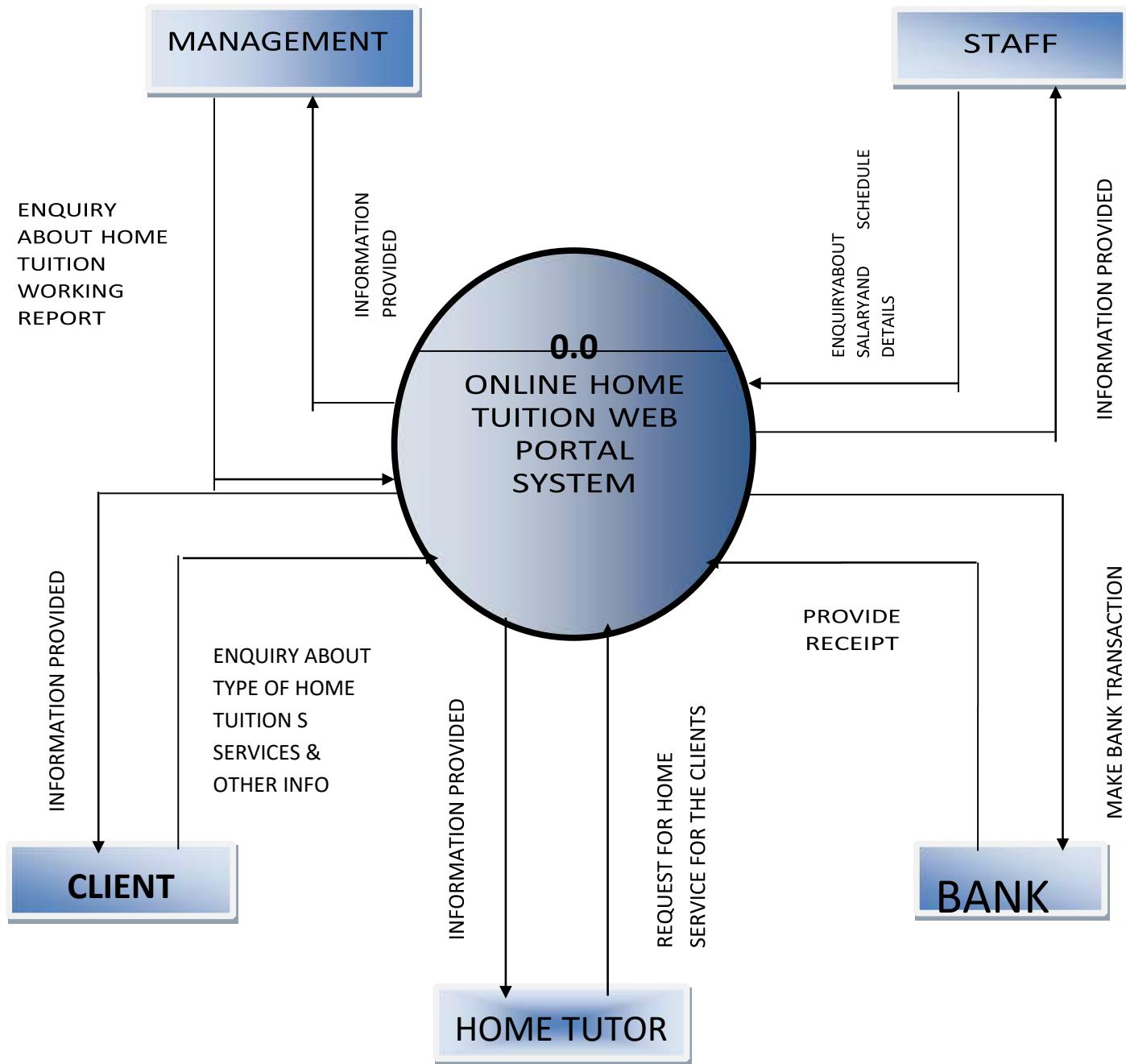
- ◆ Staff salary query page
- ◆ Data entry form of Staff master page
- ◆ Data entry form of Staff transaction page

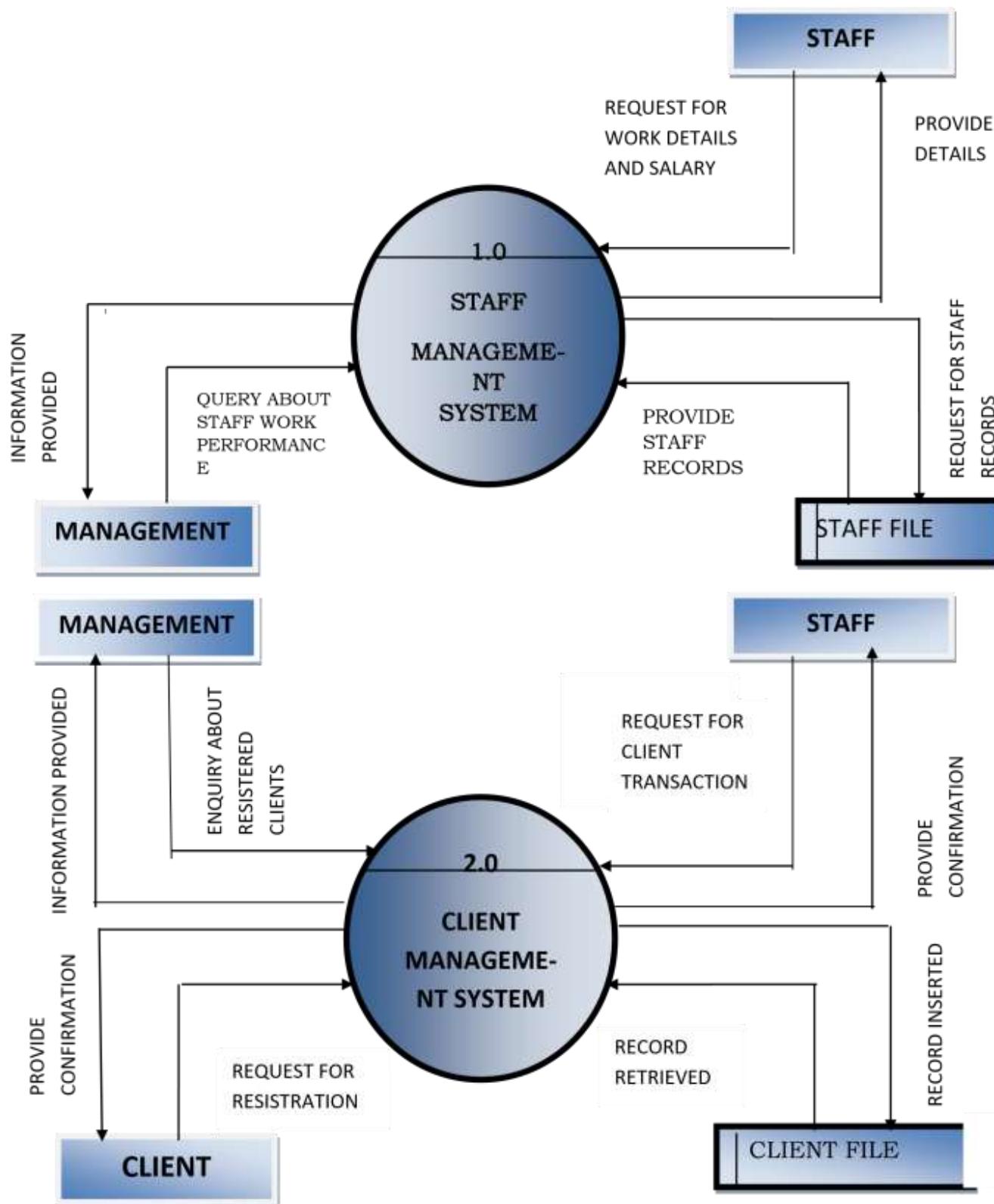
- ◆ Client payment page
- ◆ Staff pay slip generation page

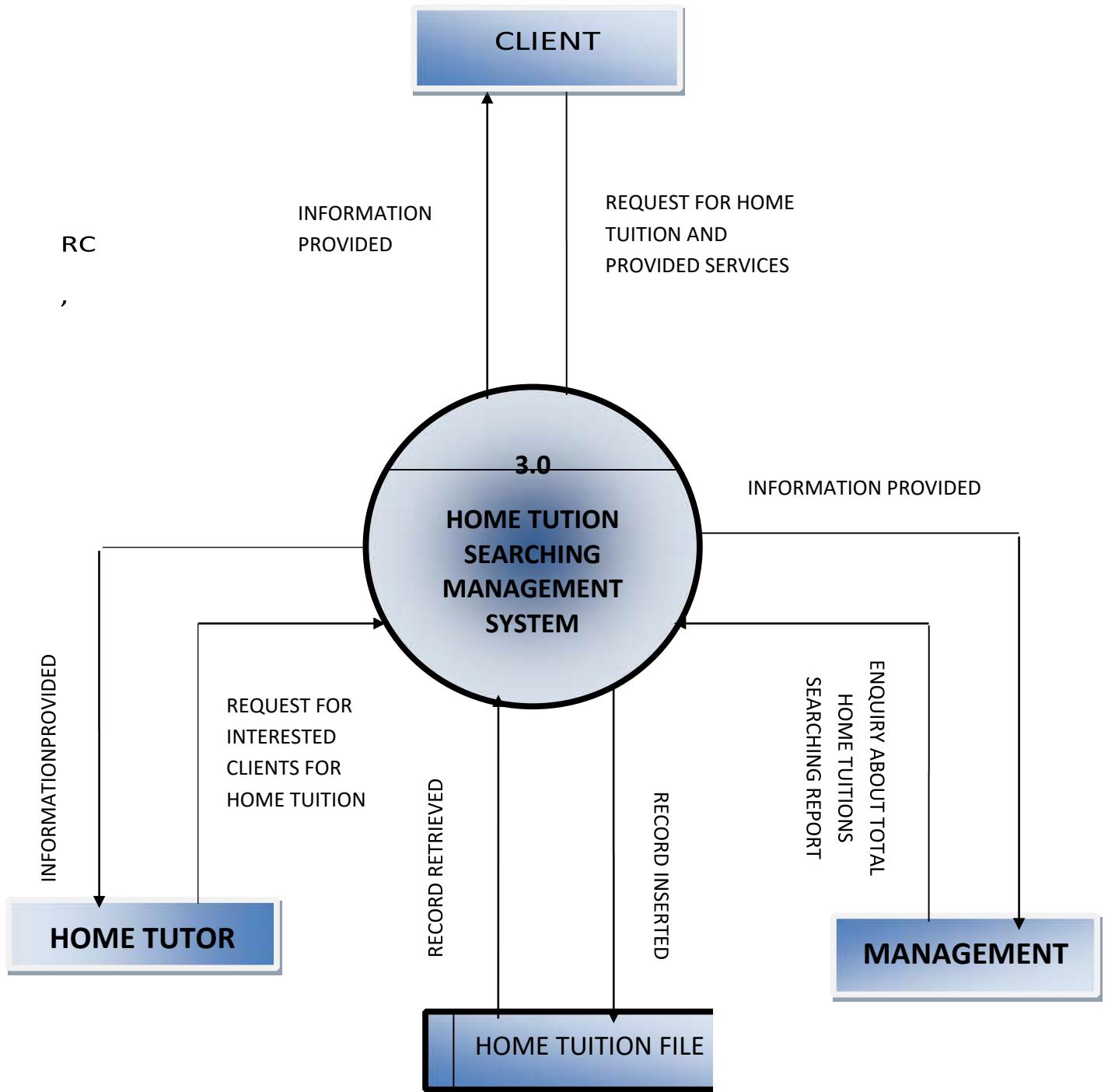
REPORTS:-

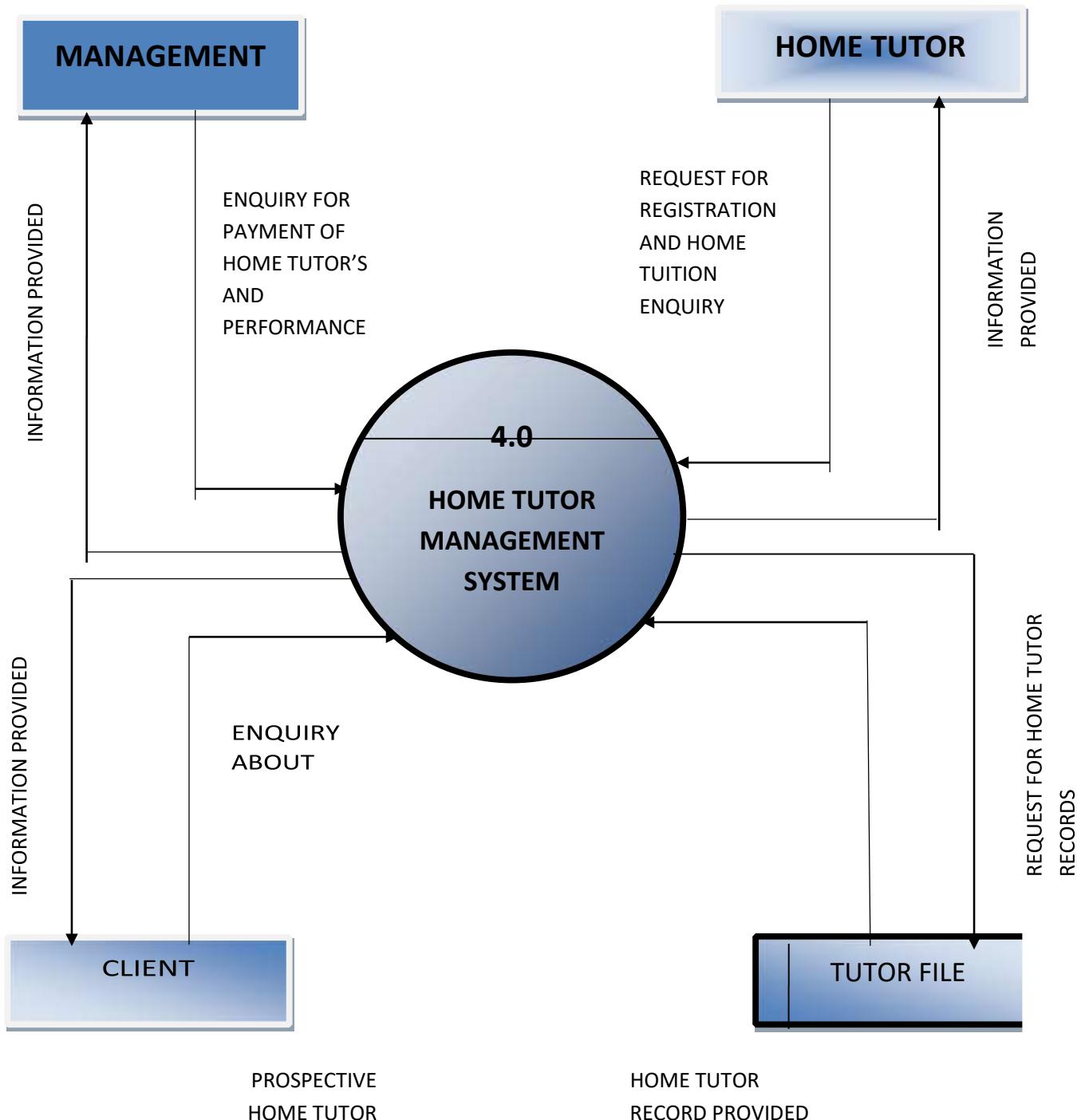
- ◆ Yearly report of bank transaction
- ◆ Monthly details of payroll system
- ◆ Yearly details of payroll system
- ◆ Yearly payable report of Client

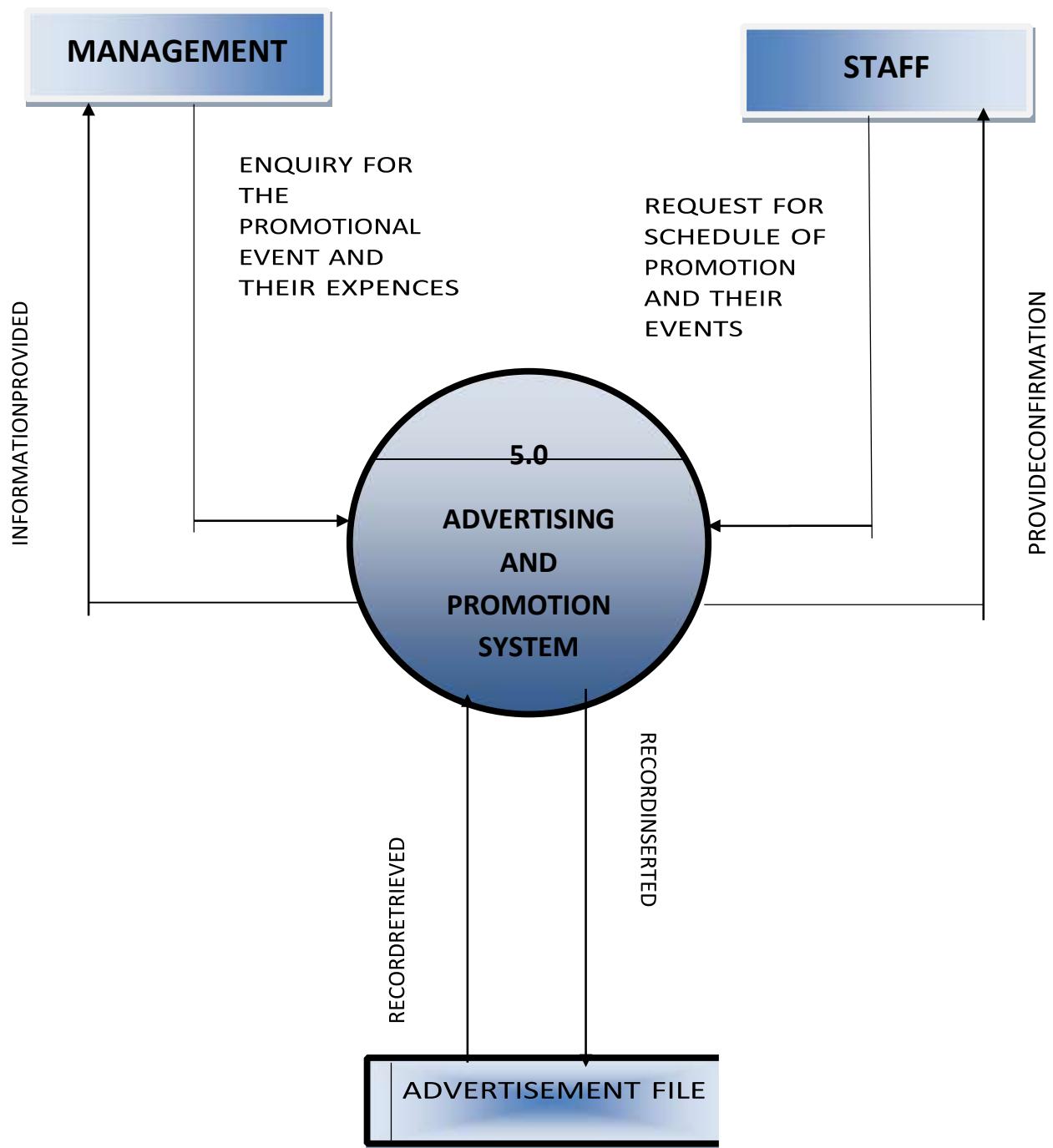
DFD(DATA FLOW DIAGRAM)

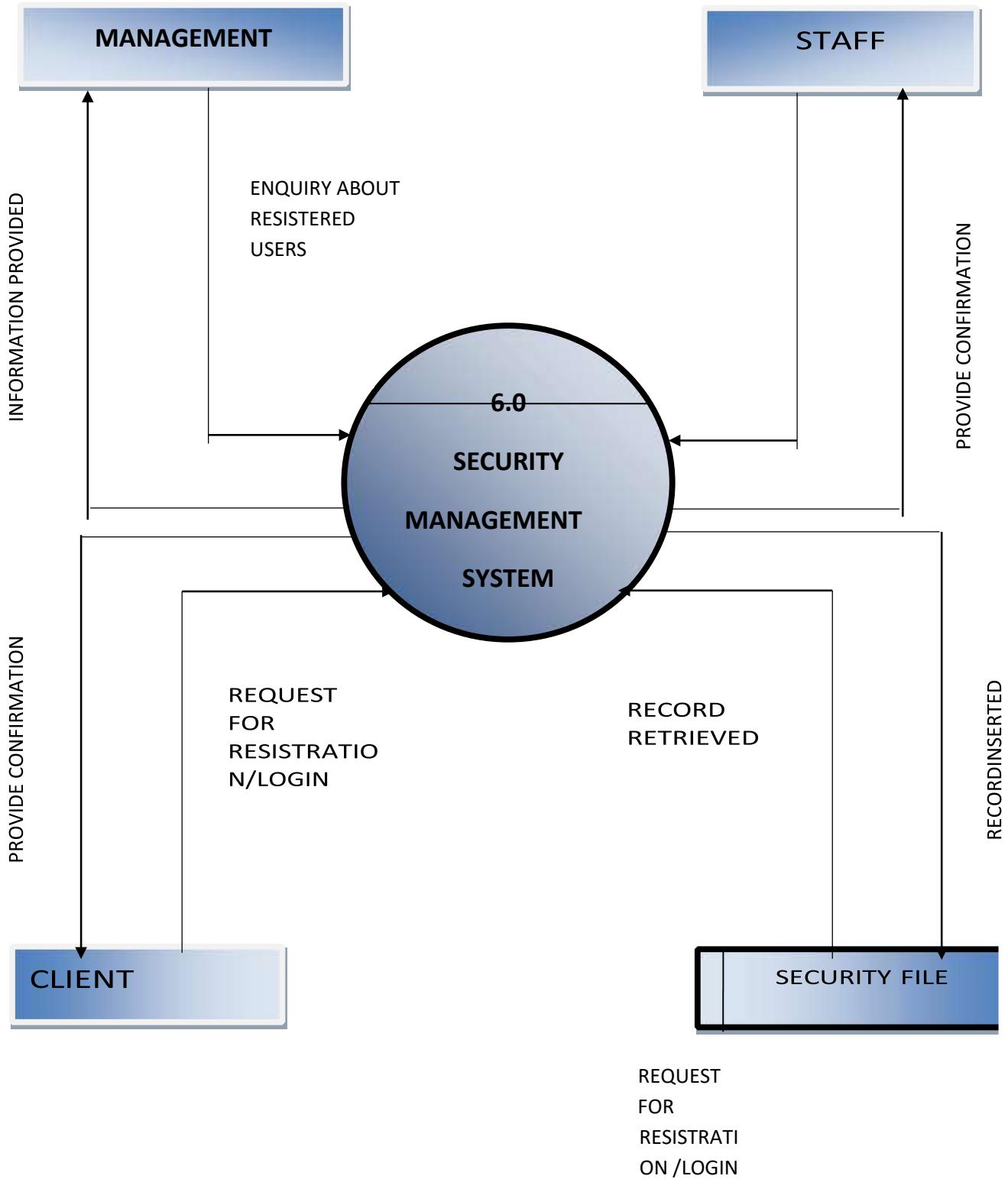


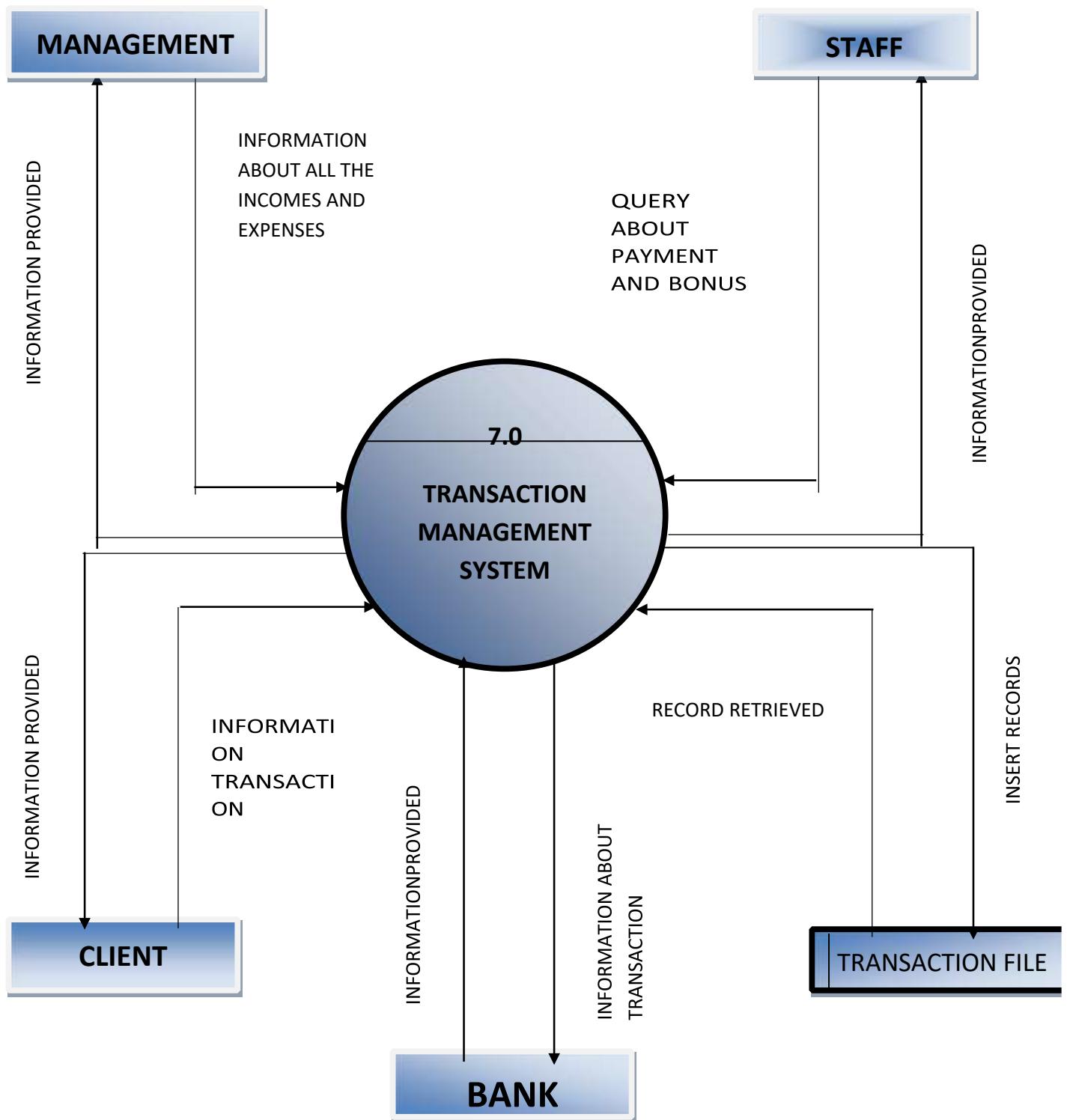


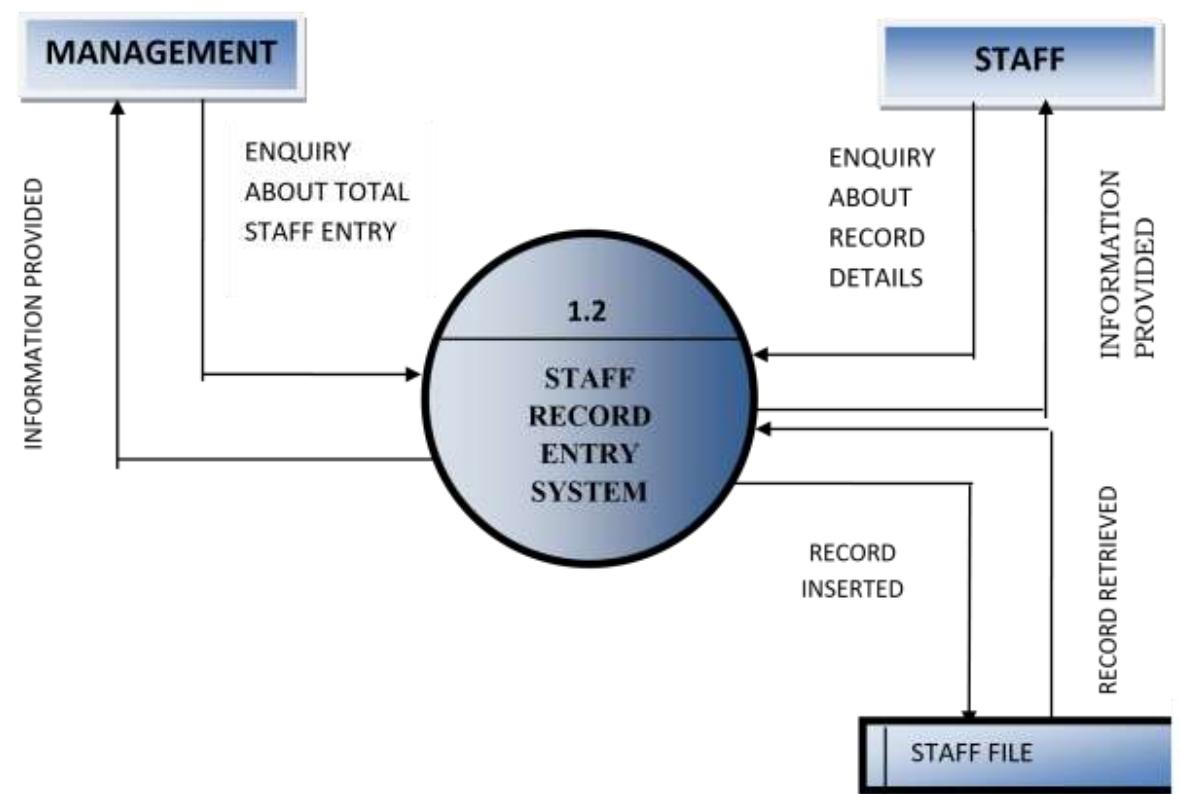
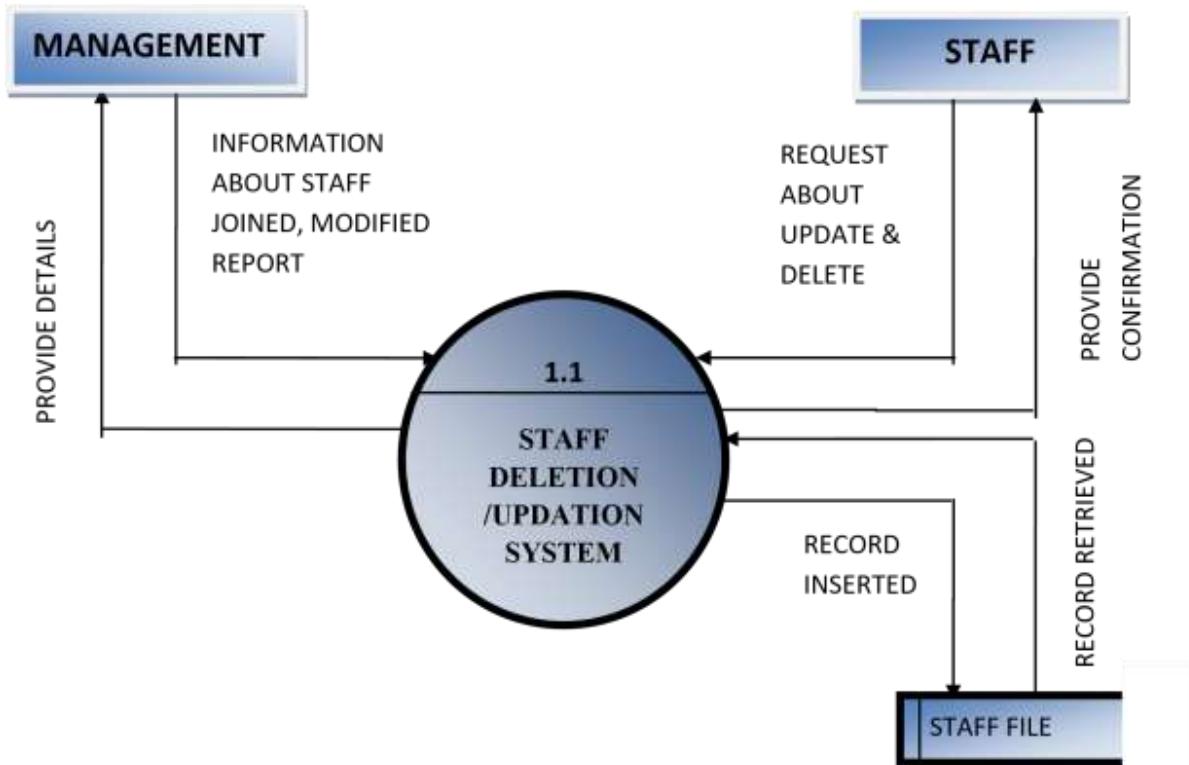


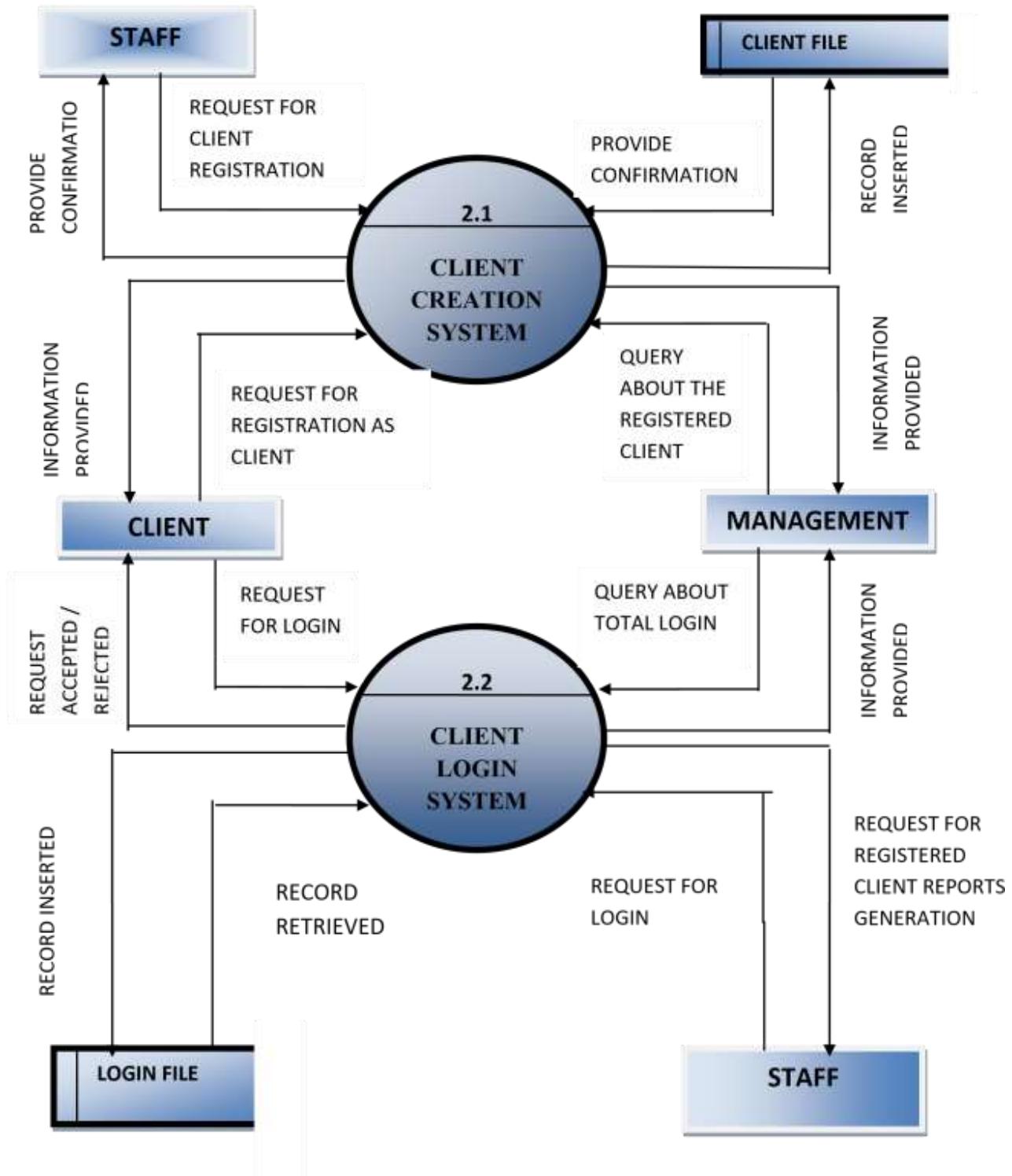


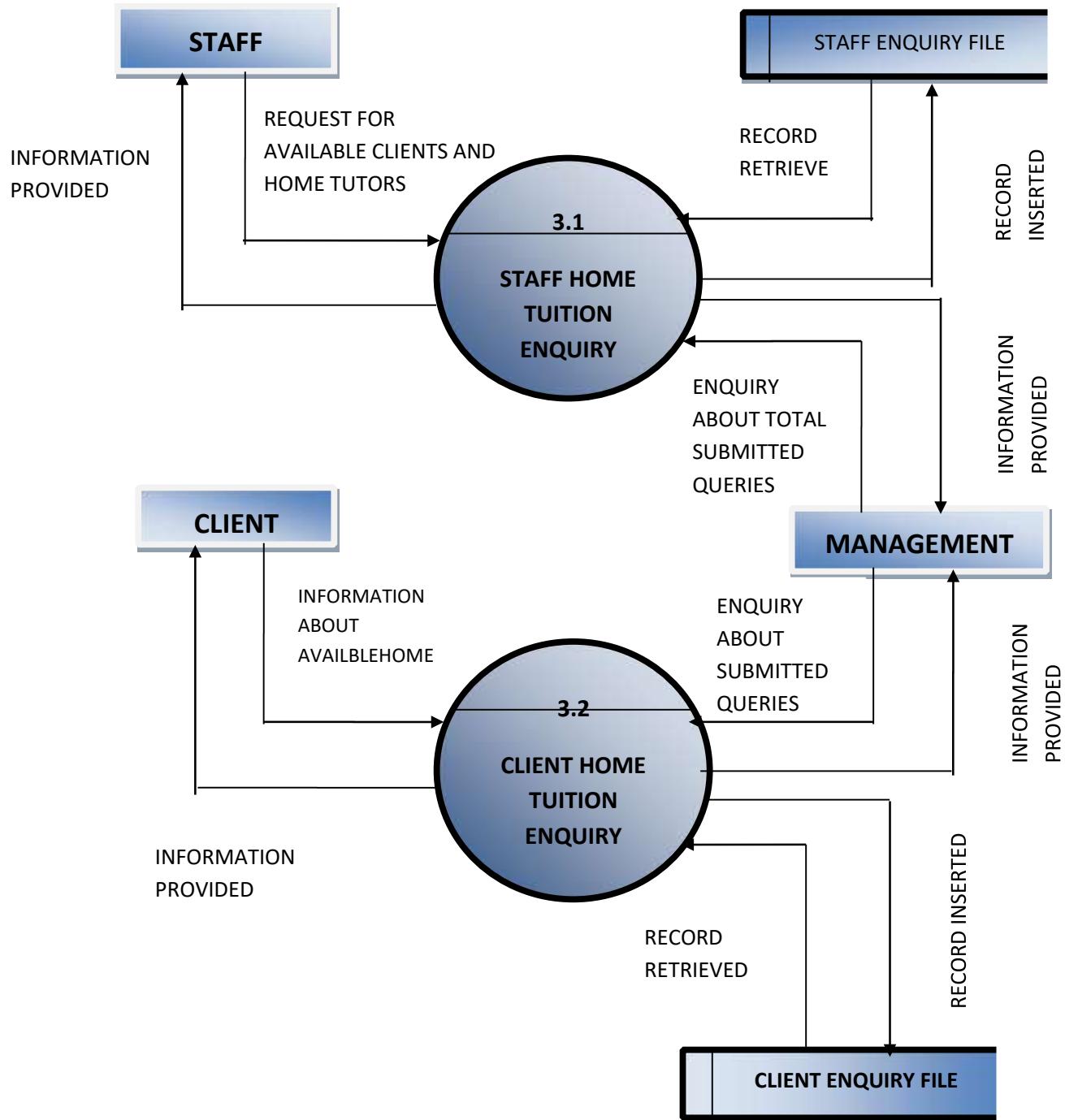


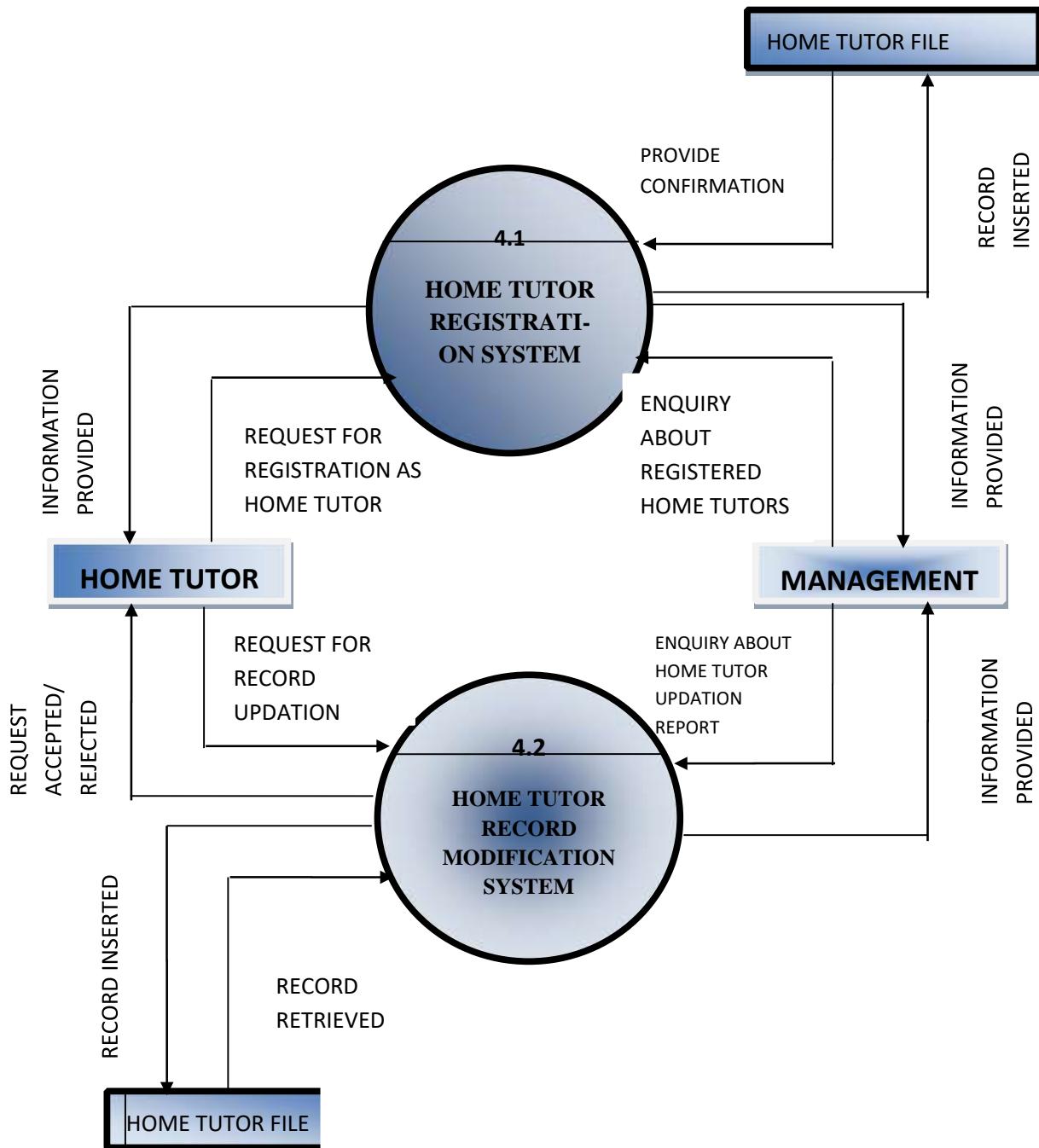


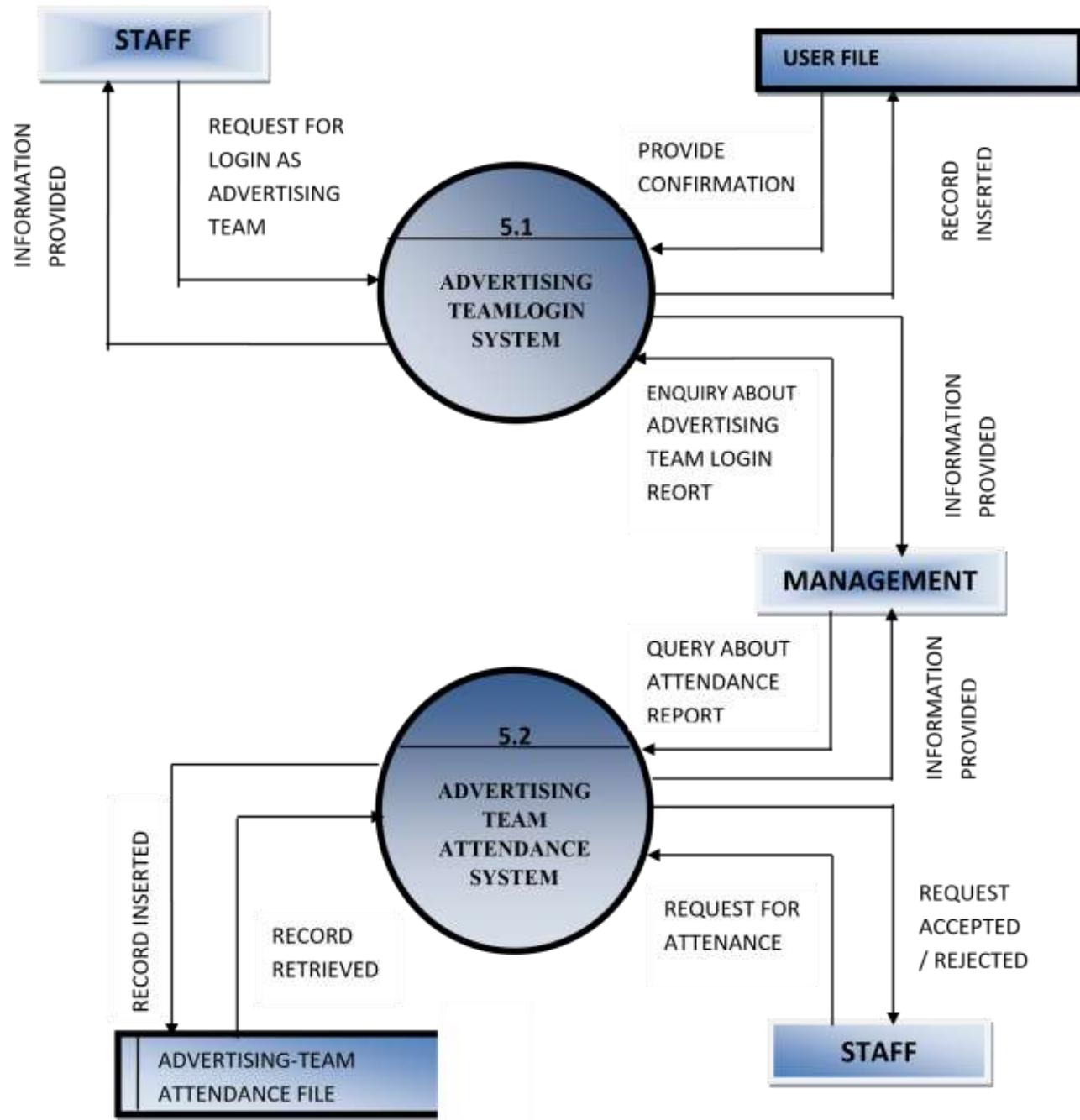


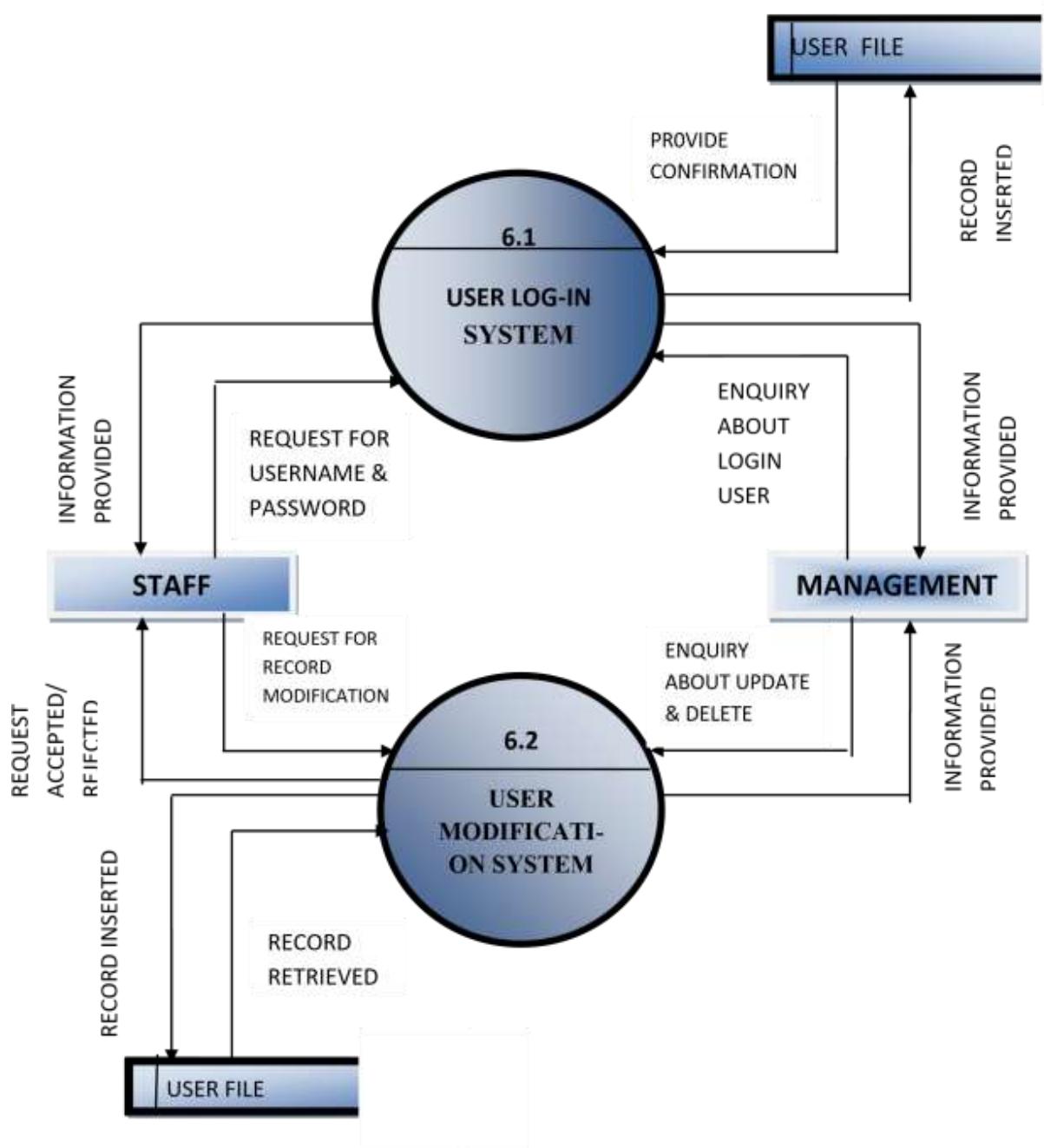


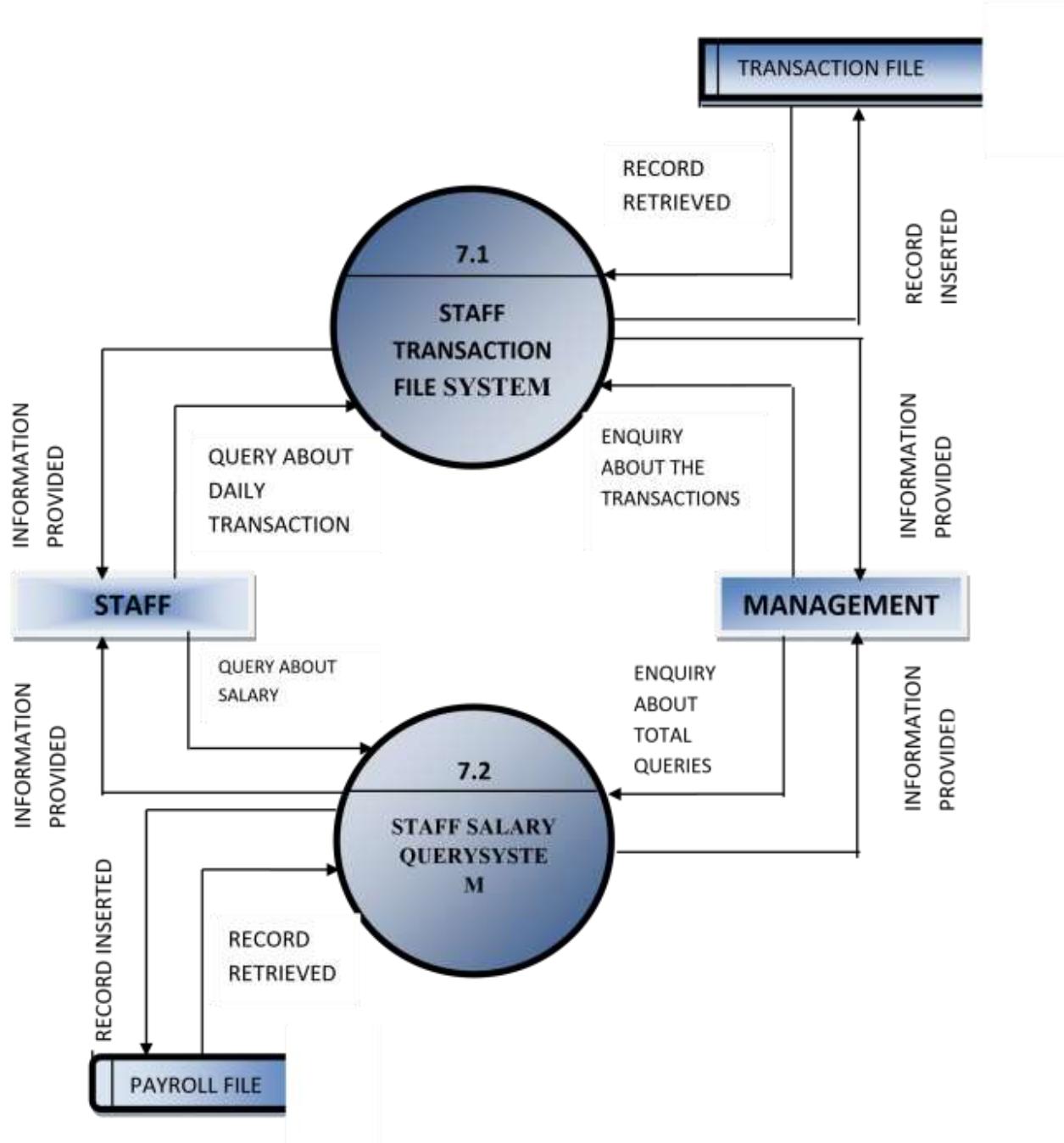




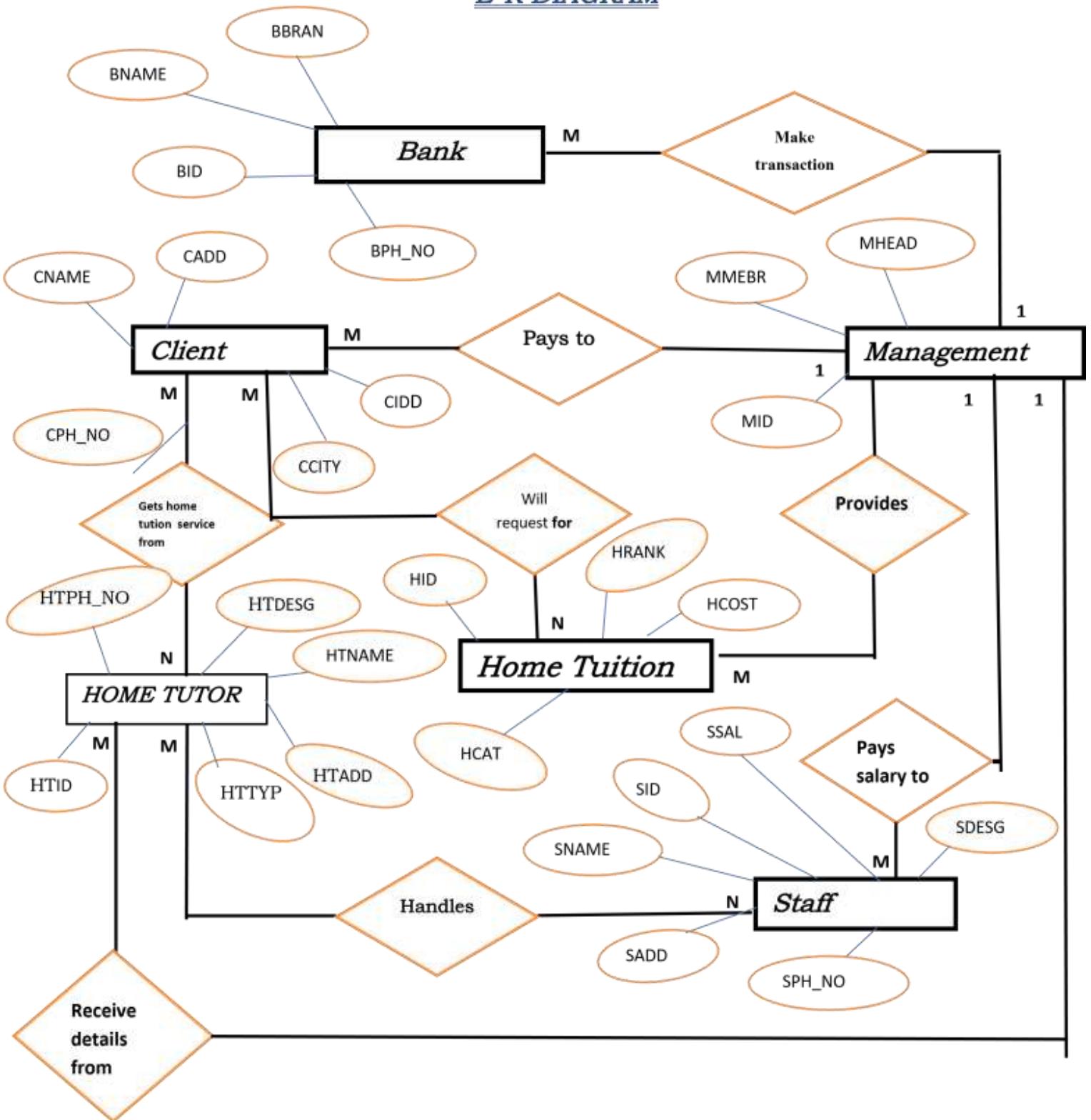








E-R DIAGRAM



TABLES:-

After analysis and normalization following tables are found.

<u>CLIENT FILE</u>		
<u>Data Field</u>	<u>Data Type</u>	<u>Description</u>
CID(PK)	Char(20)	Client's ID
CNAME	Char(20)	Client's name
CADD	Char(20)	Client's address
CPH_NO	Numeric(5,2)	Client's phone no.
C_CITY	Char(20)	Client's city

<u>HOME TUITION FILE</u>		
<u>Data Field</u>	<u>Data Type</u>	<u>Description</u>
HID(PK)	Char(20)	Home Tuition ID
HCOST	Numeric(5,2)	Charges for the Home Tuition
HCAT	Char(20)	Home Tuition Category
HRANK	Char(20)	Home Tuition Rank

HOME TUTOR

<u>Data Field</u>	<u>Data Type</u>	<u>Description</u>
HTID(PK)	Char(20)	Home Tutor's ID
HTNAME	Char(20)	Home Tutor's name
HTADD	Char(20)	Home Tutor's address
HTPH_NO	Numeric(5,2)	Home Tutor's phone no.
HTTYPE	Char(20)	Home Tutor's type
HTEMAIL	CHAR(20)	Home Tutor's email

STAFF

<u>Data Field</u>	<u>Data Type</u>	<u>Description</u>
SID(PK)	Char(20)	Staff ID
SNAME	Char(20)	Staff name
SADD	Char(20)	Staff address
SPH_NO	Numeric(5,2)	Staff phone no.
SSAL	Numeric(5,2)	Staff salary
SDESG	Char(20)	Staff designation

STAFF ATTENDANCE FILE

<u>Data- Field</u>	<u>Data Type</u>	<u>Data Description</u>
ATID(PK)	Int	Attendance id
NOL	Numeric	Number of leaves
S_ID(FK)	Char(20)	Staff's ID
MONTH	Numeric	Attendance month
YEAR	Numeric	Attendance year

Payment file

<u>Data-field</u>	<u>Data-type</u>	<u>Description</u>
PID(PK)	Numeric(5)	Payment id
Uname	Char(20)	User Name
Pamt	Numeric(5,2)	Payment amount
Pdate	Date	Payment date
BALANCE	Float	Staff balance
Pmode	Payment mode	Payment mode
Pdesc	Char(20)	Payment description

USER		
Data-field	Data-type	Description
USER_PASS	Char(20)	User password
USER_NAME	Char(20)	User name
QUERY_QUES	Char(20)	Ask for question if password doesn't matches
QUERY_ANS	Char(20)	Query answer
Email	Char(20)	Email
Type	Char(20)	User type

BANK FILE		
DATA FIELD	DATA TYPE	DESCRIPTION
NAME	Char(20)	Bank name
B_ID(PK)	Numeric	Bank id
BBRANCH	Char(20)	Bank branch
BADD	Char(20)	Bank address
BPH_NO	Char(20)	Bank phone number

STAFF SALARY

<u>DATA FIELD</u>	<u>DATA TYPE</u>	<u>DATA DESCRIPTION</u>
<u>SAL_ID(PK)</u>	<u>INT</u>	<u>SALARY ID</u>
<u>SAL_ID(FK)</u>	<u>INT</u>	<u>STAFF ID</u>
<u>BASIC</u>	<u>INT</u>	<u>BASIC SALARY</u>
<u>GROSS SALARY</u>	<u>INT</u>	<u>GROSS SALARY</u>
<u>MONTH</u>	<u>INT</u>	<u>MONTH</u>
<u>YEAR</u>	<u>INT</u>	<u>YEAR</u>

TOOLS/PLATFORM, HARDWARE
& SOFTWARE REQUIREMENT

SOFTWARE :-

Front End : JSP (Java Server Pages)
Back End : Oracle 10g
Operating system : windows 7

HARDWARE :-

Processor : Dual core
RAM : 1 GB
Hard disk : 160 GB
Monitor : 16" color

FUTURE SCOPE

This project can be used in the online service provider after adding or by upgrading some more useful modules in the project for which the company are providing services. This website can be converted to distributed system with little modification. The company also has a plan to develop intranet system in future to increase the productivity and to enhance the growth.

This website is proved to be necessity for the development and growth of the company which is needs a very good decision support system for the manager. As the basic trend of the market does not change coming four or five years this website has a tremendous potential to fulfill the market need at present also in future.

This website contains various analysis reports or crystal reports about home tutor and Client which will be much more helpful to the managers. Also the analytical

reports are very much helpful for the manager of the company to take decision about the demand and how much stock has to be made to optimize the profit.

PROJECT REPORT

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Introduction:-

Home-tuition is becoming basic need for mostly school going students. In today's context every parent is looking for a good home tuition which is no so far from their home and they need safe home tuition. Some tutors want to give home tuition. So, those who are looking for a home tuition or who wants to provide home tuition, this web portal is a complete solution. Online Home tuition Web Portal is an internet portal dedicated to meet every aspect of the consumers needs in the home tuition service. It is a forum where Parents, home tutors can exchange information, quickly, effectively and inexpensively. It features complete solution for every category of home tuition and availability of more than one tutor of one subject and also area wise or distance wise are the highlights of this portal. Our motive is to provide user friendly interface, satisfying the needs of the, employs a new strategy that facilitates easy management of home tuitions. This portal is designed to meet every aspect of the parents and students.

Mission:

Our mission is to touch the horizon where our capabilities may successfully meet with the requirements of our clients, that too with ultimate transparency and cost-effectiveness.

Vision:

To sow the seeds of par-excellence services with customer centric approach and reap the trust of clients.

Carving a vent for your right home tuition we at strive hard to embellish your dreams by providing you the end to end solution related to home tuition searching problem. Clubbing of the trust of our patrons and firm determination of our deft team has resulted in the exponential growth of home tuition service in DELHI NCR. We want to pass our path from the headwind and to cover the entire DELHI NCR. Acquainted well with the nitty-gritty of this field we provide solutions keeping in mind the requirement of both home tuition seekers as well as tutors. Vast database of potential tutors has assisted many home tuition seekers to choose the best from the pool of equals. Moreover, this platform also shows light to various home tutors to reach their perfect destination. So, connect with our child to shape your dreams into reality.

OBJECTIVES:-

We want to become one of the leading home tuition service provider systems into market participants of the industry; we are undertaking various research studies for home tuition service as per market standards. The website should have following features which are given below:



Time Efficiency

- Data security and Reliability
- Fast Data Retrieval
- Huge Data Storage Capacity
- Simple Operation
- Online Demand Processing

User Satisfaction:

Our goal as a successful company in the field of Home tuition service is focused towards satisfaction of website user. With the confidence of quality services, we can obtain a wide base of Home tuition-seekers in the market. We also ascertain open line of communications with our home tuitions at all levels to ensure that they are left fully contented. This has helped us in attaining a trustworthy and satisfied Home tuition base across the DELHI NCR. We want to provide better Home tuition services with the help of computerized system, own company Website. The main motive of the website design is to provide the solution for Home tuition-seeker management, Home tuition management, and Home tuition service business management, generate reports, graphs based one Home tuition analysis, Clients analysis and market analysis etc.

Software Requirements

Specification

We want to provide better customer service with the help of website. The main motive of the software design to provide the solution for customer management, generate reports, graphs based one customer analysis, sales analysis and market analysis etc.

3.0 REQUIREMENTS AND ANALYSIS

SYSTEM ANALYSIS

SYSTEM ANALYSIS

- Analysis Methodology
- Feasibility Analysis
- Cost Estimation Sheet
- Choice of the Platform
- Software Specification
- Hardware Specification

ANALYSIS METHODOLOGY

Methodology of Systems Analysis

Requirements analysis – encompasses those tasks that go into determining the needs or conditions to meet for a new or altered product, taking account of the possibly conflicting requirements of the various stakeholders, such as beneficiaries or users.

Competitive analysis (online algorithm) – shows how online algorithms perform and demonstrates the power of randomization in algorithms.

Lexical Analysis – the process of processing an input sequence of characters and producing as output a sequence of symbols.

Program Analysis (Computer Science) – The process of automatically analyzing the behavior of Computer Programs.

Semantic Analysis (computer science) – a pass by a compiler that adds semantical information to the parse tree and performs certain checks.

Static code analysis – the analysis of computer software that is performed without actually executing programs built from that.

Syntax analysis – a process in compilers that recognizes the structure of programming languages, also known as parsing.

Worst-case execution time – determines the longest time that a piece of software can take to run.

The goal of the requirement analysis is to produce the software requirement specification document also known as the requirement document.

There are two types of major activities of this phase:

1. Detailed investigation: -

This involves a thorough understanding of the existing system, the parts of which must be automated. A clear understanding is needed of the important data entities in the system, the purpose of different actions that are performed and the inputs and outputs. This requires interacting with the clients and the end users, as well as studying the existing manuals and procedures.

2. Analysis or Determination systems requirements:-

This involves determining what the new system should provide. These requirements should satisfy the needs of the client.

INPUTS: Once we know that we can easily determine what the inputs should be. Sometimes, it may happen that required information may not be readily available in the proper form. This may be because of the existing forms are not properly designed. Sometimes, it may not be possible to get the required information without the help of top management. **Accuracy:** - If the data is not accurate, the output will be wrong.

- Timeliness:- If data is not obtained in time, the entire system fall into arrears.
- Proper format:- The inputs must be available in proper format.
- Economy:- The data must be produced at the least cost.

OUTPUTS:

1. First of all, we must determine what the objectives or goals are, what do we intend to achieve, what is the purpose of our work; in other words, what is the main aim behind the system. Defining aim is very vital in system work. If we do not know where we want to go, we will not know when we have reached there. Once we know our aim, we can try to achieve it in the best possible way.

FILES: - As the word implies files are used to store data. Most of the inputs necessary for the system may be historical data, or it may be possible that these are generated from within the system. These are stored in files either in terms of isolated facts or in large volumes.

PROCESSES:- Here we come to the details of how the inputs and files are converted into outputs. This involves the programs and the way in which data is processed through the computer. The processing involves a set of logical steps. These steps are required to be instructed to the computer and this is done by a series of instructions called “programs”.

Analyzing system data

After gathering sufficient data to understand how the existing system operates, a proper study on data should be made for evaluating the current operation.

Identifying Design Requirement

From the analysis, design requirements are formulated. The requirements for the new system are those features that must be incorporated to produce the improvements. The new system should have the following features:

- Greater speed of processing
- Effective procedure to eliminate errors
- Better accuracy
- Faster retrieval of information
- Integration of data
- Larger capacity of storing data with reduced cost

To achieve these features, several alternatives must be studied and evaluated. One alternate may not satisfy all the features. Then I select those that are feasible economically, technically and operationally. The approach may emphasize the introduction of computerized system, replacement staff, changes in operational procedures, or a combination of several options.

METHODOLOGY ADOPTED

The project follows the waterfall model. This states that the phases are organized in a linear order. It is also known as linear order. It is also known as linear sequential model.

There are two basic assumptions for justifying the linear ordering of phases in the manner proposed by the water fall model.

- For a successful product, all phases listed in the water fall model must be performed any way.
- Any different ordering of the phases will be reused in a less successful s/w product.

WATER FALL MODEL

The Waterfall Model was first Process Model to be introduced. It is also referred to as a linear-sequential life cycle model. It is very simple to understand and use. In a waterfall model, each phase must be completed before the next phase can begin and there is no overlapping in the phases.

Waterfall model is the earliest SDLC approach that was used for software development.

The Water Fall Model illustrates the software development process in linear sequential flow; hence it is also referred to as a linear-sequential life cycle model. This means that any phase in the development process begins only if the previous phase is complete. In waterfall model phases do not overlap.

SOFTWARE FEASIBILITY

FEASIBILITY STUDY – SOFTWARE ENGINEERING FEASIBILITY STUDY – SOFTWARE ENGINEERING

A feasibility study aims to objectively and rationally uncover the strengths and weaknesses of an existing business or proposed venture, opportunities and threats present in the environment, the resources required to carry through, and ultimately the prospects for success. In its simplest terms, the two criteria to judge feasibility are cost required and value to be attained.

A well-designed feasibility study should provide a historical background of the business or project, a description of the product or service, accounting statements, details of the operations and management, marketing research and policies, financial data, legal requirements and tax obligations. Generally, feasibility studies precede technical development and project implementation.

A feasibility study evaluates the project's potential for success; therefore, perceived objectivity is an important factor in the credibility of the study for potential investors and leading institutions. It must therefore be conducted with an objective, unbiased approach to provide information upon which decision can be based.

Technical Feasibility

This assessment is based on an outline design of system requirements, to determine whether the company has the technical expertise to handle completion of the project. When writing a feasibility report, the following should be taken to consideration:

A brief description of the business to assess more possible factors which could affect the study

The part of the business being examined

The human and economic factor

The possible solutions to the problem

At this level, the concern is whether the proposal is both technically and legally feasible (assuming moderate cost).

The technical feasibility assessment is focused on gaining an understanding of the present technical resources of the organization and their applicability to the expected needs of the proposed system. It is an evaluation of the hardware and software and how it meets the need of the proposed system

Legal feasibility

Determines whether the proposed system conflicts with legal requirements, e.g. a data processing system must comply with the local data protection regulations and if the proposed venture is acceptable in accordance to the laws of the land.

Operational feasibility

Operational feasibility is the measure of how well a proposed system solves the problems, and takes advantage of the opportunities identified during scope definition and how it satisfies the requirements identified in the requirements analysis phase of system development.[6]

The operational feasibility assessment focuses on the degree to which the proposed development projects fits in with the existing business environment and objectives with regard to development schedule, delivery date, corporate culture and existing business processes.

To ensure success, desired operational outcomes must be imparted during design and development. These include such design-dependent parameters as reliability, maintainability, supportability, usability, producibility, disposability, sustainability, affordability and others. These parameters are required to be considered at the early stages of design if desired operational behaviors are to be

realized. A system design and development requires appropriate and timely application of engineering and management efforts to meet the previously mentioned parameters. A system may serve its intended purpose most effectively when its technical and operating characteristics are engineered into the design. Therefore, operational feasibility is a critical aspect of systems engineering that needs to be an integral part of the early design phases. [7]

Schedule feasibility

A project will fail if it takes too long to be completed before it is useful. Typically this means estimating how long the system will take to develop, and if it can be completed in a given time period using some methods like payback period. Schedule feasibility is a measure of how reasonable the project timetable is. Given our technical expertise, are the project deadlines reasonable? Some projects are initiated with specific deadlines. It is necessary to determine whether the deadlines are mandatory or desirable.

Fact Finding

Fact finding means learning as much as possible about the present system.

To do fact finding, I do the following:

- Interviews personnel
- Prepares questionnaires
- Observes the current system

- Gather forms and documents currently in use
- Determines the flow of data through the system, and
- Clearly determines the system requirements.

COST/BENEFIT ANALYSIS

COST AND BENEFIT ANALYSIS

Cost-benefit analysis is a tool for evaluating effectiveness of the project. It may be used by the management to decide as to what extent benefits outweigh the costs.

The cost associated with the proposed business system are the expenses arising from developing, installing, training and implementing the system. The benefits are the advantages gained, including money savings, from implementing the proposed system. Here we plan how effective our project will be when it completely developed. Here we checked whether this project benefitted us or not.

Worthwhile to invest in the proposed project. If the return on the investment is high, then the project is considered economically worthwhile.

TYPES OF COSTS AND BENEFIT

- TANGIBLE OR INTANGIBLE

Tangible cost means that which is definite and can therefore be determined in advance. It is the cost which can be estimated quite accurately.

Intangible cost refers to something which we know exists but financial value of which cannot be accurately accessed.

Tangible benefits, like costs, are not difficult to specify accurately.

Benefits such as more satisfied customers or an improved corporate image or faster response to customer inquiries or better working condition are not easily quantified. These are all **intangible benefits**.

- FIXED OR VARIABLE:

Costs that are constant and do not change are **fixed costs**.

Variable costs are those that are incurred periodically and vary with the volume of work.

Fixed benefits are constant and do not change.

Variable benefits, on the other hand, are realized on an irregular basis.

- **DIRECT OR INDIRECT:**

Direct costs are those costs directly associated with the system that are incurred in buying equipment, employing people, cost of consumable items, rent for accommodation etc.

Indirect costs are the results of operations that are not directly associated with a given system or activity.

A new system that can handle 25% more transactions per day is giving a **direct benefit**.

Indirect benefits are achieved as a by-product of another activity or system.

Planning and Scheduling

PROJECT PLANNING

The objective of project planning can be described in the terms of the successful project which has been completed on time, within the budgeted cost and to the technical specification which satisfied the user. The project planning calls for detailing the project into activities, estimating the resource requirements and also the time for each activity relationships. Scheduling requires the details of starting and completion dates for each activity.

Gantt chart is one of the techniques of project scheduling. Also known as bar chart developed by Henry. L. Gantt. These charts show the graphical representation of work on the time scale.

PERT (Program Evaluation and Review Technique)

PERT is a network planning method for managing and controlling large one-time projects.

It is a technique for scheduling complicated projects comprising many activities, some of which are interdependent.

A **PERT network** is a flowchart like diagram that depicts the sequence of activities

needed to complete a project and the time or costs associated with each activity.

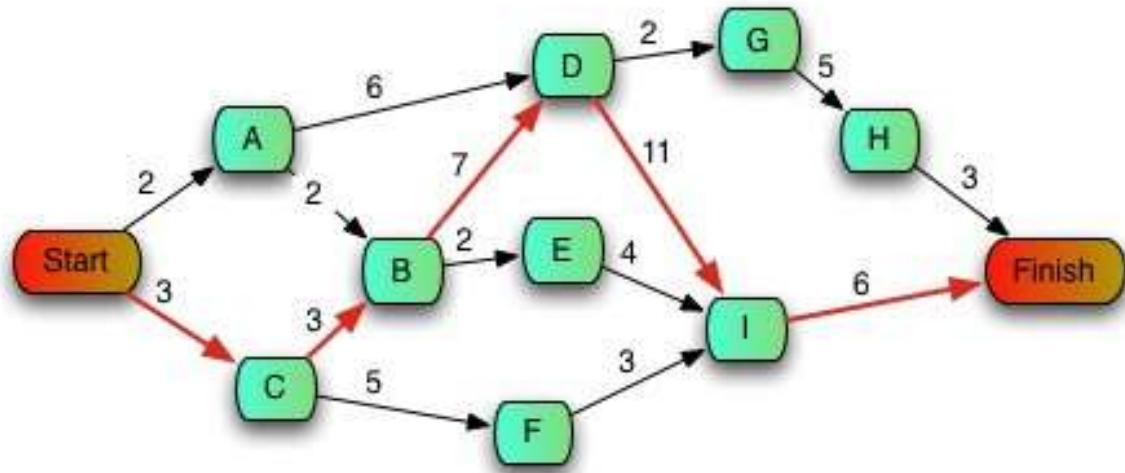
1. All of the major activities in the project are specified.
2. The sequences of these activities are determined
3. A **network diagram** a graphic depiction of the interrelationships among activities, is constructed.
 - a. An **activity** is a work component to be accomplished, and is represented by an arrow on the network diagram.
 - b. An **event (or node)** represents a single point in time that is the beginning or the ending of an activity.

4. Three time estimates for each activity are determined and an expected time is calculated for each activity.

5. The **critical path** is the path of activities and events in the network that will take the longest time to complete

- a. Delays on any activities on the critical path mean that the project will be delayed.
- b. **Slack** is the degree of latitude about when various activities can be started without endangering the completion date of the entire project.

6. After the project has begun, actual times for completion of each activity are collected and recorded on the PERT network so that any rescheduling and adjustments can be made as quickly as possible.



GANTT CHART OR TIME LINE CHART

A timeline chart can be developed for the entire project. Alternatively, separate charts can be developed for each project function or for each individual working on the project.

When multiple bars occur at the same time on the calendar, task concurrency is implied. The diamonds indicate milestones.

Once the information necessary for the generation of a timeline chart has been input, the majority of software project scheduling tools produce project tables—a tabular listing of all project tasks, their planned and actual start- and end-dates, and a variety of related information (Figure 1). Used in conjunction with the timeline chart, project tables enable the project manager to track progress.

Gantt chart is used for the time estimation of the project. A tabular form is maintained where rows indicate the task and column indicates duration. The horizontal bar that spans across column indicates duration of the task.

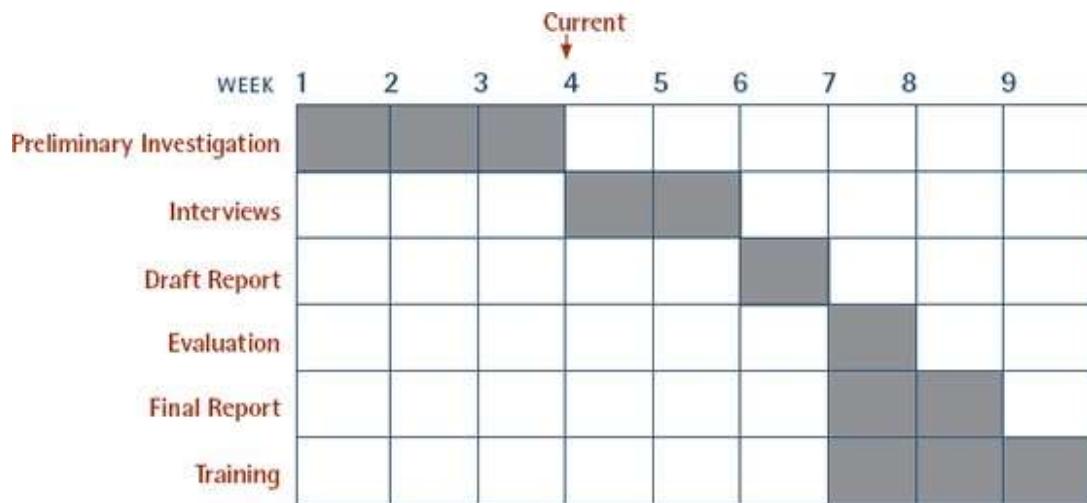


Figure1. GANTT CHART FOR UOMSMS

SYSTEM DESIGN

The system design develops the architectural detail required to build a system or product. As in the case of any systematic approach, this software too has undergone the best possible design phase fine tuning all efficiency, performance and accuracy levels. The first step in system designing is to determine how the output is to be produced and in what format. Samples of the output and input are also presented. In the second step, input data and master files are to be designed to meet requirement of the proposed output. The processing phases are handled through program construction and testing, including a list of the programs needed to meet the system's objectives and complete documentation.

DESIGN METHODOLOGY

System design is the solution to the creation of a new system. This phase is composed of several systems. This phase focuses on the detailed implementation of the feasible system.

It emphasis on translating design specifications to performance specification.

System design has two phases of development logical and physical design.

During logical design phase the analyst describes inputs (sources), out puts (destinations), databases (data stores) and procedures (data flows) all in a format that meets the uses requirements. The analyst also specifies the user needs and at a level that virtually determines the information flow into and out of the system and the data resources. Here the logical design is done through data flow diagrams and database design.

The physical design is followed by physical design or coding. Physical design produces the working system by defining the design specifications, which tell the programmers exactly what the candidate system must do. The programmers write the necessary programs that accept input from the user, perform necessary processing on accepted data through call and produce the required report on a hard copy or display it on the screen.

LOGICAL DESIGN

Logical design of an information system shows the major features and also how they are related to one another. The first step of the system design is to design logical design

elements. This is the most creative and challenging phase and important too. Design of proposed system produces the details of the state how the system will meet the requirements identified during the system analysis that is, in the design phase we have to find how to solve the difficulties faced by the existing system. The logical design of the proposed system should include the details that contain how the solutions can be implemented. It also specifies how the database is to be built for storing and retrieving data, what kind of reports are to be created and what are the inputs to be given to the system. The logical design includes input design, output design, and database design and physical design.

PHYSICAL DESIGN

The process of developing the program software is referred to as physical design. We have to design the process by identifying reports and the other outputs the system will produce. Coding the program for each module with its logic is performed in this step. Proper software specification is also done in this step.

MODULAR DESIGN

A software system is always divided into several sub systems that makes it easier for the development. A software system that is structured into several subsystems makes it easy for the development and testing. The different subsystems are known as the modules and the process of dividing an entire system into subsystems is known as modularization or decomposition.

A system cannot be decomposed into several subsystems in any way. There must some logical barrier, which facilitates the separation of each module.

The separation must be simple but yet must be effective so that the development is not affected.

The system under consideration has been divided into several modules taking in consideration the above-mentioned criteria. The different modules are:

MODULES:-

- ◆ Staff management system
- ◆ Client management system
- ◆ Home Tuition searching management system
- ◆ Home Tutor Management system
- ◆ Advertising and promotion system
- ◆ Security Management System
- ◆ Transaction management system

INPUT DESIGN

The input design is the link between the information system and the user. It comprises the developing specification and procedures for data preparation and those steps are necessary to put transaction data into a usable form for processing data entry. The activity of putting data into the computer for processing can be achieved by inspecting the computer to read data from a written or printed document or it can occur by having

people keying the data directly into the system. The design of input focuses on controlling the amount of input required, controlling errors, avoiding delay, avoiding extra steps and keeping the process simple.

The system needs the data regarding the asset items, depreciation rates, asset transfer, physical verification for various validation, checking, calculation and report generation..

The error raising method is also included in the software, which helps to raise error message while wrong entry of input is done. So in input design the following things are considered.

- What data should be given as input?
- How the data should be arranged or coded?
- Methods for preparing input validations and steps to follow when error occur
- The samples of screen layout are given in the appendix.

OUTPUT DESIGN

Computer output is the most important and direct information source to the user.

Output design is a process that involves designing necessary outputs in the form of reports that should be given to the users according to the requirements. Efficient,

intelligible output design should improve the system's relationship with the user and help in decision making. Since the reports are directed referred by the management for taking decisions and to draw conclusions they must be designed with almost care and the details in the reports must be simple, descriptive and clear to the user.

So while designing output the following things are to be considered.

- Determine what information to present
- Arrange the presentation of information in an acceptable format
- Decide how to distribute the output to intended receipts
- Depending on the nature and future use of output required, they can be displayed on the monitor for immediate need and for obtaining the hardcopy.

The options for the output reports are given in the appendix.

DATABASE DESIGN

The overall objective in the development of database technology has been to treat data as an organizational resource and as an integrated whole. DBMS allow data to be protected and organized separately from other resources. Database is an integrated collection of data. The most significant form of data as seen by the programmers is data as stored on the direct access storage devices. This is the difference between logical and physical data.

Database files are the key source of information into the system. It is the process of designing database files, which are the key source of information to the system. The files

should be properly designed and planned for collection, accumulation, editing and retrieving the required information.

The organization of data in database aims to achieve three major objectives: -

- Data integration.
- Data integrity.
- Data independence.

The proposed system stores the information relevant for processing in the MS SQL SERVER database. This database contains tables, where each table corresponds to one particular type of information. Each piece of information in table is called a field or column. A table also contains records, which is a set of fields. All records in a table have the same set of fields with different information. There are primary key fields that uniquely identify a record in a table. There are also fields that contain primary key from another table called foreign keys. Database

What is Normalization?

Normalization is a process of eliminating redundant data and storing the related information in a table.

1. Eliminating redundant data.
2. Faster update
3. Improve performance

4. Performance in indexes

Let we see different Normalization forms

1. First Normal Form (1NF) if a Table is said to be 1NF then it should satisfy following rules.

- Each cell must have one value
- Eliminating Duplicate Columns
- Create a separate table for group of related data and each row must be identify by primary key.

That means each cell must have single value and each row should be uniquely identified by Primary key

2. Second Normal Form (2NF)

The Table must be in second normal form, then it should satisfy the following rules.

- It should satisfy first normal form
- Separate the particular columns , values are duplicated in each row should be place in separate table
- Create the relationship between the tables

3. Third Normal Form (3NF)

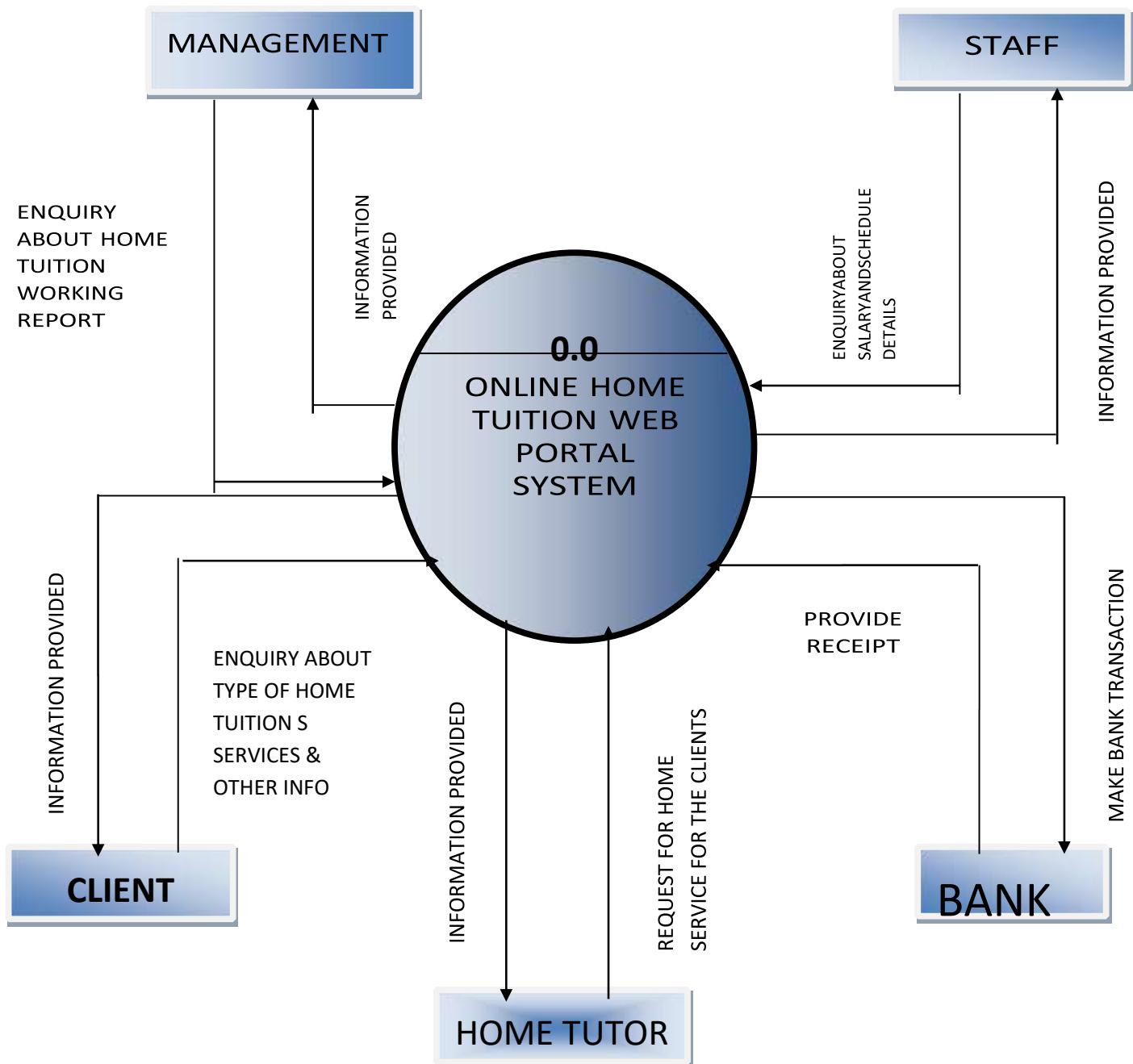
The table must be in 3NF, if it is satisfying the following rules

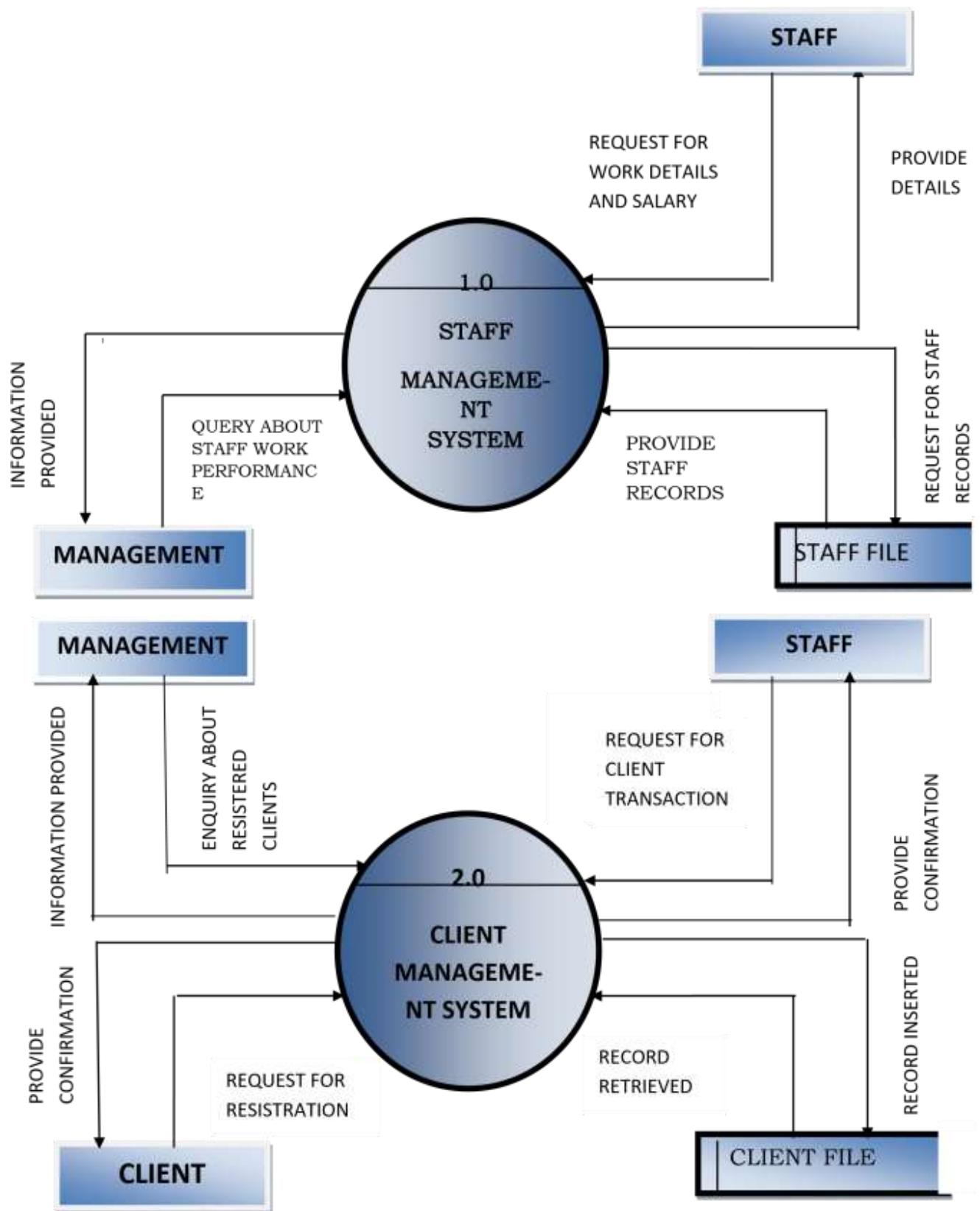
- Must be in 2NF
- Separate the columns that are not dependent upon the primary key of the table.

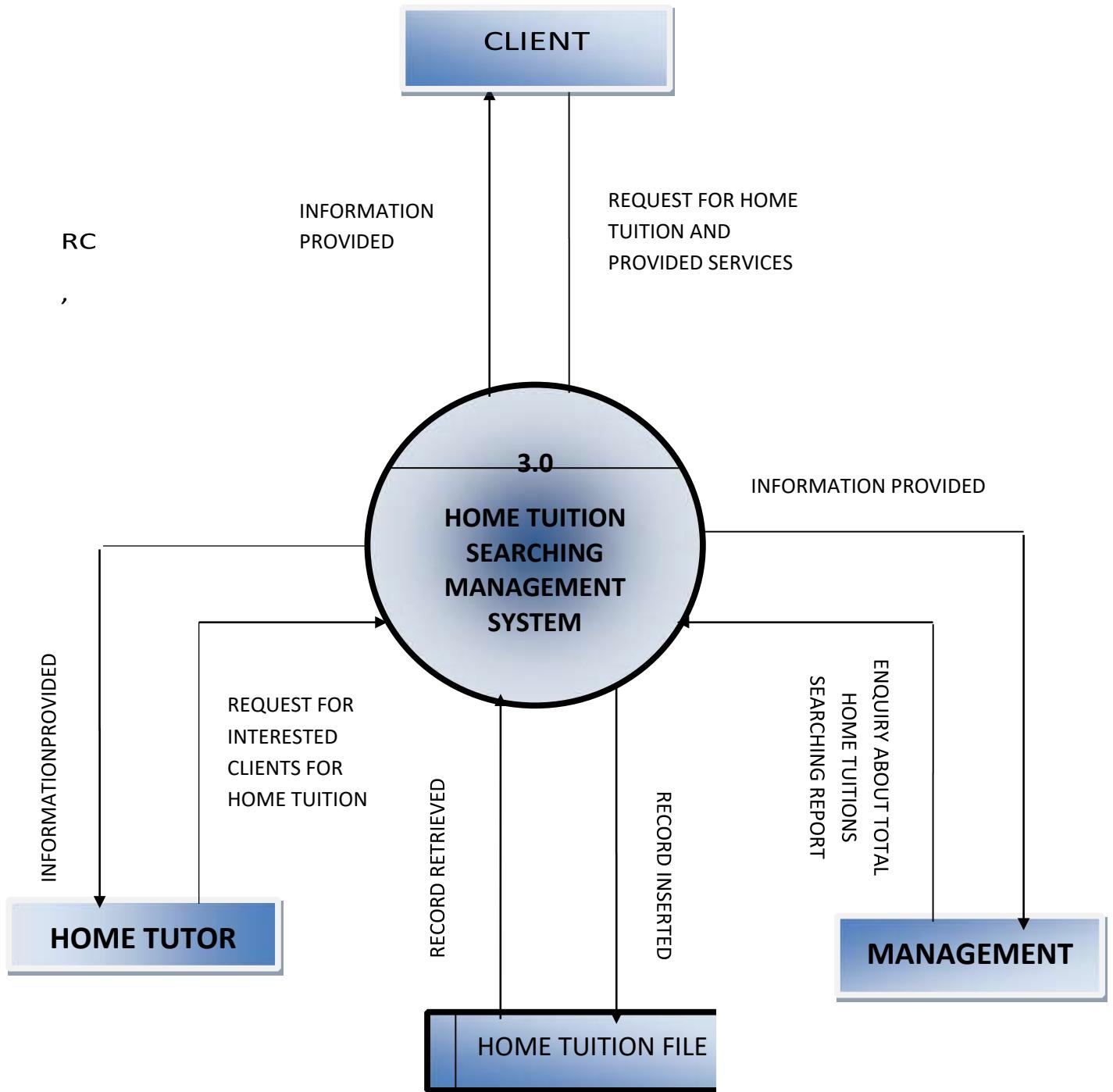
4. Fourth Normal Form (4NF)

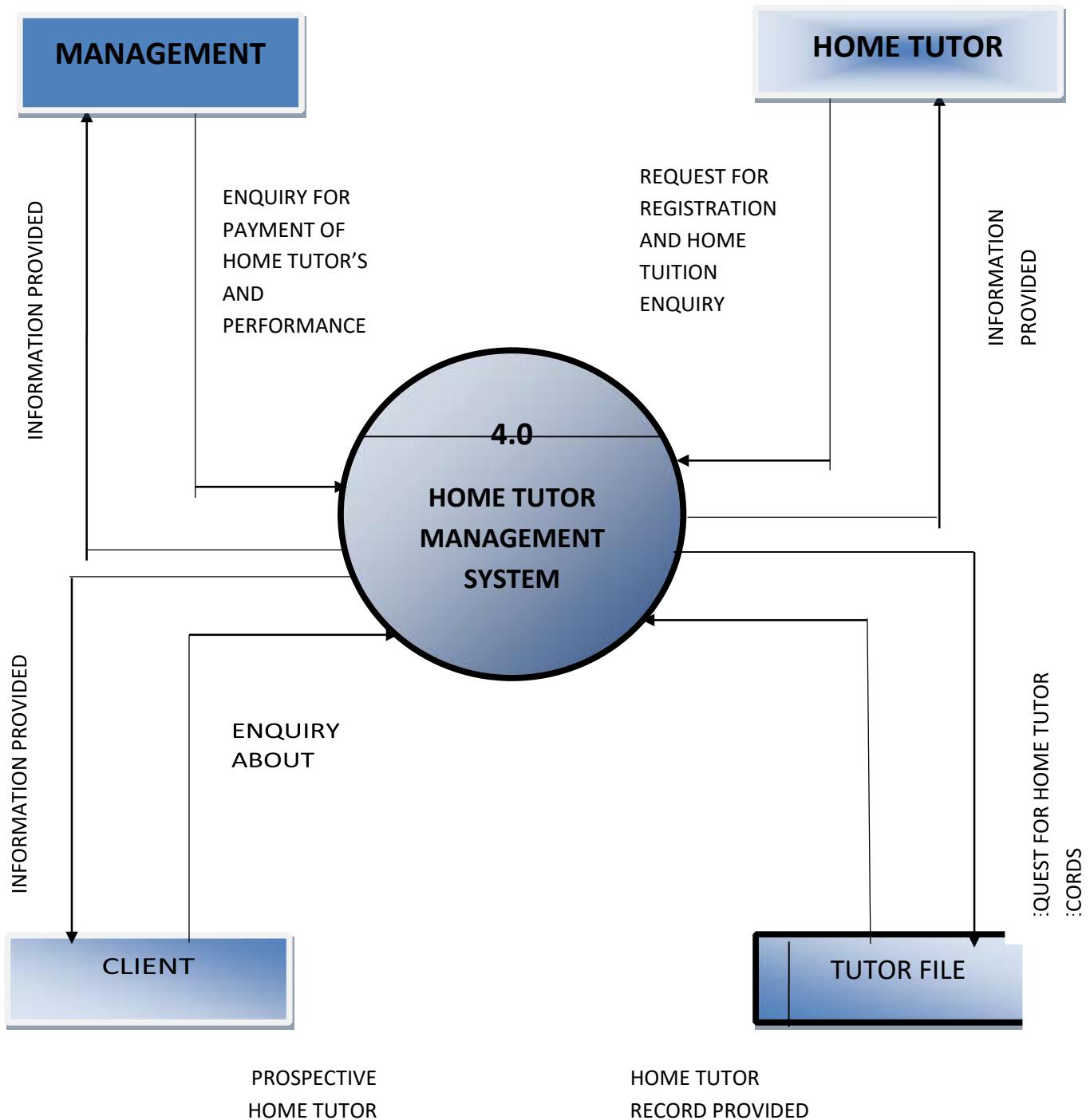
- It should be in 3NF
- The non key columns should be dependent on full primary key instead of partial key, if then separate it.

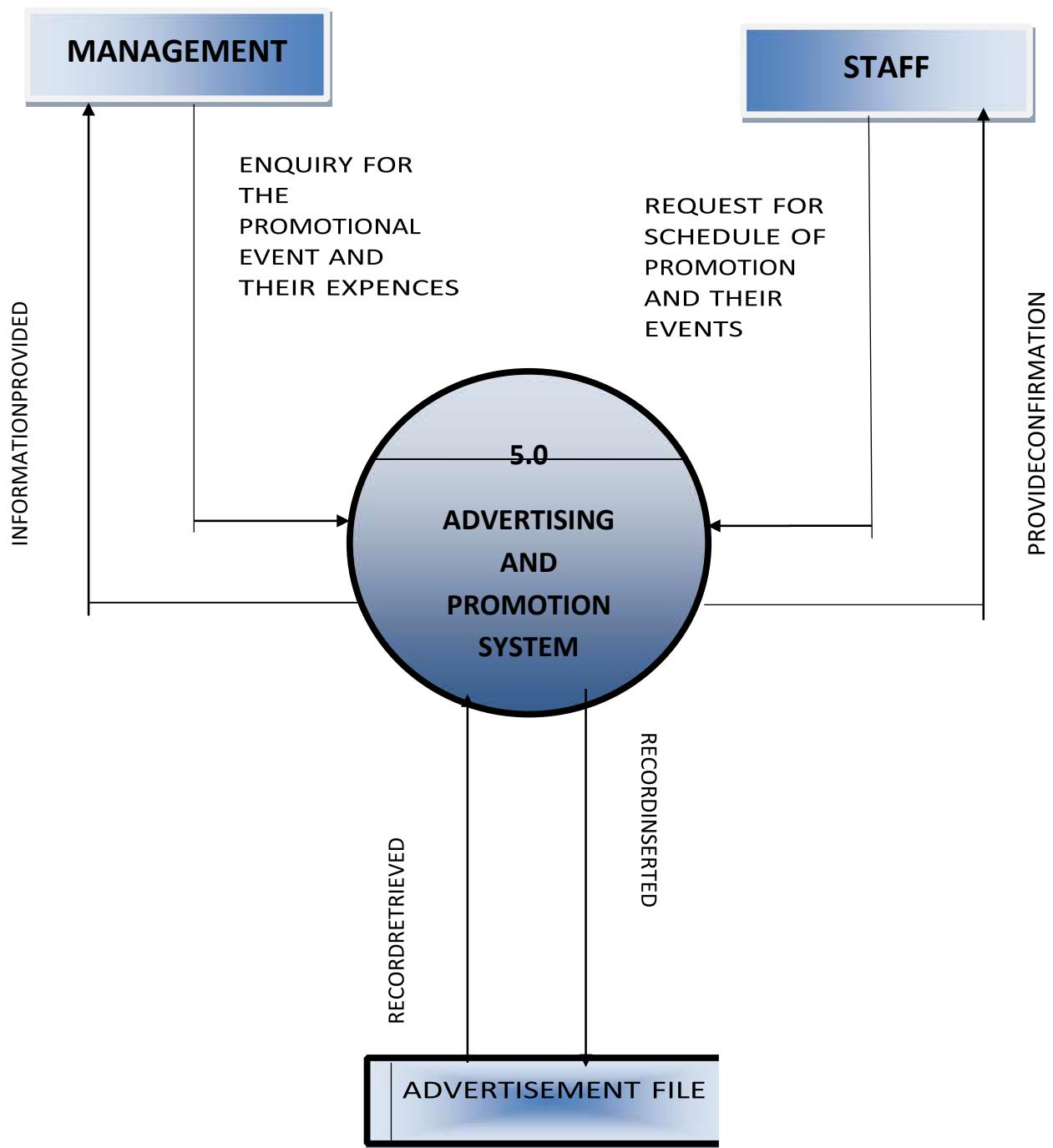
DFD(DATA FLOW DIAGRAM)

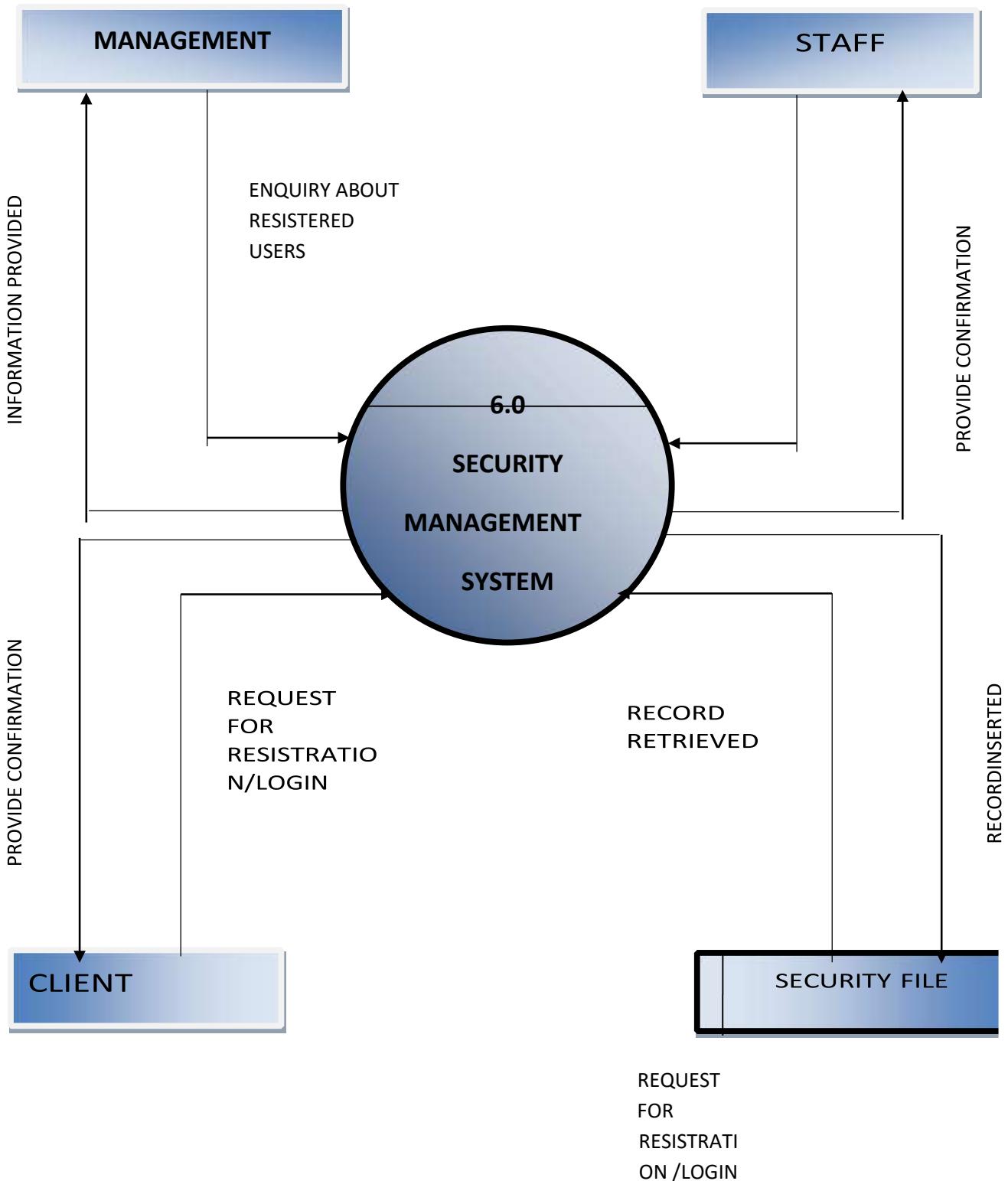


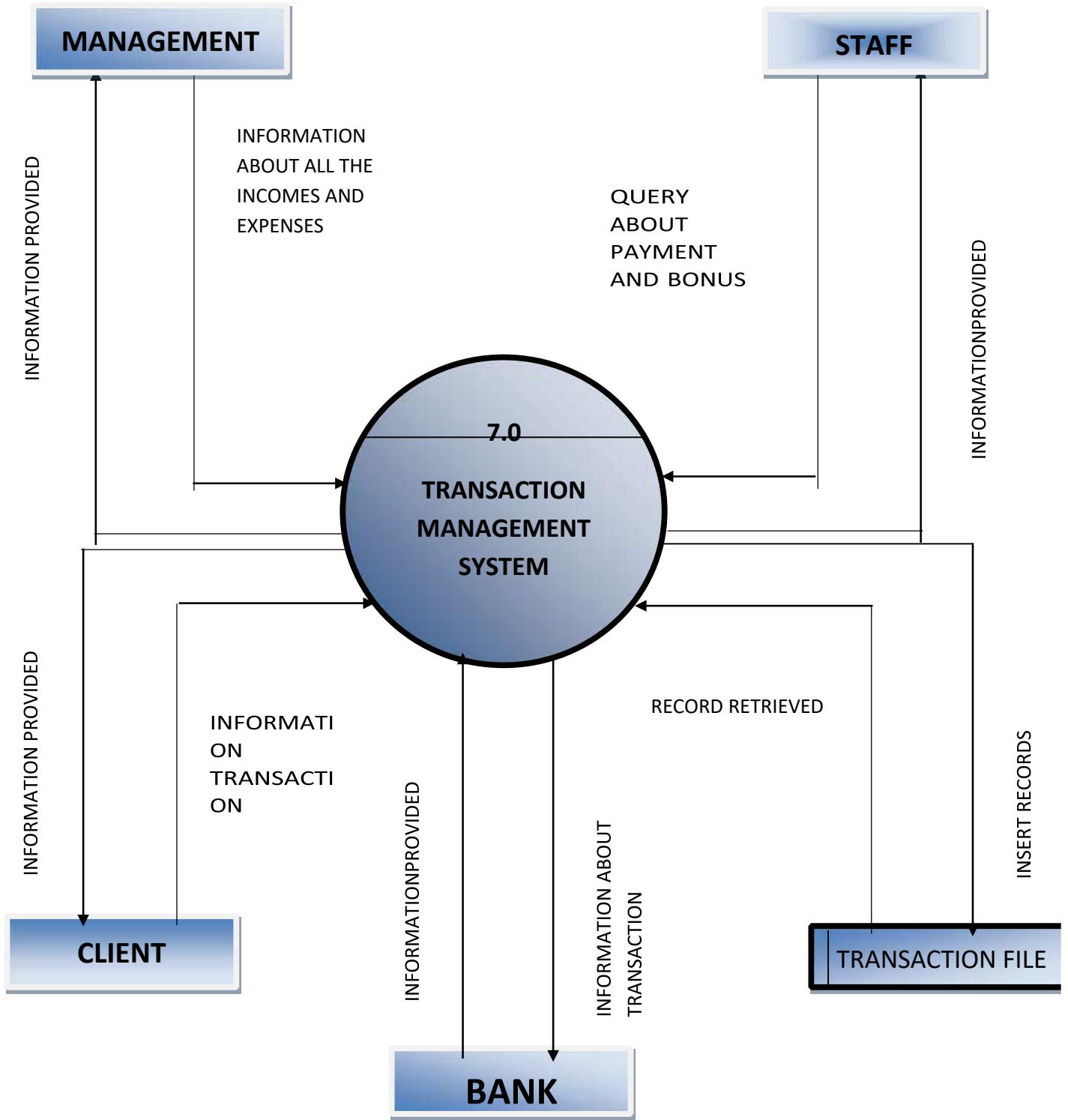


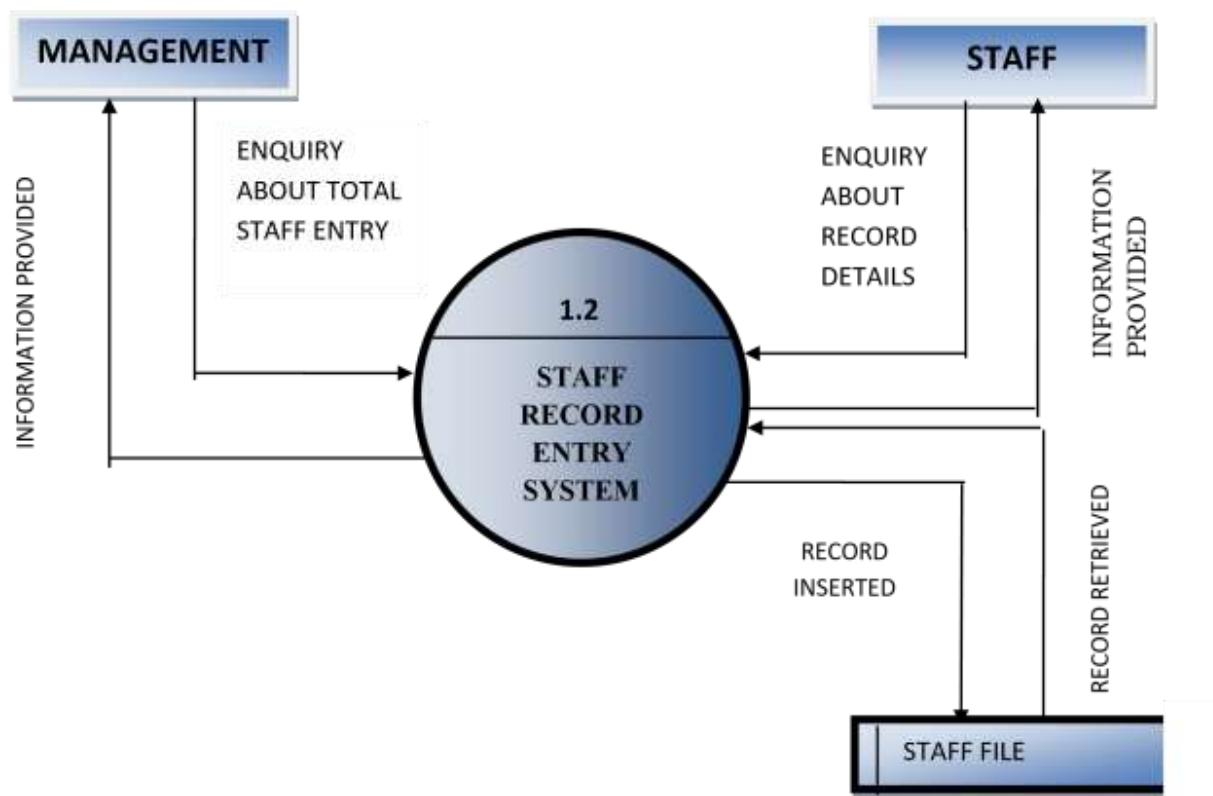
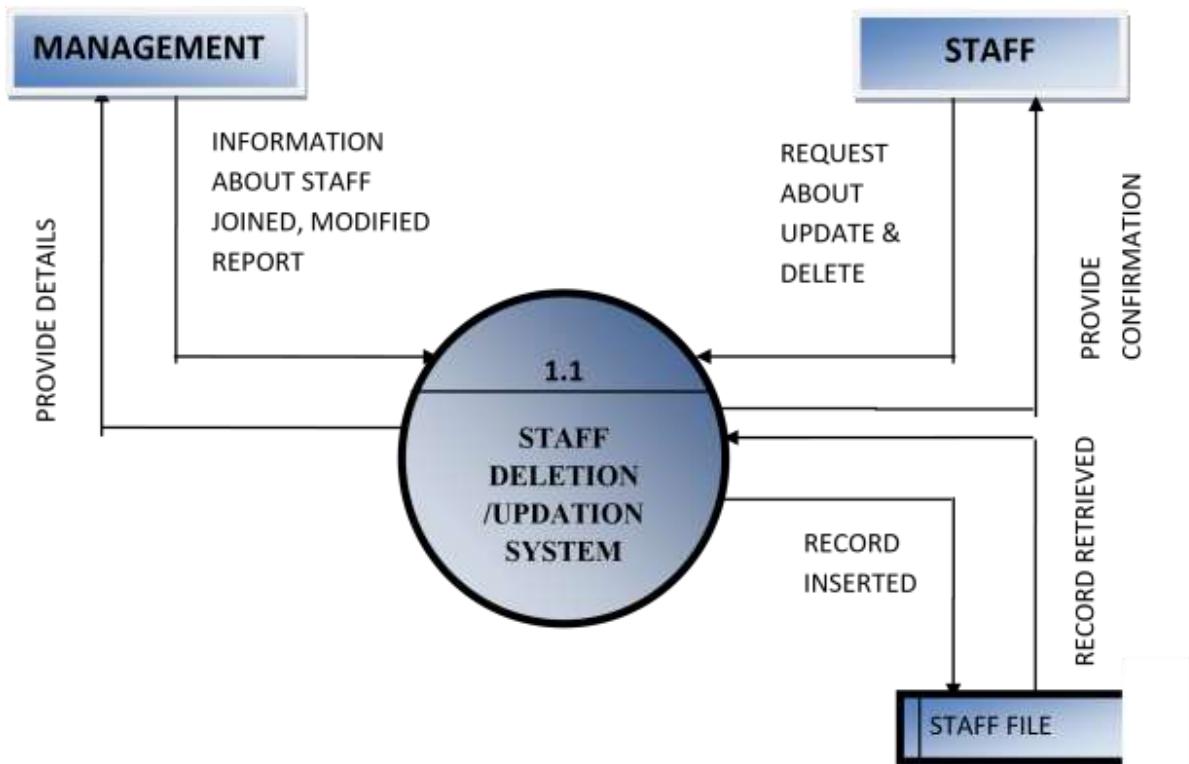


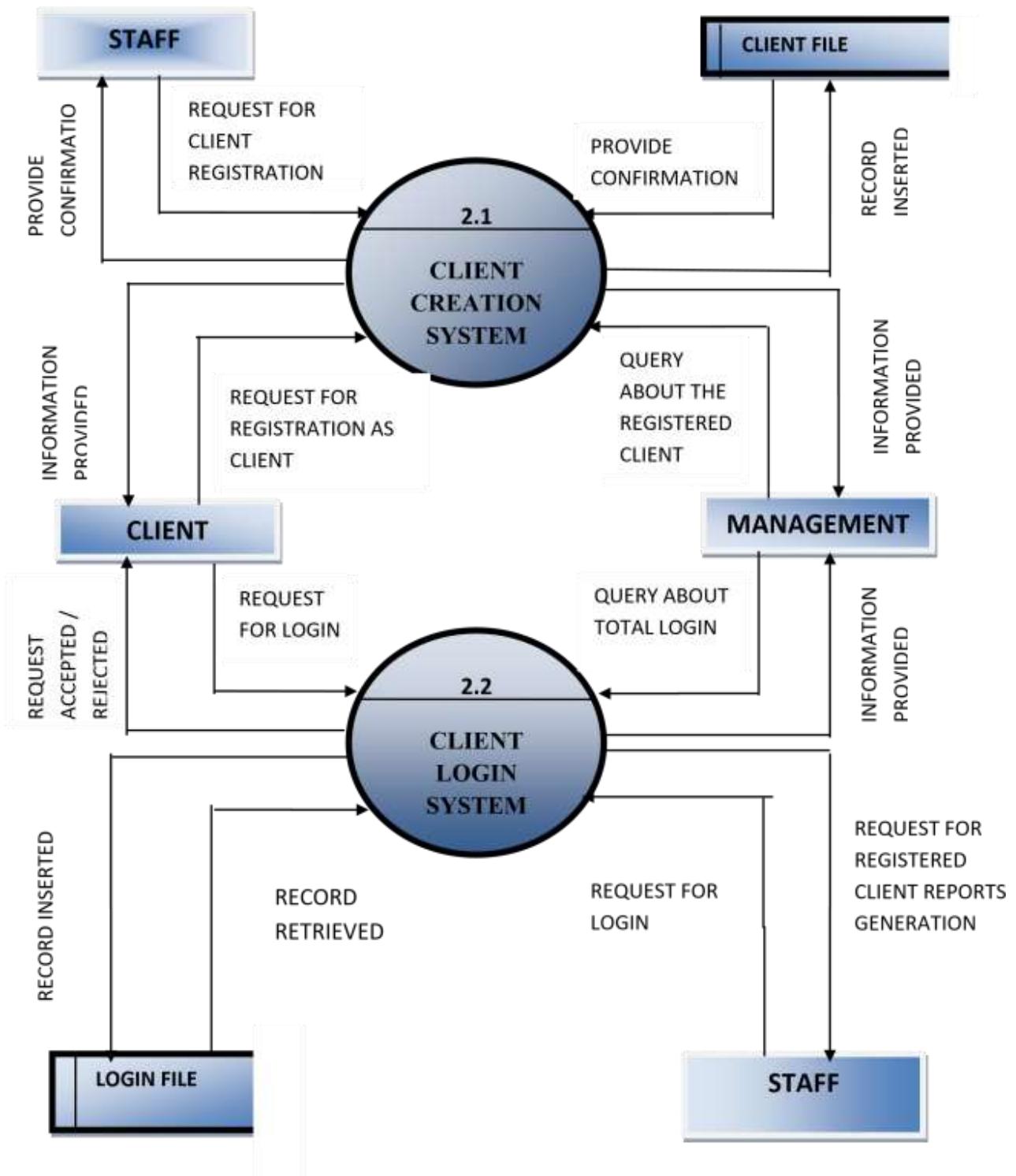


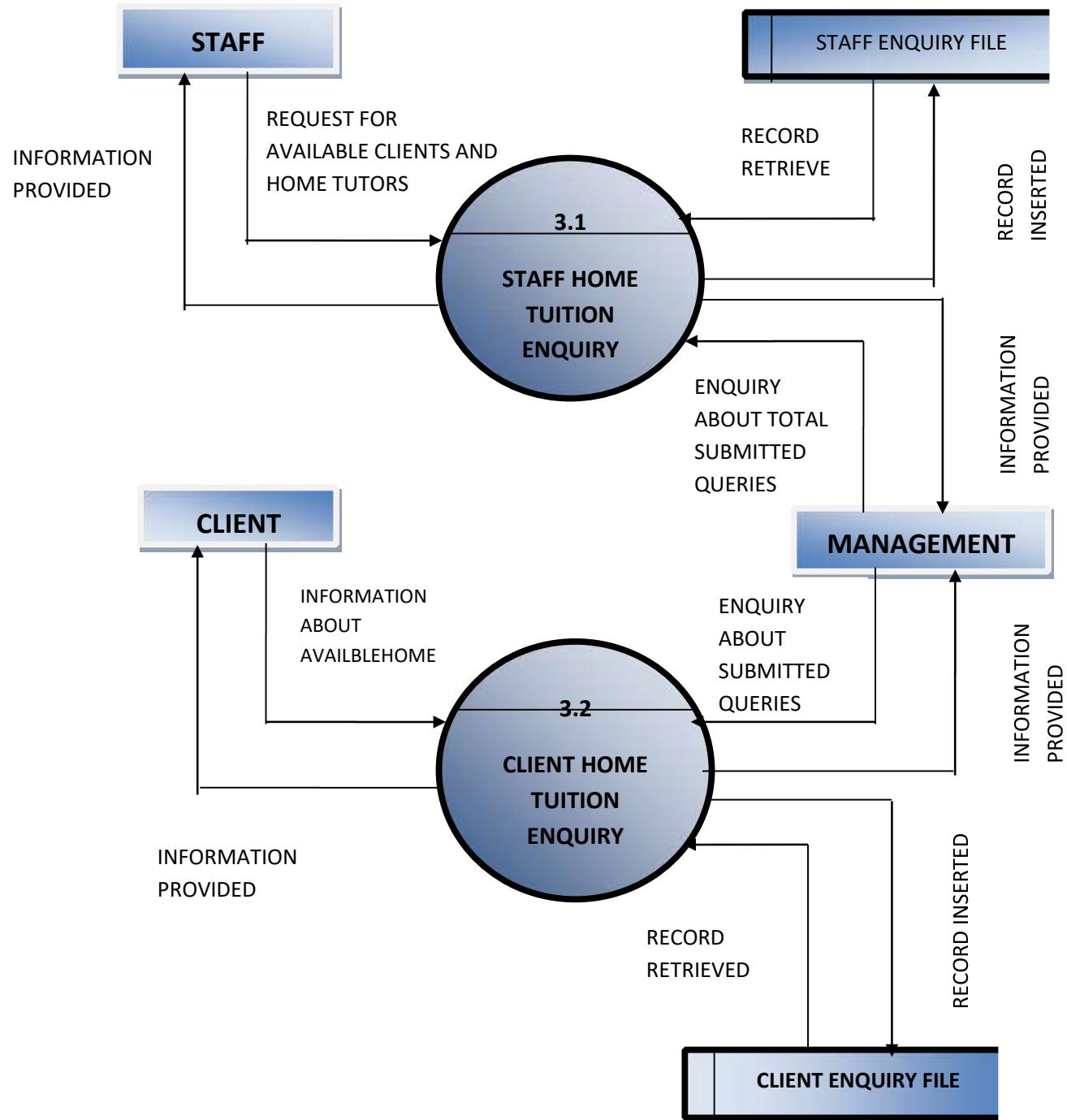


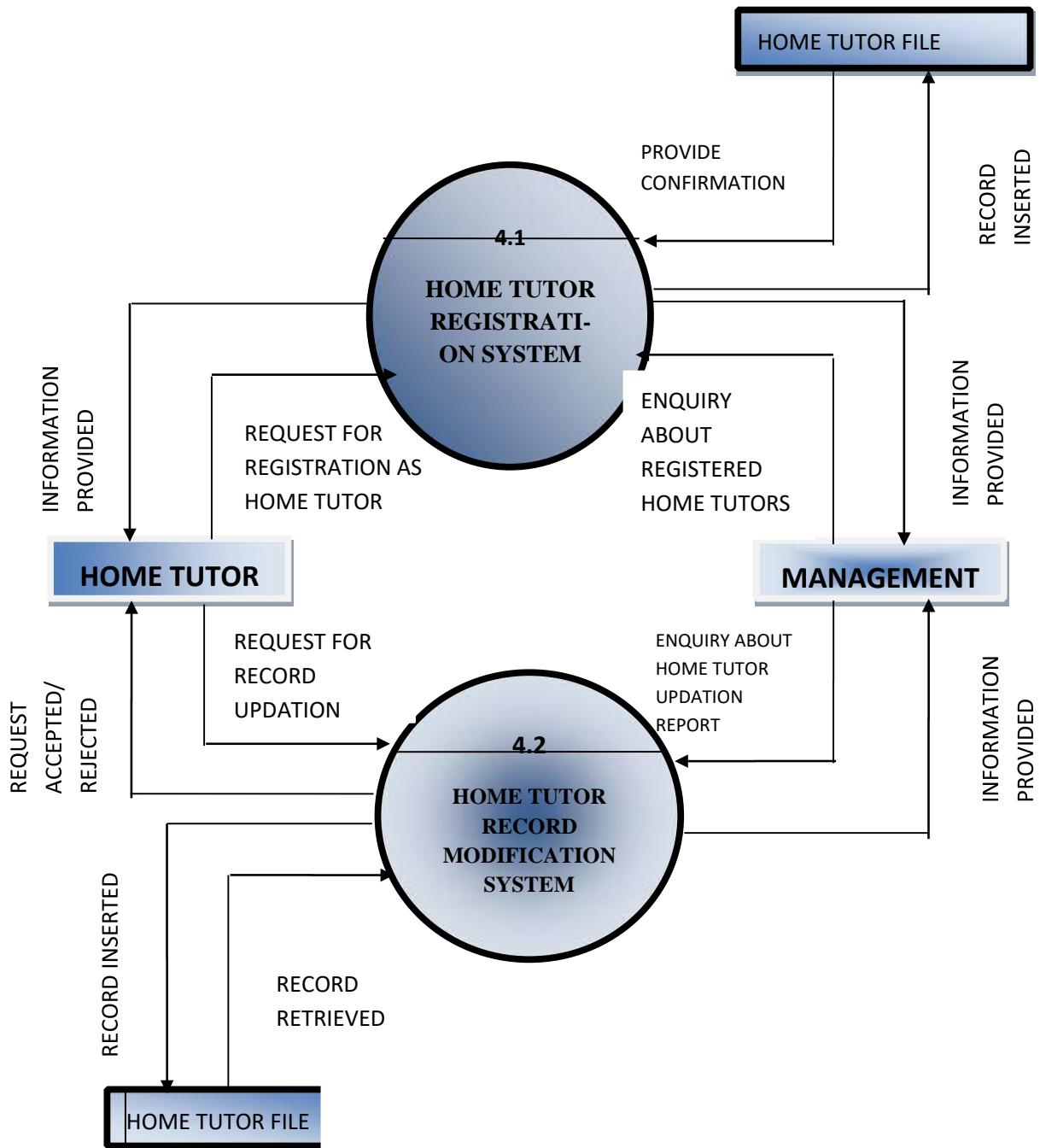


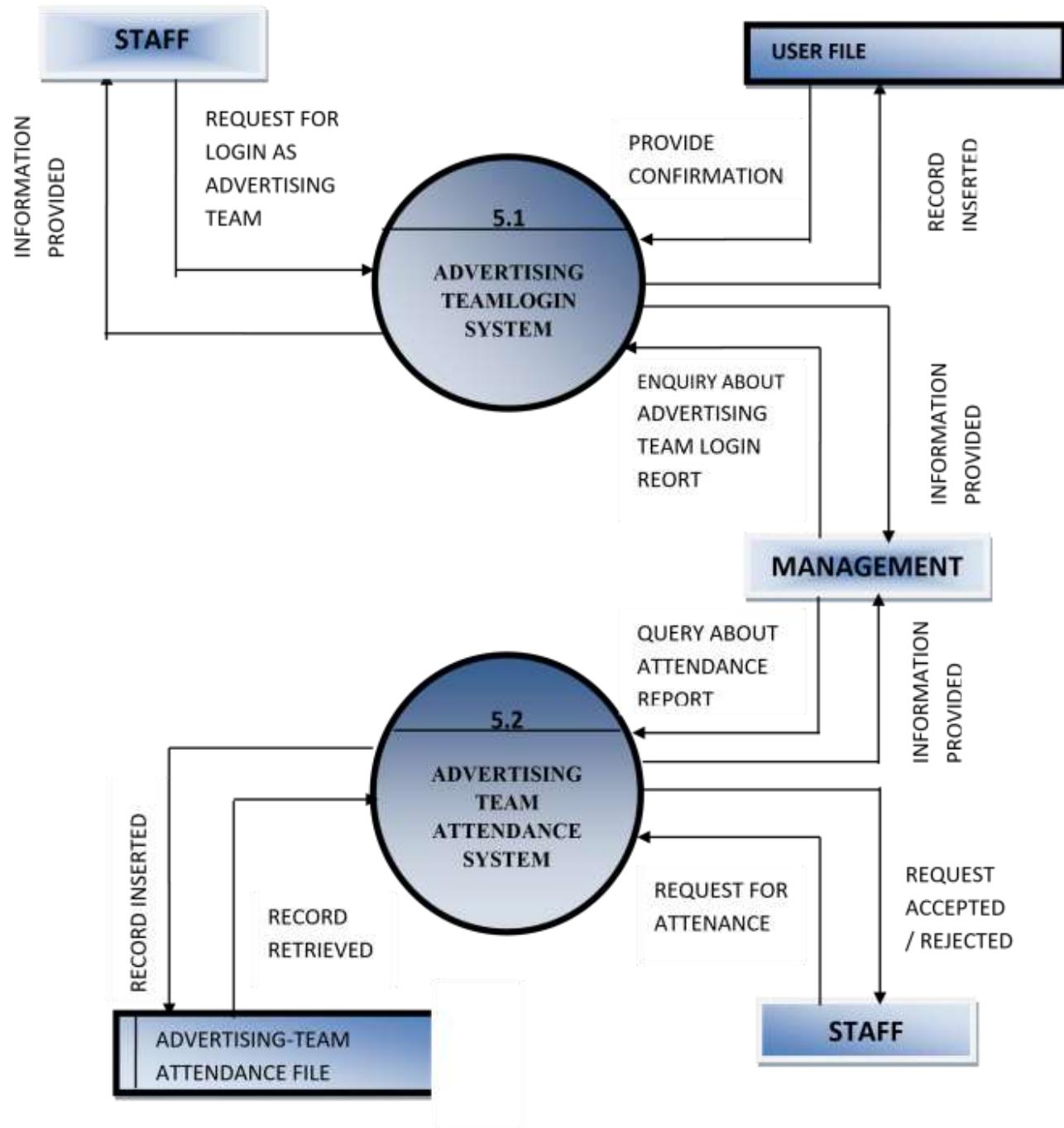


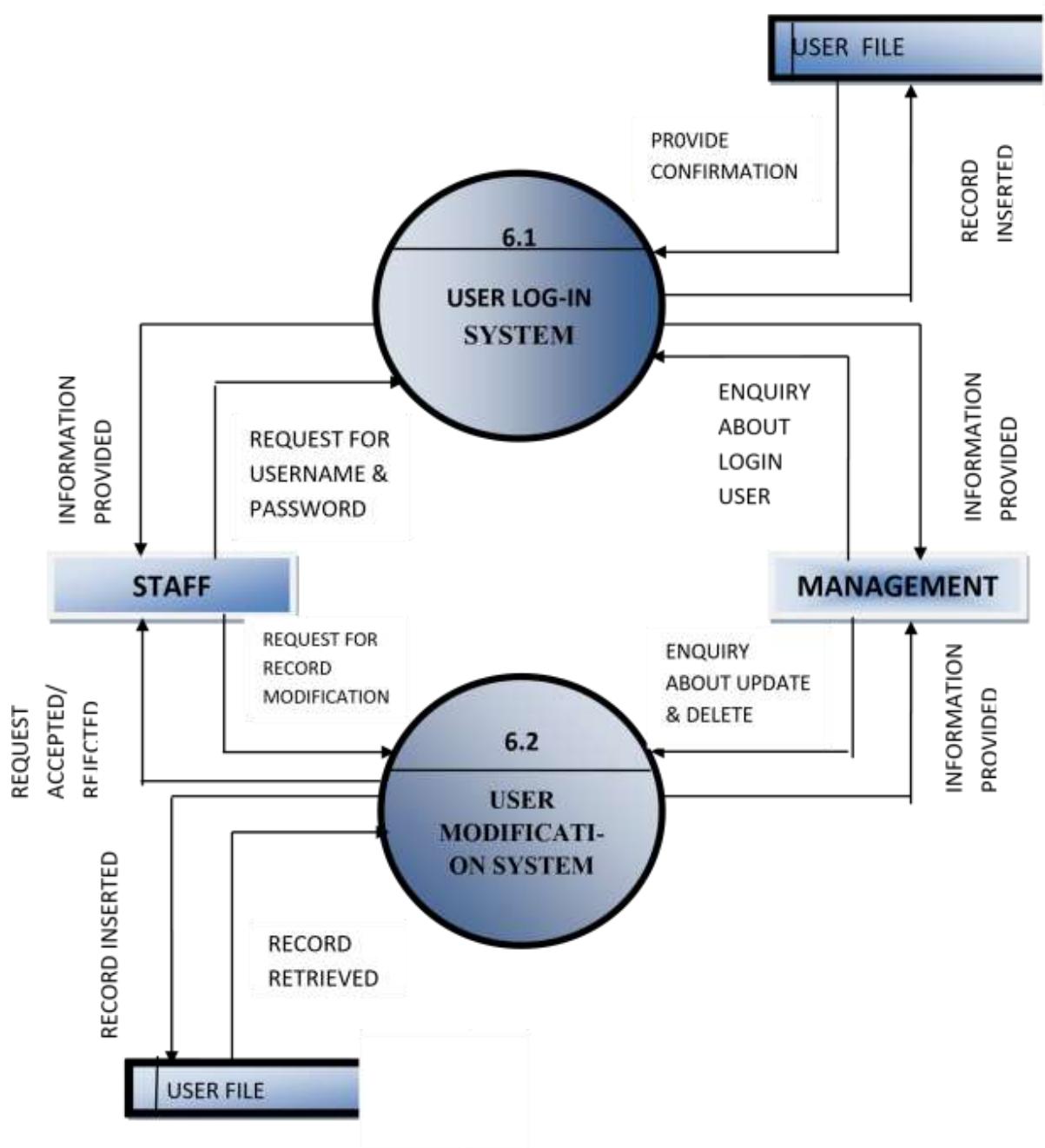


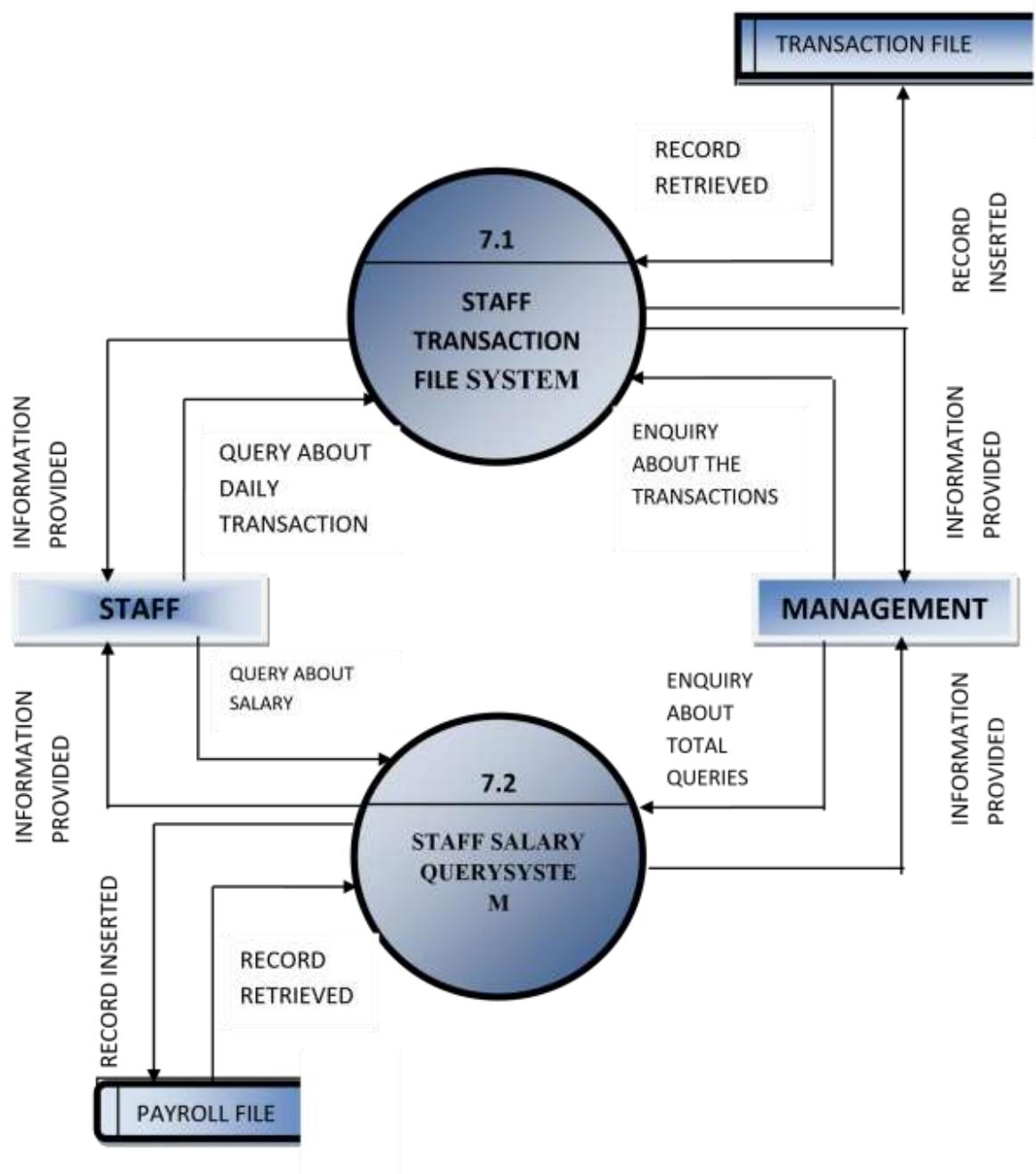




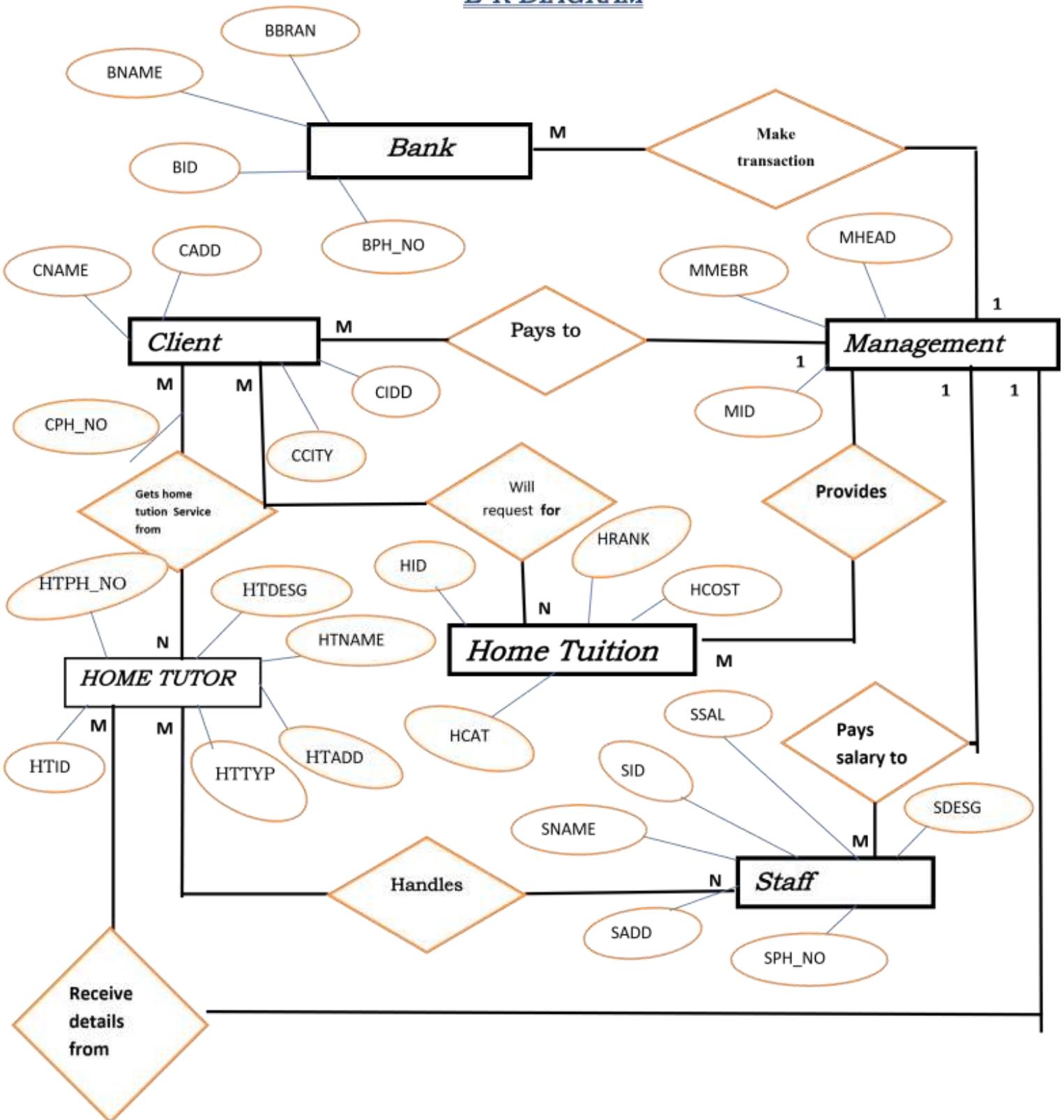








E-R DIAGRAM



TOOLS ENVIRONMENT USED

- JSP(Java Server Pages)
- Oracle 10g
- JavaScript
- Windows 7

JSP technology is used to create web application just like Servlet technology. It can be thought of as an extension to servlet because it provides more functionality than servlet such as expression language, jstl etc.

A JSP page consists of HTML tags and JSP tags. The jsp pages are easier to maintain than servlet because we can separate designing and development. It provides some additional features such as Expression Language, Custom Tag etc.

Advantage of JSP over Servlet

There are many advantages of JSP over servlet. They are as follows:

1) Extension to Servlet

JSP technology is the extension to servlet technology. We can use all the features of servlet in JSP. In addition to, we can use implicit objects, predefined tags, expression language and Custom tags in JSP that makes JSP development easy.

2) Easy to maintain

JSP can be easily managed because we can easily separate our business logic with presentation logic. In servlet technology, we mix our business logic with the presentation logic.

3) Fast Development: No need to recompile and redeploy

If JSP page is modified, we don't need to recompile and redeploy the project. The servlet code needs to be updated and recompiled if we have to change the look and feel of the application.

4) Less code than Servlet

In JSP, we can use a lot of tags such as action tags, jstl, custom tags etc. that reduces the code. Moreover, we can use EL, implicit objects etc.

Life cycle of a JSP Page

The JSP pages follow these phases:

- Translation of JSP Page
- Compilation of JSP Page
- Classloading (class file is loaded by the classloader)
- Instantiation (Object of the Generated Servlet is created).
- Initialization (`jsplInit()` method is invoked by the container).
- Request processing (`_jspService()` method is invoked by the container).
- Destroy (`jspDestroy()` method is invoked by the container).

Note: `jsplInit()`, `_jspService()` and `jspDestroy()` are the life cycle methods of JSP.

Creating a simple JSP Page

To create the first Jsp page, write some html code as given below, and save it by .jsp extension. We have save this file as index.jsp. Put it in a folder and paste the folder in the web-apps directory in apache tomcat to run the jsp page.

index.jsp

Let's see the simple example of JSP, here we are using the scriptlet tag to put java code in the JSP page. We will learn scriptlet tag later.

1. <html>
2. <body>
3. <% out.print(2*5); %>
4. </body>
5. </html>

It will print **10** on the browser.

How to run a simple JSP Page?

Follow the following steps to execute this JSP page:

- Start the server
- put the jsp file in a folder and deploy on the server
- visit the browser by the url <http://localhost:portno/contextRoot/jspfile>

e.g. <http://localhost:8888/myapplication/index.jsp>

Do I need to follow directory structure to run a simple JSP?

No, there is no need of directory structure if you don't have class files or tld files. For example, put jsp files in a folder directly and deploy that folder. It will be running fine. But if you are using bean class, Servlet or tld file then directory structure is required.

Directory structure of JSP

The directory structure of JSP page is same as servlet. We contains the jsp page outside the WEB-INF folder or in any directory.

JavaScript is the most popular programming language in the world.

JavaScript is the language for the web, for HTML, for servers, PCs, laptops, tablets, cell phones, and more.

JAVA SCRIPT

JavaScript is a Scripting Language

A scripting language is a lightweight programming language.

JavaScript code can be inserted into any HTML page, and it can be executed by all types of web browsers.

JavaScript is easy to learn.

Below is a taste of what JavaScript can do.

Change the Content of HTML Elements

The HTML DOM (Document Object Model) is the official W3C standard for accessing HTML elements.

It is very common to use JavaScript to manipulate the DOM (to change the content of HTML elements).

`document.getElementById()` is one of the most commonly used HTML DOM methods.

You can also use JavaScript to:

- Delete HTML elements
 - Create new HTML elements
 - Copy HTML elements
-

JavaScript Where To

In HTML, JavaScripts must be inserted between `<script>` and `</script>` tags.

JavaScripts can be put in the `<body>` and in the `<head>` section of an HTML page.

The `<script>` Tag

To insert a JavaScript into an HTML page, use the `<script>` tag.

The `<script>` and `</script>` tells where the JavaScript starts and ends.

The lines between the `<script>` and `</script>` contain the JavaScript code:

Example `<script>`

```
function myFunction()
```

```
{  
document.getElementById("demo").innerHTML="My First JavaScript Function";  
}  
</script>
```

You don't have to understand the code above.

Just take it for a fact, that the browser will interpret the code between the `<script>` and `</script>` tags as JavaScript.

Old examples may have `type="text/javascript"` in the `<script>` tag. This is no longer required. JavaScript is the default scripting language in all modern browsers and in HTML5.

JavaScript Functions and Events

Most often, JavaScript code is written to be executed when an **event** occurs, like when the user clicks a button.

If we put JavaScript code inside a **function**, we can call that function when an event occurs.

You will learn much more about functions and events in later chapters.

JavaScript in `<head>` or `<body>`

You can place an unlimited number of scripts in an HTML document.

Scripts can be in the `<body>` or in the `<head>` section of HTML, and/or in both. It is a common practice to put functions in the `<head>` section, or at the bottom of the page.

Separating HTML and JavaScript, by putting all the code in one place, is always a good habit.

JavaScript in <head>

In this example, a JavaScript function is placed in the <head> section of an HTML page.

The function is called when a button is clicked:

Example

```
<!DOCTYPE html>

<html><head>

<script> function

myFunction() {

document.getElementById("demo").innerHTML="My First JavaScript Function";

}

</script>

</head>

<body>

<h1>My Web Page</h1>

<p id="demo">A Paragraph</p>

<button type="button" onclick="myFunction()">Try it</button>

</body>

</html>
```

JavaScript in <body>

In this example, a JavaScript function is placed in the <body> section of an HTML page.

The function is called when a button is clicked:

Example

```
<!DOCTYPE html>

<html>

<body>

<h1>My Web Page</h1>

<p id="demo">A Paragraph</p>

<button type="button" onclick="myFunction()">Try it</button>

<script>

function myFunction()

{

document.getElementById("demo").innerHTML="My First JavaScript Function";

}

</script>

</body>

</html>
```

External JavaScripts

Scripts can also be placed in external files. External files often contain code to be used by several different web pages.

External JavaScript files have the file extension .js.

To use an external script, put the name of the script file in the source (src) attribute of the <script> tag:

Example

```
<!DOCTYPE html>

<html>
<body>
<script src="myScript.js"></script>
</body>
</html>
```

ORACLE

The **Oracle Database** (commonly referred to as **Oracle RDBMS** or simply as **Oracle**) is an object-relational database management system^[2] produced and marketed by Oracle Corporation.

Larry Ellison and his friends, former co-workers Bob Miner and Ed Oates, started the consultancy Software Development Laboratories (SDL) in 1977. SDL developed the original version of the Oracle software. The name Oracle comes from the codename of a CIA-funded project Ellison had worked on while previously employed by Ampex.^[3]

Physical and logical structures

An Oracle database system—identified by an alphanumeric system identifier or SID^[4]—comprises at least one instance of the application, along with data storage.

An instance—identified persistently by an instantiation number (or activation id: SYS.V_\$DATABASE.ACTIVATION#)—comprises a set of operating-system processes and memory-structures that interact with the storage. (Typical processes include PMON

(the process monitor) and SMON (the system monitor.) Oracle documentation can refer to an active database instance as a "shared memory realm".^[5]

Users of Oracle databases refer to the server-side memory-structure as the SGA (System Global Area). The SGA typically holdscache information such as databuffers, SQL commands, and user information. In addition to storage, the database consists of online redo logs (or logs), which hold transactional history. Processes can in turn archive the online redo logs into archive logs (offline redo logs), which provide the basis (if necessary) for data recovery and for the physical-standby forms of data replication using Oracle Data Guard.

If the Oracle database administrator has implemented Oracle RAC (Real Application Clusters), then multiple instances, usually on different servers, attach to a central storage array. This scenario offers advantages such as better performance, scalability and redundancy. However, support becomes more complex, and many sites do not use RAC. In version 10g, grid computing introduced shared resources where an instance can use (for example)CPU resources from another node (computer) in the grid.

The Oracle DBMS can store and execute stored procedures andfunctions within itself. PL/SQL (Oracle Corporation's proprietary procedural extension to SQL), or the object-oriented language Java can invoke such code objects and/or provide the programming structures for writing them.

Storage

The Oracle RDBMS stores data logically in the form of tablespaces and physically in the form of data files("datafiles").^[6] Tablespaces can contain various types of memory segments, such as Data Segments, Index Segments, etc. Segments in turn comprise one

or more extents. Extents comprise groups of contiguous data blocks. Data blocks form the basic units of data storage.

A DBA can impose maximum quotas on storage per user within each tablespace.^[7]

Partitioning

Newer versions of the database can also include a partitioning feature: this allows the partitioning of tables based on different set of keys. Specific partitions can then be easily added or dropped to help manage large data sets.

Monitoring

Oracle database management tracks its computer data storage with the help of information stored in the SYSTEMtablespace. The SYSTEMtablespace contains the data dictionary—and often (by default) indexes and clusters. A data dictionary consists of a special collection of tables that contains information about all userobjects in the database.

Since version 8i, the Oracle RDBMS also supports "locally managed" tablespaces which can store space management information in bitmaps in their own headers rather than in the SYSTEMtablespace (as happens with the default "dictionary-managed" tablespaces). Version 10g and later introduced the SYSAUXtablespace which contains some of the tables formerly stored in the SYSTEMtablespace, along with objects for other tools such as OEM which previously required its own tablespace.^[8]

Disk files

This section requires expansion. (September 2009)

Disk files primarily represent one of the following structures:

- Data and index files: These files provide the physical storage of data, which can consist of the data-dictionary data (associated to the tablespace SYSTEM), user data, or index data. These files can be managed manually or managed by Oracle itself ("Oracle-managed files"). Note that a datafile has to belong to exactly one tablespace, whereas a tablespace can consist of multiple datafiles.
- Redo log files, consisting of all changes to the database, used to recover from an instance failure. Note that often a database will store these files multiple times, for extra security in case of disk failure. The identical redo log files are said to belong to the same group.
- Undo files: These special datafiles, which can only contain undo information, aid in recovery, rollbacks, and read-consistency.
- Archive log files: These files, copies of the redo log files, are usually stored at different locations. They are necessary (for example) when applying changes to a standby database, or when performing recovery after a media failure. It is possible to archive to multiple locations.
- Tempfiles: These special datafiles serve exclusively for temporary storage data (used for example for large sorts or for global temporary tables)
- Control file, necessary for database startup. "A binary file that records the physical structure of a database and contains the names and locations of redo log files, the time stamp of the database creation, the current log sequence number, checkpoint information, and so on."^[9]

At the physical level, data files comprise one or more data blocks, where the block size can vary between data files.

Data files can occupy pre-allocated space in the file system of a computer server, utilize raw disk directly, or exist within ASM logical volumes.^[10]

Database schema

Most Oracle database installations traditionally came with a default schema called SCOTT. After the installation process has set up the sample tables, the user can log into the database with the username scott and the password tiger. The name of the SCOTT schema originated with Bruce Scott, one of the first employees at Oracle (then Software Development Laboratories), who had a cat named Tiger.^[11] Oracle Corporation has de-emphasized the use of the SCOTT schema, as it uses few of the features of the more recent releases of Oracle. Most recent examples supplied by Oracle Corporation reference the default HR or OE schemas.

Other default schemas^{[12][13]} include:

- SYS (essential core database structures and utilities)
- SYSTEM (additional core database structures and utilities, and privileged account)
- OUTLN (utilized to store metadata for stored outlines for stable queryoptimizer execution plans.^[14])
- BI, IX, HR, OE, PM, and SH (expanded sample schemas ^[15] containing more data and structures than the older SCOTT schema).

System Global Area

Main article: [System Global Area](#)

Each Oracle instance uses a System Global Area or SGA—a shared-memory area—to store its data and control-information.^[16]

Each Oracle instance allocates itself an SGA when it starts and de-allocates it at shut-down time. The information in the SGA consists of the following elements, each of which has a fixed size, established at instance startup:

- Datafiles

Every Oracle database has one or more physical datafiles, which contain all the database data. The data of logical database structures, such as tables and indexes, is physically stored in the datafiles allocated for a database. Datafiles have the following characteristics:

- One or more datafiles form a logical unit of database storage called a tablespace.
- A datafile can be associated with only one tablespace.
- Datafiles can be defined to extend automatically when they are full.

Data in a datafile is read, as needed, during normal database operation and stored in the memory cache of Oracle Database. For example, if a user wants to access some data in a table of a database, and if the requested information is not already in the memory cache for the database, then it is read from the appropriate datafiles and stored in memory.

Modified or new data is not necessarily written to a datafile immediately. To reduce the amount of disk access and to increase performance, data is pooled in memory and written to the appropriate datafiles all at once

- The redo log buffer: this stores redo entries—a log of changes made to the database. The instance writes redo log buffers to the redo log as quickly and efficiently as possible. The redo log aids in instance recovery in the event of a system failure.
- The shared pool: this area of the SGA stores shared-memory structures such as shared SQL areas in the library cache and internal information in the data dictionary. An insufficient amount of memory allocated to the shared pool can cause performance degradation.

- the Large pool Optional area that provides large memory allocations for certain large processes, such as Oracle backup and recovery operations, and I/O server processes
- Database buffer cache: Caches blocks of data retrieved from the database
- KEEP buffer pool: A specialized type of database buffer cache that is tuned to retain blocks of data in memory for long periods of time
- RECYCLE buffer pool: A specialized type of database buffer cache that is tuned to recycle or remove block from memory quickly
- nK buffer cache: One of several specialized database buffer caches designed to hold block sizes different than the default database block size
- Java pool: Used for all session-specific Java code and data in the Java Virtual Machine (JVM)
- Streams pool: Used by Oracle Streams to store information required by capture and apply

When you start the instance by using Enterprise Manager or SQL*Plus, the amount of memory allocated for the SGA is displayed.^[17]

Library cache

The library cache^[18] stores shared SQL, caching the parse tree and the execution plan for every unique SQL statement. If multiple applications issue the same SQL statement, each application can access the shared SQL area. This reduces the amount of memory needed and reduces the processing-time used for parsing and execution planning.

Data dictionary cache

The data dictionary comprises a set of tables and views that map the structure of the database.

Oracle databases store information here about the logical and physical structure of the database. The data dictionary contains information such as:

- user information, such as user privileges
- integrity constraints defined for tables in the database
- names and datatypes of all columns in database tables
- information on space allocated and used for schema objects

The Oracle instance frequently accesses the data dictionary in order to parse SQL statements. The operation of Oracle depends on ready access to the data dictionary: performance bottlenecks in the data dictionary affect all Oracle users. Because of this, database administrators should make sure that the data dictionary cache ^[19] has sufficient capacity to cache this data. Without enough memory for the datadictionary cache, users see a severe performance degradation. Allocating sufficient memory to the shared pool where the data dictionary cache resides precludes these particular performance problems.

Program Global Area

The Program Global Area^{[20][21]} or PGA memory-area of an Oracle instance contains data and control-information for Oracle's server-processes.

The size and content of the PGA depends on the Oracle-server options installed. This area consists of the following components:

- stack-space: the memory that holds the session's variables, arrays, and so on

- Session-information: unless using the multithreaded server, the instance stores its session-information in the PGA. (In a multithreaded server, the session-information goes in the SGA.)
- private SQL-area: an area which holds information such as bind-variables and runtime-buffers
- Sorting area: an area in the PGA which holds information on sorts, hash-joins, etc.

DBAs can monitor PGA usage via the V\$SESSTAT system view.

DDL	Data Definition Language.
SQL	Structure Query Language
DML	Data Manipulation Language
DCL	Data Control Language

Client Server application development requires broadly dividing the application into two categories: -

❖ Server Coding

❖ Client Coding

It has emerged as the standard for query language for relational DBMSs. Its original version was called SEQUEL. It is still pronounced as SEQUEL. SQL is both the data definition and data manipulation language of a number of relational database systems e.g. SQL Server, Ingres, Sybase, Informix etc.

In any **DBMS i.e. the DATABASE MANAGEMENT SYSTEM**, a group of similar information of data which is of interest to an organization is called an Entity.

Entity Information is stored in an object called Table.

Attributes: Each entity can have a number of characteristics. The characteristics of an entity are called as Attributes.

The values for these characteristics are called Attribute values. There are following Data Types that are used in the RDBMS SQL Server: -

CHAR (size)	This Data type is used to store character strings values of fixed length. The size in bracket determines the number of characters the cell can hold. The maximum is 255. SQL Server compares CHAR values using blank-padded comparison semantics i.e. if a value that is defined for then it will be padded with spaces on the right until it reaches the size characters in length.
VARCHAR(size) / VARCHAR2 (size)	This data type is used to store variable length alphanumeric data. The maximum this can hold is 2000 characters. SQL Server compares VARCHAR using non-padded comparison semantics i.e. the inserted values will not be padded with spaces.

NUMBER (P,S)	The number data type is used to store numbers (fixed or floating point). Numbers of virtually any magnitude may be stored up to 38 digits of precision. The Precision(P), determines the maximum length of the data, whereas the scale, (S) determines the number of places to the right of the decimal. If the scale is omitted then the default is zero. If precision is omitted, values are stored with their original precision upto the maximum of 38 digits.
DATE	This format is used to represent date and time. The standard format is DD-MM-YY as in 21-JUN-98. To enter dates other than the standard format, use the appropriate functions. DateTime stores date in the 24-hour format. By default, the time in a date field is 12:00:00 am, if no time portion is specified. The default date for a date field is the first day of the current month.
LONG	This is used to store variable length character strings containing upto 2GB.
RAW / LONG	This is used to store binary data. Data loaded into columns of these types are stored without any further conversion. RAW can have 255
RAW	bytes. LONG RAW data type can contain up to 2GB. Values stored in columns having LONG TRAW cannot be indexed.

Common Rules to be followed in SQL Statements:

- ☞ An SQL Statement starts with a verb. This verb may have additional nouns and adjectives.
- ☞ Each verb is followed by a number of clauses.
- ☞ Each clause has one or more parameters. Beyond this no further decomposition is allowed i.e. parameters cannot in turn have subparameters.
- ☞ A space separates clauses within an SQL statement.
- ☞ A comma separates parameters within a clause.
- ☞ A semicolon is used to terminate the SQL statement.

Now comes the explanation of the Step-by-Step procedure in SQL Server:

To create a new table in SQL Server the command CREATE TABLE is used:

Syntax:

```
CREATE TABLE tablename (columnnamenamedatatype(size), columnnamenamedatatype  
(size));
```

The second task is the insertion of data into the table so formed / created: =

When inserting a single row of data into the table the INSERT operation creates a new row in the database table

Loads the values passed into all the columns specified.

```
INSERT INTO tablename (Columnname1, Columnname2) VALUES ('text  
value in Col.1', value in Col.2);
```

The one thing to note is that the character expressions must be enclosed in single quotes ().

If there are exactly the same number of values as there are columns and the values are given in accordance with the way the columns were created. There is no need to indicate the column names in the sentence.

If there are less values being described than columns in the table then it is mandatory to indicate both the table column name and its corresponding value in the insert into sentence.

To VIEW DATA IN THE TABLES

Once data is inserted, the next operation is to view what has been entered For viewing all rows and all columns

```
SELECT (Columnname1..... columnname n) FROM tablename;
```

* Here Columnname1..... columnname n represents the table columns.

SQL Server allows the user to use the meta character astrisk(*), which is expanded by SQL Server to mean all columns in the table.

Filtering Table data

While viewing the data from a table it is rare that all the data from the table will be required each time. Hence SQL gives a method of filtering data that is not required.

Mainly, for viewing the data in the table in SQL Server, only the following three type of queries can be possible: -

- ☞ Selected columns and all rows
- ☞ Selected rows and all columns
- ☞ Selected columns and selected rows

a) Selected columns and all rows:

Syntax:

SELECT columnname, columnname FROM tablename;

b) Selected rows and all columns

If the information of a particular client must be retrieved from the table, its retrieval must be based on a specific condition.

SYNTAX:

SELECT * FROM tablename WHERE search condition;

c) Selected columns and selected rows

To view a specific data set from the table and also a select number of columns.

Syntax:

```
SELECT columnname, columnname FROM tablename WHERE search  
condition;
```

And one thing is also important to mention here, since the duplication in such Entrance Examinations is very common sort of thing. Elimination of duplicates from the select statement in SQL Server can be done. This can be regarded as one of its advantages.

Syntax:

```
SELECT DISTINCT columnname, columnname FROM tablename;
```

Or

```
SELECT DISTINCT * FROM tablename;
```

The **Sorting** according to a particular column can be done.

SYNTAX

```
SELECT * FROM tablename ORDERBY columnname ,columnname [sort  
order];
```

We can also create a table from an existing table or we can use an existing table's columns.

Syntax:

```
CREATE TABLE tablename [(columnname, columnname)] AS SELECT columnname,  
columnname FROM tablename;
```

The source table is the table identified in the SELECT section. The target table is in the CREATE. This will populate the target table with data from Source.

Inserting data into a table from another table

Syntax: -

```
INSERT INTO Tablename SELECT columnname, columnname FROM tablename;
```

Insertion of data set into a table from Another table:

Syntax: -

**Insert into tablename select columnname, columnname from tablename where
column = expression;**

In any database management, the operation of deletion of records / data is very significant.

a) For Removal of all rows Syntax:

DELETE FROM tablename;

b) Removal of specified row(s)

Syntax:

DELETE FROM tablename WHERE search condition

The contents of a table can be updated at any point of time. For updating the contents of a table the commands are as : -

- For **UPDATING** all rows

Syntax:

UPDATE tablename SET columnname = expression, columnname = expression;

- For Updating records conditionally

Syntax:

UPDATE tablename SET columnname = expression, columnname = expression.....

WHERE columnname = expression;

MODIFYING THE STRUCTURE OF TABLES

- a) Adding New Columns

Syntax:

**ALTER TABLE tablename ADD (newcolumnnamedatatype (size),
newcolumnnamedatatype (size));**

b) Modifying existing columns

Syntax:

ALTER TABLE tablename MODIFY (columnnamenewdatatype (newszie));

There are also some restrictions on the ALTER TABLE command

1. Using the ALTER TABLE we cannot change the name of the table;
2. Change the name of the column;
3. Drop a column, and
4. Decrease the size of a column if table data exists.

RENAMING TABLES

Syntax:

RENAME oldtable TO newtablename;

DESTROYING TABLES

Syntax:

DROP TABLE tablename; FINDING

OUT ALL THE TABLES

Syntax:

SELECT * FROM TAB;

Finding out the column details of a table created:

DESCRIBE tablename;

Or

DESC tablename;

Crystal Reports

This gives an overview of the system. Further, Crystal Reports are also used, as these are a powerful and easy to use tool for creating custom reports, lists and form letters using data from our existing databases. The program works by establishing connections with one or more of our databases. Using these connections as conduits, Crystal Reports draws in the values from database field we select and uses them in report, either in their original form or as part of a formula that generates values that are more sophisticated. Crystal reports was design to work with all kinds of data: numbers, currency, text, dates, and Boolean (Yes/No) fields. It has a wide range of built in tool that can use to manipulate that data to fit our needs.

Creating a Report

Crystal Reports is fast and very easy to learn. It requires very little time before you will be designing interesting and informative reports for your needs. The following is a list of topics covering step by step instructions for creating any report in Crystal Reports.

Custom Report command (File|New)

Use Custom Report to create a new report from scratch. When you choose the Custom Report command while using another report, Crystal Reports creates a new report window and opens the new report in that window. The report you were working on remains unchanged in its own window.

The Design Window

Once you select your database, Crystal Reports displays the Design Window. You use this window to insert and format data and to watch your report take shape. When you open a new report, Crystal Reports automatically creates five sections in the Design Window:

- **Title section:** This section is generally used for the report title, and other information you want to appear at the top of the first page of your report.

- **Page header section:** This section is generally used for field headings, range of values included, and other information that you want to appear at the top of each page.

- **Details section:** This section is the body of the report. The bulk of your report data will generally appear in this section.

- **Page footer section:** This section usually contains the page number and any other information that you want to appear on the bottom of each page.

- **Summary section:** This section is generally used for including a written summary printed only on the last page of your report.

Each section is separated by a section marker which displays the section name.

You build your report by inserting data fields, formulas, and other report elements (record counts, record numbers, etc.) in the Details section of the Designer. You use the

Insert menu, in most cases, to select or create the elements you want to insert on the report. The Design Window uses rectangular field boxes to indicate the size, position, and data type of the fields and formulas you have inserted.

You add subtotals (and other group values) by selecting a field to summarize and then telling Crystal Reports the conditions that are to generate a new summary(change of customer number, change of sales rep, etc.). Crystal Reports creates group sections as needed and places the group value in the section. Again, Crystal Reports uses rectangular field boxes to represent the group values.

You insert grand totals in the Grand Total section. This section appears when you select the field to total and then select Insert|Grand Total or when you opt to place a summary field in the Grand Total section. In both cases, Crystal Reports uses a rectangular field box, this time to identify the field in the Grand Total section of the Design Window.

You can add freeform text anywhere on the report by positioning the insertion point in the section in which you want the text to appear, typing in the text, and then using the Tab key to move it into position. You can also type freeform text as a text field using the

Insert Text Field command; this allows you to avail yourself of additional formatting options (alignment, hide options, etc.).

Custom Grouping And Sorting

Most of the time you sort and group your data based on the values in some field in your report. For example, if you have a customer list and you want to sort and group it by state, the program first sorts the list by state and then breaks the list into state groups whenever the value in the State field changes. Sometimes, however, you may not want to group based on the values found in one of the fields on your report.

Your report may not contain the field you want to group on. For example, your report contains a City field and a State field but no County field but you want to group by county.

Your report may contain the field you want to group on, but you're not happy with the grouping based on the values in that field. For example, you have a Color field on your report that includes specific color names (Logan Green, Sky Blue, Emerald Green, Navy Blue, etc.) but you want all "flavors" of each color to appear as a single group (Greens, Blues, Reds, etc.). In this case you can build custom groups and manually assign the records you want to be in each group.

Your report may contain the field you want to group on, but you want to select specific values or ranges of values for each group. For example, you might want one group to contain records where gross sales are less than a certain value, a second group where gross sales are greater than a certain value, and a final group where gross sales fall between two values. In this case, you can build your groups using the same range selection facilities that are available to you for building record selection queries.

Crystal Reports provides Specified Order sorting as a solution to these custom sorting and grouping challenges. Specified sorting enables you to create the groups you want to appear on your report and the records that each group contains. Your only real limitation is that a record can be assigned to only one group.

Printing your report

When you want to print your report, see what your report will look like when printed, or export the report to a disk file, you can use one of Crystal Reports' several printing options.

File|Print Preview (to review your work and fine tune your report using real data)

File|Print|PreviewSample(to review a draft of your report using a subset of data)

File|Print|Printer(for hard copy output)

File|Print|Export(for exporting to disk and changing the output format if necessary)

File|Print|Crystal Reports Server(for connecting to the Crystal Reports Server)

When you are creating a report, you will find yourself printing to the Preview Window often, in order to check placement and formatting of the various report elements. You can print a draft report using only a subset of the data you'll use in your final report, and you can even fine tune your report in the Preview Window using real data. Then, when you want to print a final or interim copy of the report for hands on review, you can print to the printer for hard copy output.

If you want to use your report data in another application (in a spreadsheet or word processor for example), you can export the report to a disk file in any of a variety of popular file formats. Once in a disk file, you can import the data into your other application following the importing procedures established by the receiving application. You can also export your report by Email using another output format if you wish.

Report Templates

Instead of starting from scratch when building a report, you might find it easier to begin with a template from a similar report that you created earlier.

A template is a copy of a report. It contains all of the data, links, formulas, and pictures that your original has, but it isn't tied to your original report in any way. It's a separate entity. When you modify a template, your original report remains unchanged.

Templates boost your efficiency. Use them whenever you think they can save you time

WINDOWS 7

Multitasking

Windows 7 is a multitasking, multithreaded operating system i.e. more than one thread a task can be executed at a given interface. Thread is smallest unit of execution. It is the portion of the process of the OS to handle tasks of different applications at the same time.

Message Driven Architecture

Windows use a message driven model to control applications. Messages are generated for every event in the system. Windows application can also create and send messages

to request the OS to perform a particular task. The message driven architecture is asynchronous i.e. message queues are processed independently. 32- Bit Windows based applications have a message queue for every task of the application.

Scheduling technique

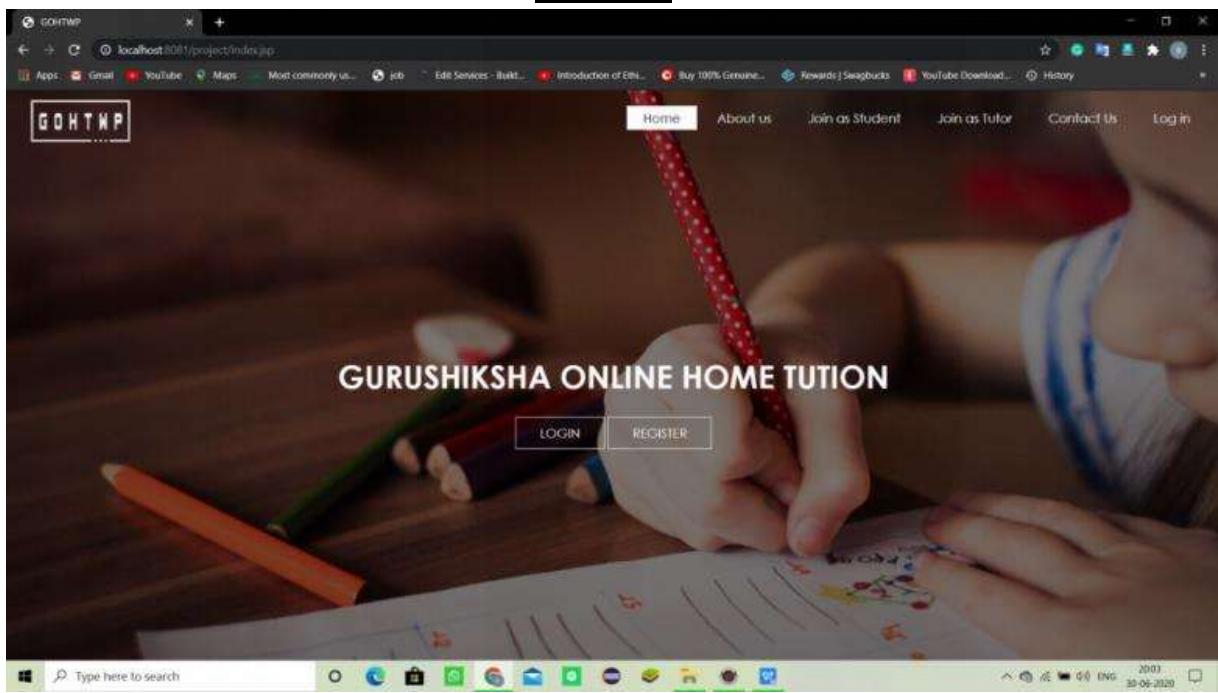
There are two scheduler function, the primary and the secondary scheduler. The primary scheduler looks at all threads executing and gets their priorities. The secondary scheduler boosts the priorities of the non – executing threads. This allows threads with the low priority to get a chance to execute.

Plug and Play Hardware Compatibility

Plug and Play is a concept as well as a design specification. The goal of plug and play is to enable changes to the configuration of a PC without requiring any intervention from the user. With a complete plug and play compatible system, the user should be able to change the configuration of the computer without having to restart the computer.

Input / Output Screen

Index.jsp



```
<html>
<head>
    <title>GOHTWP</title>
    <link rel="stylesheet" type="text/css" href="css/index.css">
</head>
<body>
    <header>
        <div class="main">
            <div class="Logo">
```

```
        

    </div>

    <ul >

        <li ><a class="active" href="#">Home</a></li>

        <li ><a href="#">About us</a></li>

        <li ><a href="signup.jsp">Join as Student</a></li>

        <li ><a href="signup.jsp">Join as Tutor</a></li>

        <li ><a href="contact_us.jsp">Contact Us</a></li>

        <li ><a href="Login.jsp">Log in</a></li>

    </ul>

</div>

<div class="title">

    <h1>GURUSHIKSHA ONLINE HOME TUTION</h1>

</div>

<div class="button">

    <a href="Login.jsp" class="btn">LOGIN</a>

    <a href="signup.jsp" class="btn">REGISTER</a>

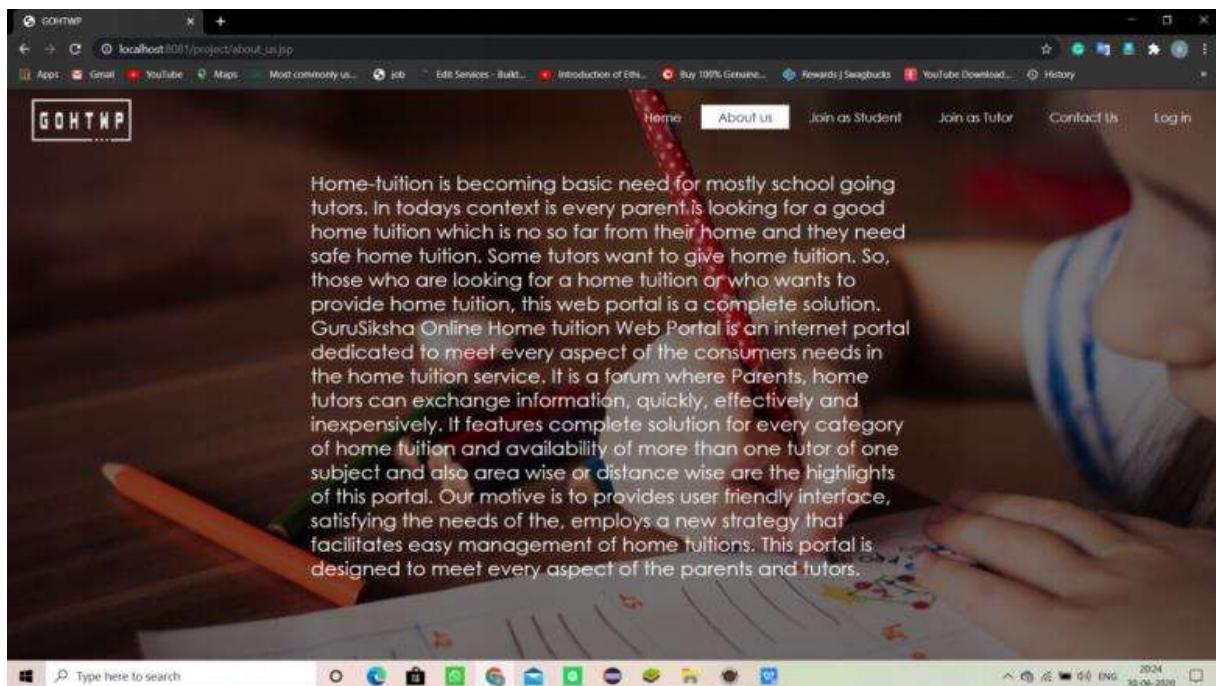
</div>

</header>

</body>

</html>
```

About_us.jsp



```
<html>
<head>
    <title>GOHTWP</title>
    <link rel="stylesheet" type="text/css" href="css/about_us.css">
</head>
<body>
    <header>
        <div class="main">
            <div class="Logo">
                
            </div>
            <ul >
                <li ><a href="index.jsp">Home</a></li>
```

```

<li ><a class="active" href="about_us.jsp">About us</a></li>

<li ><a href="signup.jsp">Join as Student</a></li>

<li ><a href="signup.jsp">Join as Tutor</a></li>

<li ><a href="contact_us.jsp">Contact Us</a></li>

<li ><a href="Login.jsp">Log in</a></li>

</ul>

</div>

</div>

<div class="title">

    <p>Home-tuition is becoming basic need for mostly school going students. In todays context every parent is looking for a good home tuition which is no so far from their home and they need safe home tuition. Some tutors want to give home tuition. So, those who are looking for a home tuition or who wants to provide home tuition, this web portal is a complete solution. Online Home tuition Web Portal is an internet portal dedicated to meet every aspect of the consumers needs in the home tuition service. It is a forum where Parents, home tutors can exchange information, quickly, effectively and inexpensively. It features complete solution for every category of home tuition and availability of more than one tutor of one subject and also area wise or distance wise are the highlights of this portal. Our motive is to provides user friendly interface, satisfying the needs of the, employs a new strategy that facilitates easy management of home tuitions. This portal is designed to meet every aspect of the parents and tutors.</p>

    </div>

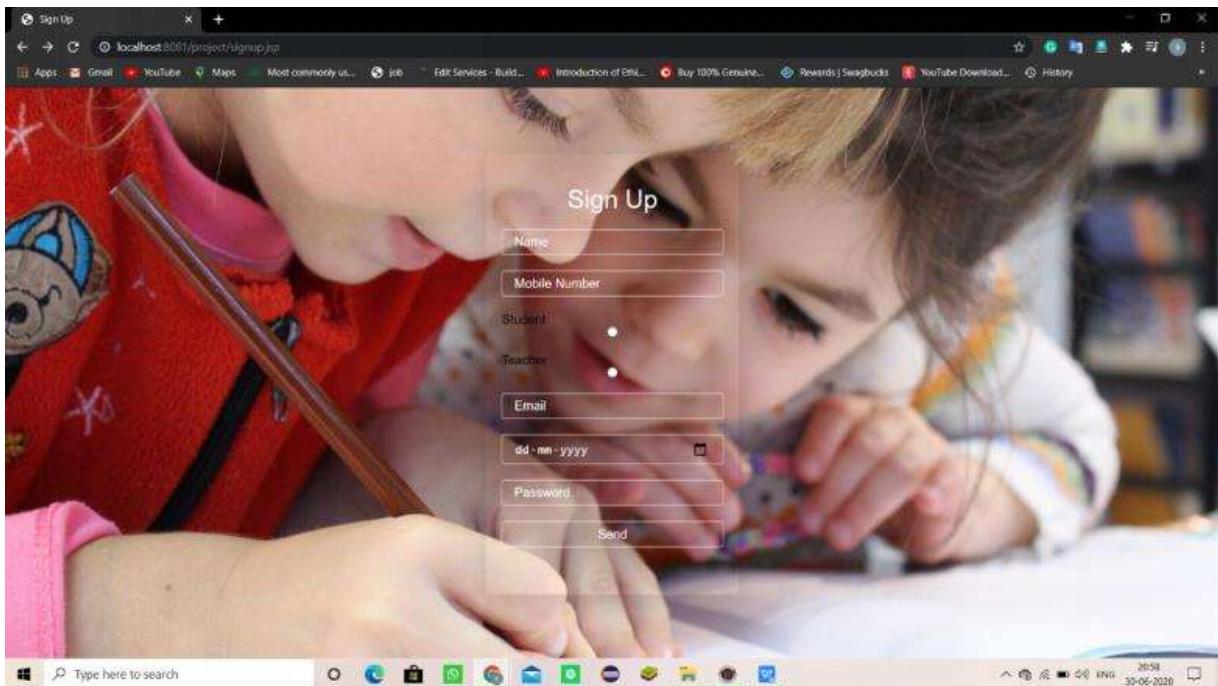
</header>

</body>

</html>

```

Signup.jsp



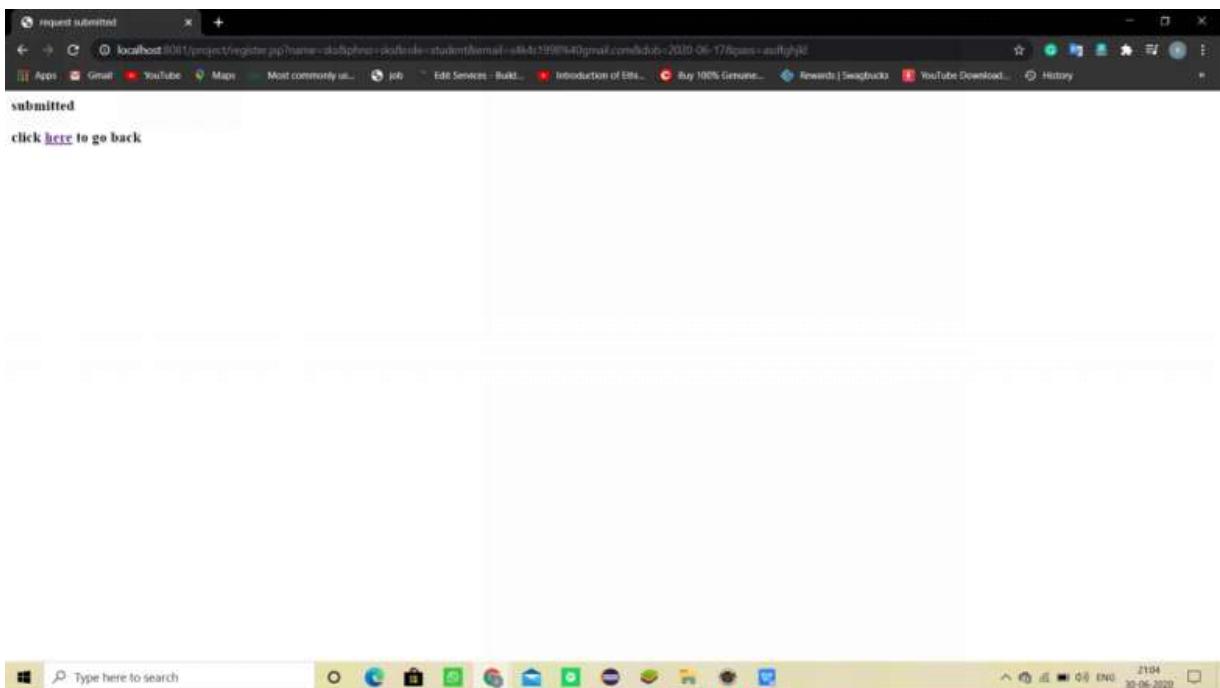
```
<html>
  <head>
    <title>Sign Up</title>
    <link rel="stylesheet" type="text/css" href="css/signup.css">
  </head>
  <body>
    <div class="form-wrap">
      <form action="register.jsp">
        <h1>Sign Up</h1>
        <input type="text" name="name" placeholder="Name" required>
        <input type="text" name="phno" placeholder="Mobile Number" required>
        <tr class="option">
          <td>Student</td><input type="radio" name="role" value="student">
        <td>Teacher</td><input type="radio" name="role" value="tutor">
      </tr>
    </form>
  </div>
</body>
```

```

<input type="email" name="email" placeholder="Email" required>
<input type="date" name="dob" placeholder="Date Of Birth" required>
<input type="password" name="pass" placeholder="Password" required>
<input type="submit" value="Send">
</form>
</div>
</body>
</html>

```

Register.jsp



```

<%@page import="java.sql.*" %>
<html>
<head>

```

```

<title>request submitted</title>
</head>
<body>

<%
try
{
    String name= request.getParameter("name");
    String phno= request.getParameter("phno");
    String role= request.getParameter("role");
    String email= request.getParameter("email");
    String dob= request.getParameter("dob");
    String pass= request.getParameter("pass");
    Class.forName("oracle.jdbc.driver.OracleDriver");
    Connection c =
DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:xe","system","1234");
    PreparedStatement ps=c.prepareStatement("insert into gohtwp
values(?,?,?,?,?,?,?,?,?,?)");
    ps.setString(1,name);
    ps.setString(2,phno);
    ps.setString(3,email);
    ps.setString(4,"");
    ps.setString(5,"");
    ps.setString(6,"");
    ps.setString(7,dob); ps.setString(8,role);
    ps.setString(9,pass);
    ps.setString(10,"");
    ps.setString(11,"");
}
%>

```

```

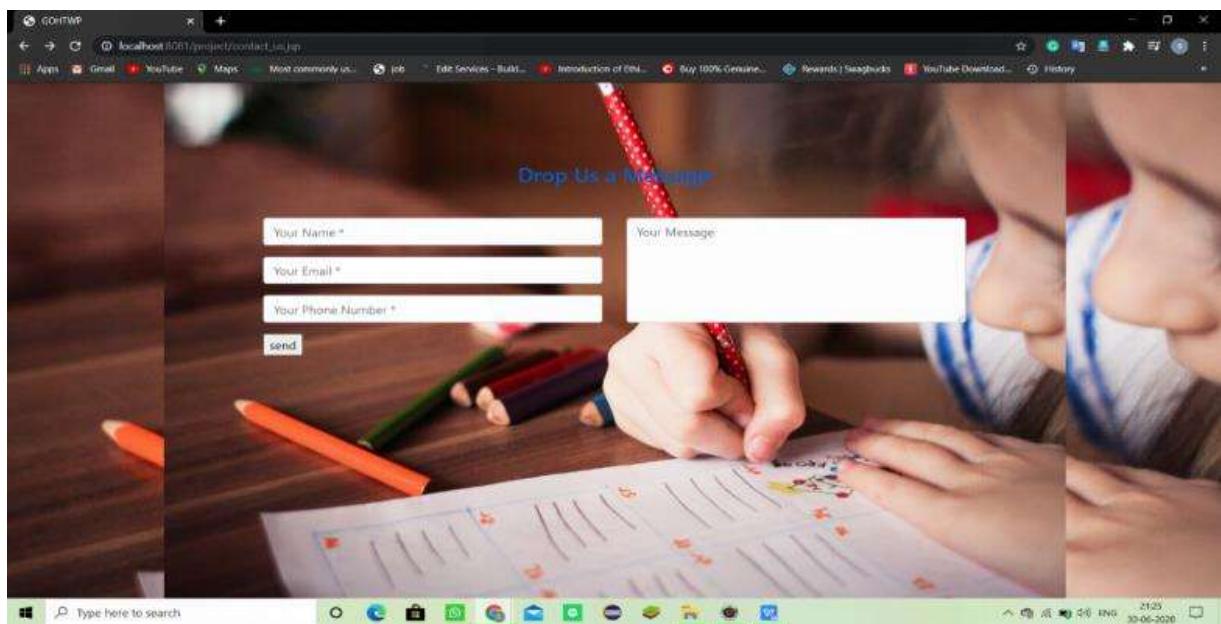
        ps.executeUpdate();

    }catch(Exception ex){
        out.println(ex);
    }

%>
<h3>submitted</h3>
<h3>click <a href="index.jsp">here</a> to go back</h3>
</body>
</html>

```

Contact_us.jsp



```

<html>
<head>
    <title>GOHTWP</title>
    <link rel="stylesheet" type="text/css" href="css/contact_us.css">

```

```

        <link rel="stylesheet"
      href="https://stackpath.bootstrapcdn.com/bootstrap/4.4.1/css/bootstrap.min.css"
      integrity="sha384-Vkoo8x4CGsO3+Hhxv8T/Q5PaXtkKtu6ug5T0eNV6gBiFeWPGFN9MuhOf23Q9Ifjh"
      crossorigin="anonymous">

</head>
<body>

<div class="container contact-form">
  <form action="submit_contact_us.jsp">
    <h3>Drop Us a Message</h3>
    <div class="row">
      <div class="col-md-6">
        <div class="form-group">
          <input type="text" name="name" class="formcontrol" placeholder="Your Name *">
        </div>
        <div class="form-group">
          <input type="Email" name="email" class="formcontrol" placeholder="Your Email *">
        </div>
        <div class="form-group">
          <input type="text" name="number" class="formcontrol" placeholder="Your Phone Number *">
        </div>
      </div>
      <div class="col-md-6">
        <div class="form-group">
          <textarea name="message" class="form-control" placeholder="Your Message"></textarea>
        </div>
      </div>
    </div>
  </form>
</div>

```

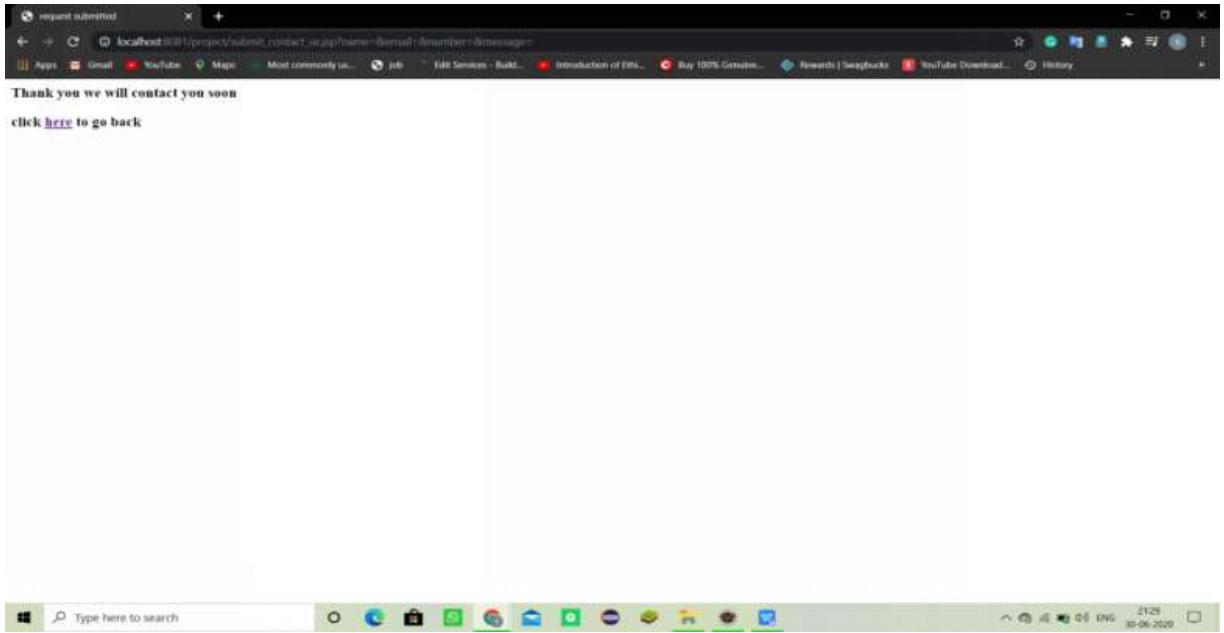
```

        </div>

        <div class="col-md-12">
            <div class="form-group">
                <input type="submit" class="btncontact"
value="send">
            </div>
        </div>
    </div>
</form>
</div>
</body>
</html>

```

Submit_contact_us.jsp



```

<%@page import="java.sql.*" %>
<html>
<head>

```

```

<title>request submitted</title>
</head>
<body>

<%
try
{
    String name= request.getParameter("name");
    String email= request.getParameter("email");
    String number= request.getParameter("number");
    String message= request.getParameter("message");
    Class.forName("oracle.jdbc.driver.OracleDriver");
    Connection c =
    DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:xe","system","1234");
    PreparedStatement ps=c.prepareStatement("insert into messages
values(?, ?, ?, ?)");
    ps.setString(1,name);
    ps.setString(2,email);
    ps.setString(3,number);
    ps.setString(4,message);
    ps.executeUpdate();

}catch(Exception ex){
    out.println(ex); }

%>
<h3>Thank you we will contact you soon</h3>

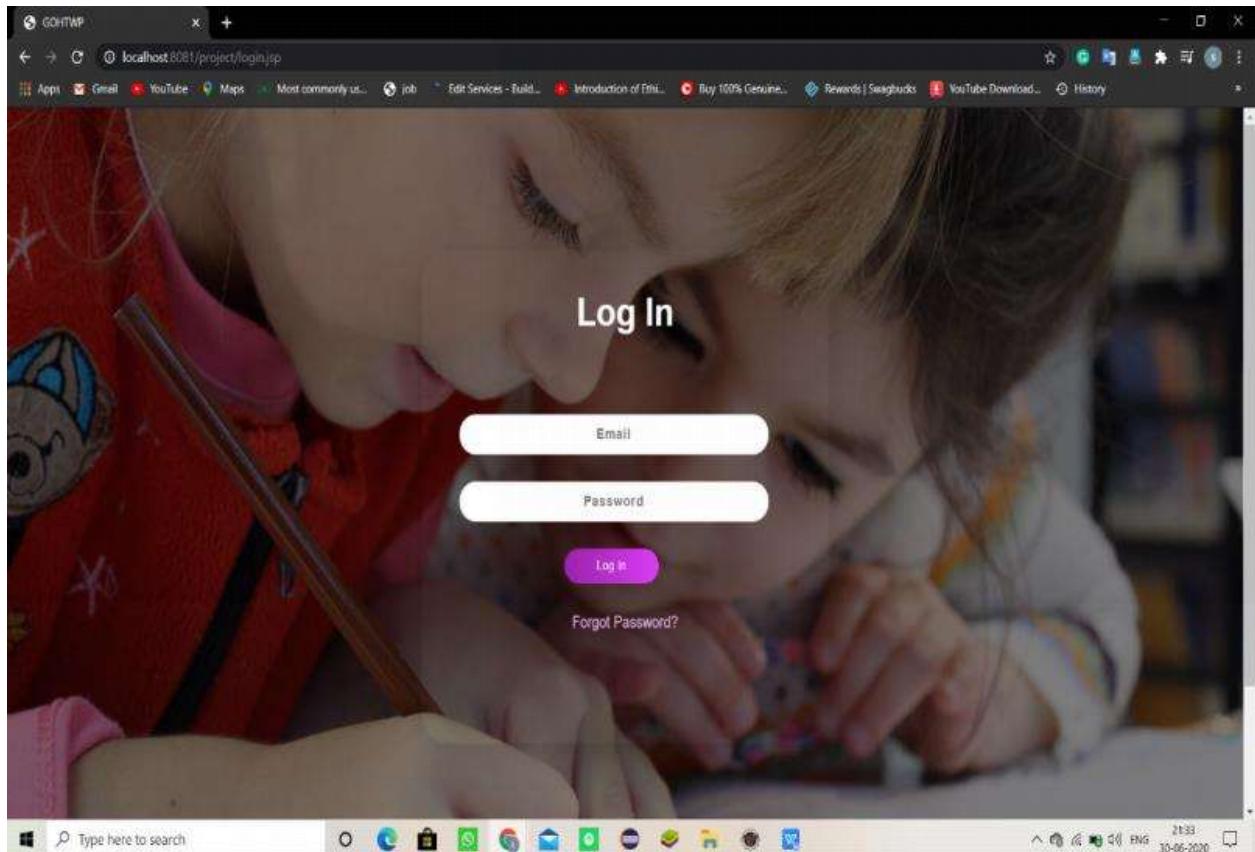
```

```
<h3>click <a href="index.jsp">here</a> to go back</h3>
```

```
</body>
```

```
</html>
```

Login.jsp



```
<html>  
<head>  
    <link rel="stylesheet" href="css/login.css">  
    <title>GOHTWP</title>  
</head>
```

```

<body>

    <div class="main">

        <p class="sign" align="center">Log In</p>

        <form class="form1" action="Login_check.jsp">

            <input class="un " type="text" placeholder="Email" name="email">

            <input class="pass" type="password" placeholder="Password" name="pass">

            <input type="submit" class="submit" value="Log In">

            <p class="forgot" align="center"><a href="#">Forgot Password?</a></p>

        </form>

    </div>

</body>

</html>

```

Login_check.jsp

```

<%@page import="java.sql.*" %>

<html>

<head>

<title>request submitted</title>

</head>

<body>

<% try

{

    String email= request.getParameter("email");

    String pass= request.getParameter("pass");

    Class.forName("oracle.jdbc.driver.OracleDriver");

```

```

Connection c =
DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:xe","system","1234");

PreparedStatement ps =c.prepareStatement("select * from gohtwp where email=?  

and pass=?");
          ps.setString(1,email);      ps.setString(2,pass);

ResultSet rs= ps.executeQuery();

if (rs.next() == true) {

    String role = rs.getString("role");

session.setAttribute("email", email);

    if (role.equals("admin")) {

session.setAttribute("role", role);

response.sendRedirect("admin_home.jsp");

    }

    else if (role.equals("student")) {

        session.setAttribute("role", role);

        response.sendRedirect("student_home.jsp");

    }

    else if(role.equals("tutor"))

    {

        session.setAttribute("role", role);

        response.sendRedirect("tutor_home.jsp");

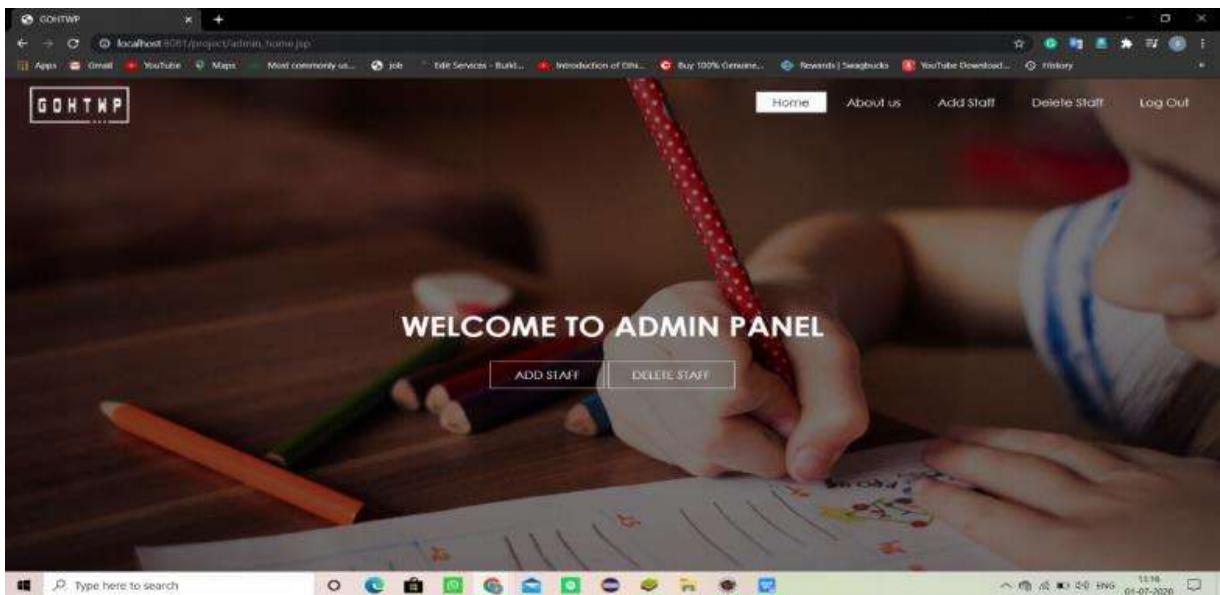
    }

    else if(role.equals("staff"))

```

```
        {  
            session.setAttribute("role", role);  
            response.sendRedirect("staff_home.jsp");  
        }  
  
    } else {  
  
        out.println("invalid username or password");  
  
    }  
}  
  
catch(Exception e)  
{  
    out.println(e);  
}  
%>  
  
</body>  
</html>
```

Admin_home.jsp

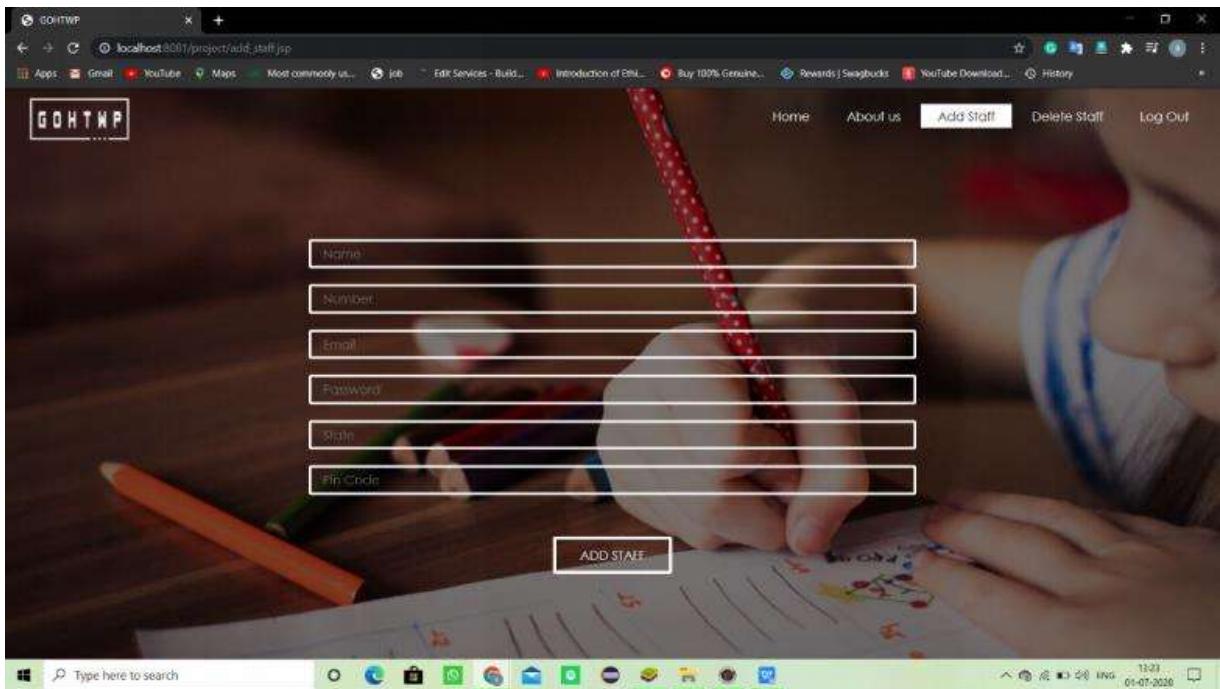


```
<html>
<head>
    <title>GOHTWP</title>
    <link rel="stylesheet" type="text/css" href="css/adminhome.css">
</head>
<body>
    <header>
        <div class="main">
            <div class="Logo">
                
            </div>
            <ul >
                <li ><a class="active" href="admin_home.jsp">Home</a></li>
                <li ><a href="admin_about_us.jsp">About us</a></li>
                <li ><a href="add_staff.jsp">Add Staff</a></li>
                <li ><a href="delete_staff.jsp">Delete Staff</a></li>
```

```
        <li><a href="index.jsp">Log Out</a></li>
    </ul>
</div>
<div class="title">
    <h1>WELCOME TO ADMIN PANEL</h1>
</div>
<div class="button">
    <a href="add_staff.jsp" class="btn">ADD STAFF</a>
    <a href="delete_staff.jsp" class="btn">DELETE STAFF</a>
</div>
</header>

</body>
</html>
```

Add_staff.jsp



```
<html>
<head>
    <title>GOHTWP</title>
    <link rel="stylesheet" type="text/css" href="css/add_staff.css">
</head>
<body>
    <header>
        <div class="main">
            <div class="Logo">
                
            </div>
            <ul >
                <li ><a href="admin_home.jsp">Home</a></li>
                <li ><a href="admin_about_us.jsp">About us</a></li>
                <li ><a class="active" href="add_staff.jsp">Add Staff</a></li>
```

```

<li ><a href="delete_staff.jsp">Delete Staff</a></li>

<li ><a href="index.jsp">Log Out</a></li>

</ul>

</div>

<form action="staff_added.jsp">

<div class="title">

    <input type="text" name="name" placeholder="Name" required>

    <input type="text" name="phno" placeholder="Number" required>

    <input type="text" name="email" placeholder="Email" required>

    <input type="text" name="pass" placeholder="Password" required>

    <input type="text" name="state" placeholder="State" required>

    <input type="text" name="zip" placeholder="Pin Code" required>

</div>

<div class="button">

    <input type="submit" class="btn" value="ADD STAFF">

</div>

</form>

</header>

</body>

</html>

```

Staff_added.jsp

```
<%@page import="java.sql.*" %>
```

```
<html>
```

```
<head>
```

```

<title>request submitted</title>
</head>
<body>

<%
try
{
    String name= request.getParameter("name");
    String phno= request.getParameter("phno");
    String email= request.getParameter("email");
    String pass= request.getParameter("pass");
    String state= request.getParameter("state");
    String zip= request.getParameter("zip");

    Class.forName("oracle.jdbc.driver.OracleDriver");
    Connection c =
DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:xe","system","1234");
    PreparedStatement ps=c.prepareStatement("insert into gohtwp
values(?,?,?,?,?,?,?,?,?,?)");
    ps.setString(1,name);
    ps.setString(2,phno);
    ps.setString(3,email);
    ps.setString(4,state);
    ps.setString(5,"");
    ps.setString(6,zip);
    ps.setString(7,"");
    ps.setString(8, "staff");
    ps.setString(9,pass); ps.setString(10,"");
}
%>

```

```

ps.setString(11, "");
ps.executeUpdate();

response.sendRedirect("admin_home.jsp");

}catch(Exception ex){
    out.println(ex);
}

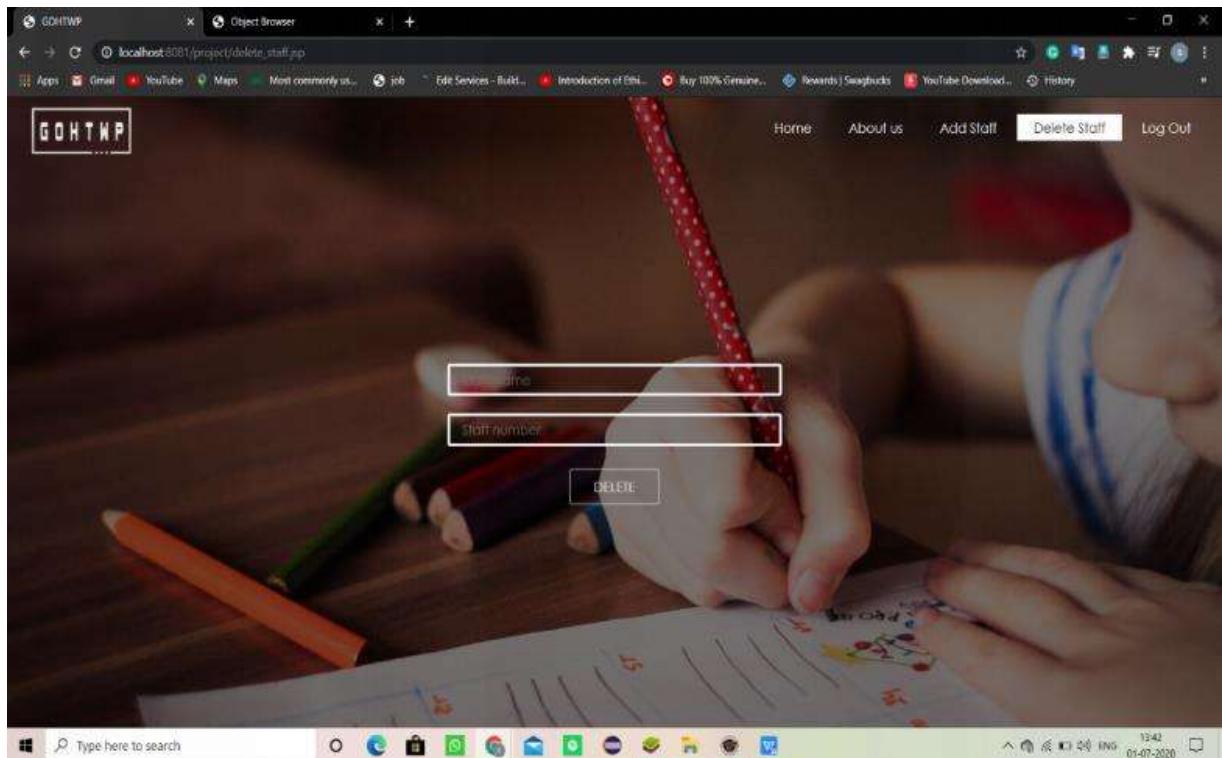
%>

</body>

</html>

```

Delete_staff.jsp



```

<html>

<head>

<title>GOHTWP</title>

<link rel="stylesheet" type="text/css" href="css/delete_staff.css">

```

```

</head>

<body>

    <header>

        <div class="main">

            <div class="Logo">
                
            </div>

            <ul >

                <li ><a href="admin_home.jsp">Home</a></li>
                <li ><a href="admin_about_us.jsp">About us</a></li>
                <li ><a href="add_staff.jsp">Add Staff</a></li>
                <li ><a class="active" href="delete_staff.jsp">Delete
                    Staff</a></li>
                <li ><a href="index.jsp">Log Out</a></li>
            </ul>

        </div>

        <form action="deleted.jsp">

            <div class="title">
                <input type="text" name="name" placeholder="Staff Name"
                    required>
                <input type="text" name="phno" placeholder="Staff number"
                    required>
            </div>

            <div class="button">
                <input type="submit" class="btn" value="DELETE">
            </div>
        </form>

    </header>

```

```
</body>
```

```
</html>
```

Staff_Deleted.jsp

```
<%@page import="java.sql.*" %>

<html>
<head>
<title>request submitted</title>
</head>
<body>
<% try
{
    String name= request.getParameter("name");
    String phno= request.getParameter("phno");
    Class.forName("oracle.jdbc.driver.OracleDriver");
    Connection c =
    DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:xe","system","1234");
    PreparedStatement ps =c.prepareStatement("select * from gohtwp where name=? and mobile=?");
    ps.setString(1,name);
    ps.setString(2,phno);

    ResultSet rs=ps.executeQuery();
    if(rs.next())
    {
        PreparedStatement ps1 =c.prepareStatement("DELETE from gohtwp WHERE name=? and mobile=?");
        ps1.setString(1,name);
        ps1.setString(2,phno);

        ps1.executeUpdate();
    }
}
```

```

        response.sendRedirect("admin_home.jsp");

    }else
    {
        out.println("record not found.");
    }

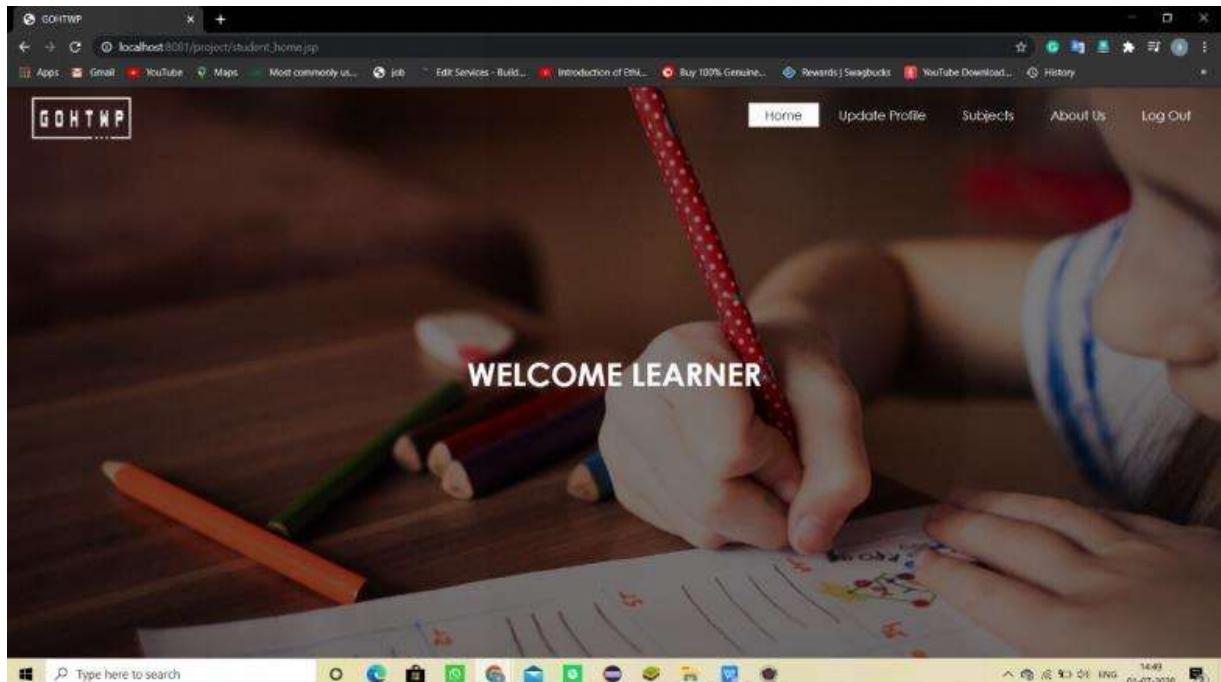
}

catch(Exception ex){
    out.println(ex);
}

```

%>

Student_home.jsp



<html>

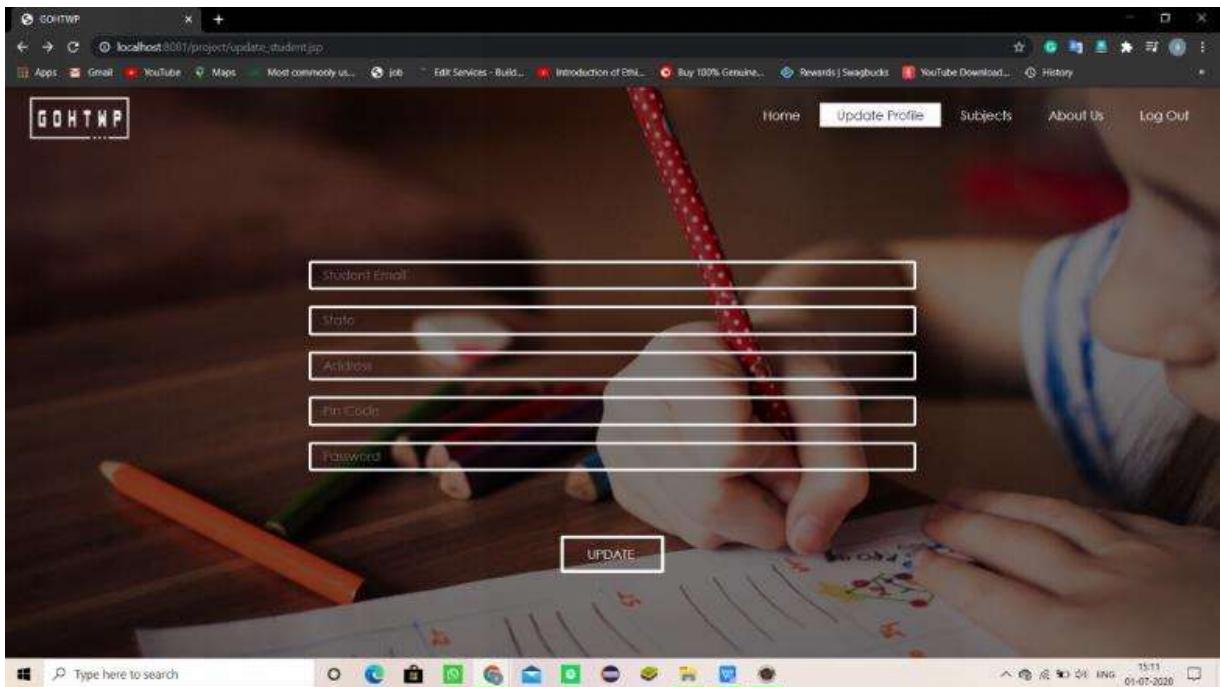
```

<head>
    <title>GOHTWP</title>
    <link rel="stylesheet" type="text/css" href="css/student_home.css">
</head>

<body>
    <header>
        <div class="main">
            <div class="Logo">
                
            </div>
            <ul >
                <li ><a class="active" href="student_home">Home</a></li>
                <li ><a href="update_student.jsp">Update Profile</a></li>
                <li ><a href="student_subjects.jsp">Subjects</a></li>
                <li ><a href="student_about_us.jsp">About Us</a></li>
                <li ><a href="index.jsp">Log Out</a></li>
            </ul>
        </div>
        <div class="title">
            <h1>WELCOME LEARNER</h1>
        </div>
    </header>
</body>
</html>

```

Update_student.jsp



```
<html>

<head>
    <title>GOHTWP</title>
    <link rel="stylesheet" type="text/css" href="css/update_tutor.css">
</head>

<body>
    <header>
        <div class="main">
            <div class="logo">
                
            </div>
            <ul >
                <li ><a href="student_home.jsp">Home</a></li>
                <li ><a class="active" href="update_tutor.jsp">Update Profile</a></li>
```

```

<li ><a href="student_subjects.jsp">Subjects</a></li>
<li ><a href="student_about_us.jsp">About Us</a></li>
<li ><a href="index.jsp">Log Out</a></li>
</ul>
</div>

<form action="update_done_student.jsp">
<div class="title">
    <input type="text" name="email" placeholder="Student Email"
required>
    <input type="text" name="state" placeholder="State" required>
    <input type="text" name="add" placeholder="Address" required>
    <input type="text" name="zip" placeholder="Pin Code" required>
    <input type="text" name="pass" placeholder="Password" required>
</div>
<div class="button">
    <input type="submit" class="btn" value="UPDATE ">
</div>
</form>
</header>

</body>
</html>

```

Update_done_student.jsp

```
<%@page import="java.sql.*" %>

<html>
<head>
<title>request submitted</title>
</head>
<body>

<%
try
{
    String email= request.getParameter("email");
    String state= request.getParameter("state");
    String add= request.getParameter("add");
    String zip= request.getParameter("zip");
    String pass= request.getParameter("pass");
    Class.forName("oracle.jdbc.driver.OracleDriver");

    Connection c =
    DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:xe","system","1234");
    PreparedStatement ps=c.prepareStatement("update gohtwp set state=?, address=?, pin_code=? where email=? and pass=?");
    ps.setString(1,state);
    ps.setString(2,add);
    ps.setString(3,zip);
    ps.setString(4,email);
    ps.setString(5,pass);
}
```

```
int i=ps.executeUpdate();

if(i>0)

{

response.sendRedirect("student_home.jsp");

}else{

    out.println("error");

}

}catch(Exception ex){

out.println(ex);

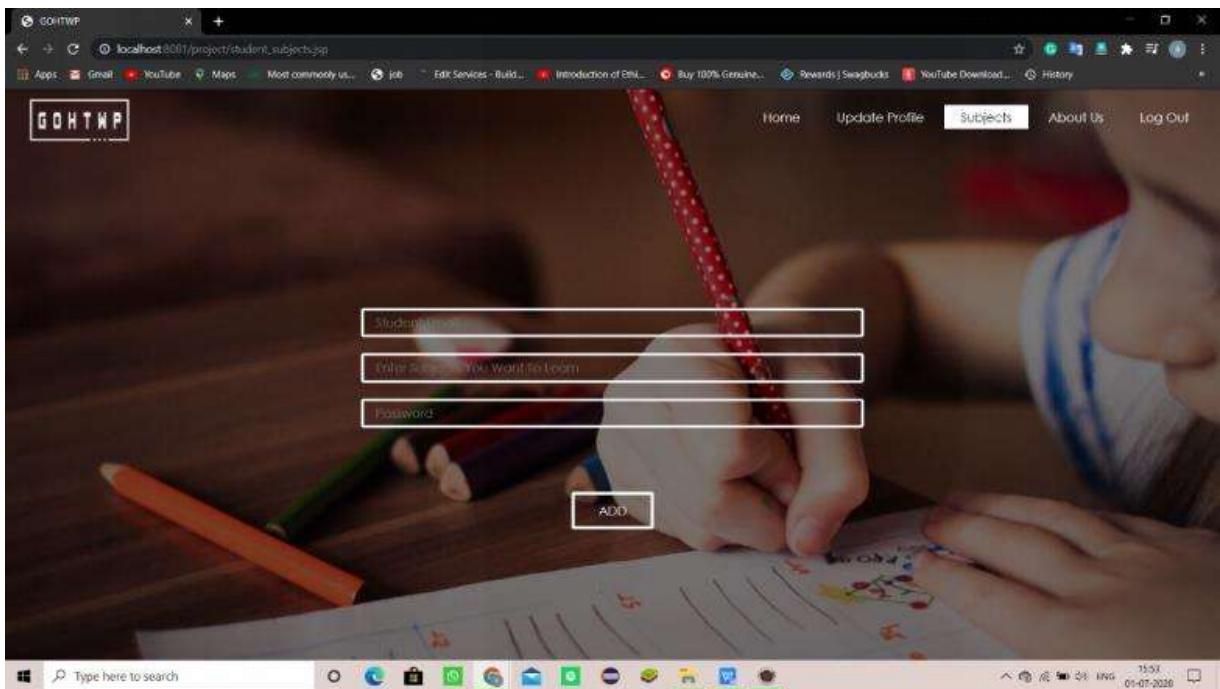
}

%>

</body>

</html>
```

Student_subject.jsp



```
<html>

<head>

    <title>GOHTWP</title>

    <link rel="stylesheet" type="text/css" href="css/tutor_subjects.css">

</head>

<body>

    <header>

        <div class="main">

            <div class="logo">
                
            </div>

            <ul >
                <li ><a href="student_home.jsp">Home</a></li>
                <li ><a href="update_student.jsp">Update Profile</a></li>
                <li ><a class="active" href="#">Add Subject</a></li>
            </ul >

        </div >
    </header>

    <div class="content">
        <h2>Add Subject</h2>
        <form>
            <input type="text" name="subject_name" placeholder="Subject Name" />
            <input type="text" name="tutor_subjects" placeholder="Tutor Subjects You Want To Learn" />
            <input type="password" name="password" placeholder="Password" />
            <input type="button" value="ADD" />
        </form>
    </div >
</body>
```

```
href="student_subjects.jsp">Subjects</a></li>

    <li ><a href="student_about_us.jsp">About Us</a></li>

    <li ><a href="index.jsp">Log Out</a></li>

</ul>

</div>

<form action="student_subject_added.jsp">

<div class="title">

    <input type="text" name="name" placeholder="Student Email"
required>

    <input type="text" name="sub" placeholder="Enter Subjects You
Want To Learn" required>

    <input type="text" name="pass" placeholder="Password" required>

</div>

<div class="button">

    <input type="submit" class="btn" value="ADD">

</div>

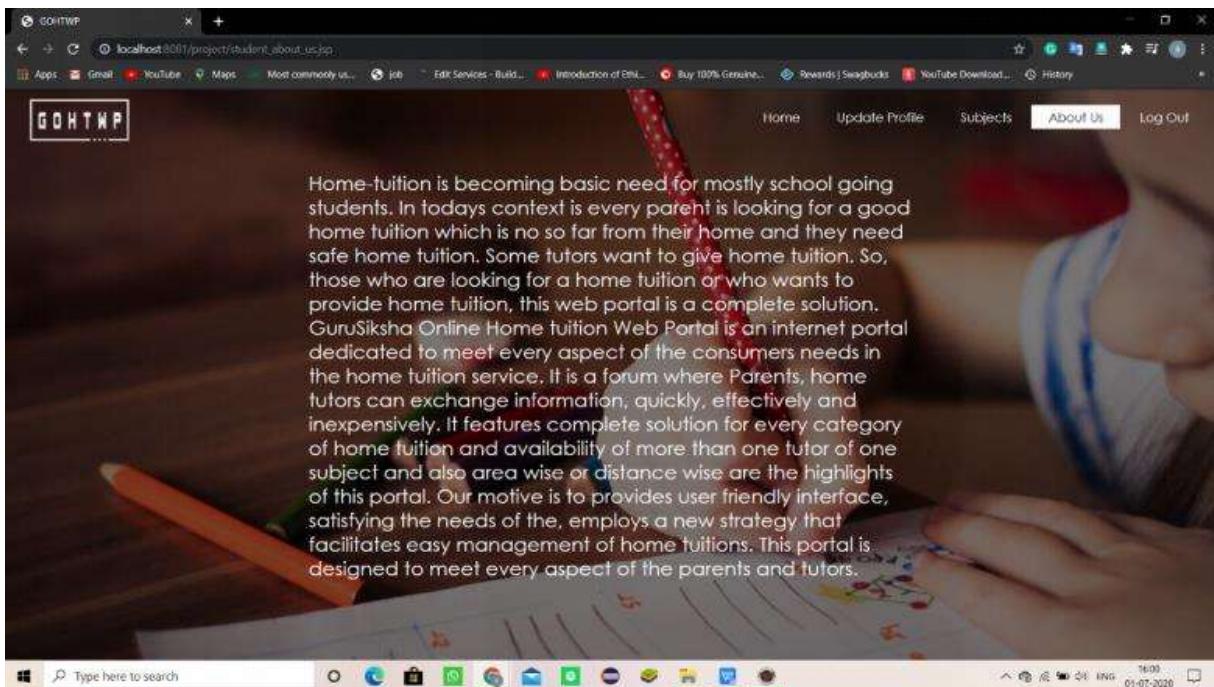
</form>

</header>

</body>

</html>
```

Student_contact_us.jsp



```
<html>

<head>

    <title>GOHTWP</title>

    <link rel="stylesheet" type="text/css" href="css/tutor_about_us.css">

</head>

<body>

    <header>

        <div class="main">

            <div class="logo">

            </div>

            <ul >

                <li ><a href="tutor_home.jsp">Home</a></li>

                <li ><a href="update_tutor.jsp">Update Profile</a></li>

                <li ><a href="tutor_subjects.jsp">Subjects</a></li>

            </ul >

        </div>

    </header>

    <div class="content">

        <h2>Student Contact Us</h2>

        <p>Home-tuition is becoming basic need for mostly school going students. In todays context every parent is looking for a good home tuition which is so far from their home and they need safe home tuition. Some tutors want to give home tuition. So, those who are looking for a home tuition or who wants to provide home tuition, this web portal is a complete solution. GuruSiksha Online Home tuition Web Portal is an internet portal dedicated to meet every aspect of the consumers needs in the home tuition service. It is a forum where Parents, home tutors can exchange information, quickly, effectively and inexpensively. It features complete solution for every category of home tuition and availability of more than one tutor of one subject and also area wise or distance wise are the highlights of this portal. Our motive is to provides user friendly interface, satisfying the needs of the, employs a new strategy that facilitates easy management of home tuitions. This portal is designed to meet every aspect of the parents and tutors.</p>

    </div>

</body>
```

```
<li ><a class="active" href="tutor_about_us.jsp">About Us</a></li>

<li ><a href="index.jsp">Log Out</a></li>

</ul>
</div>

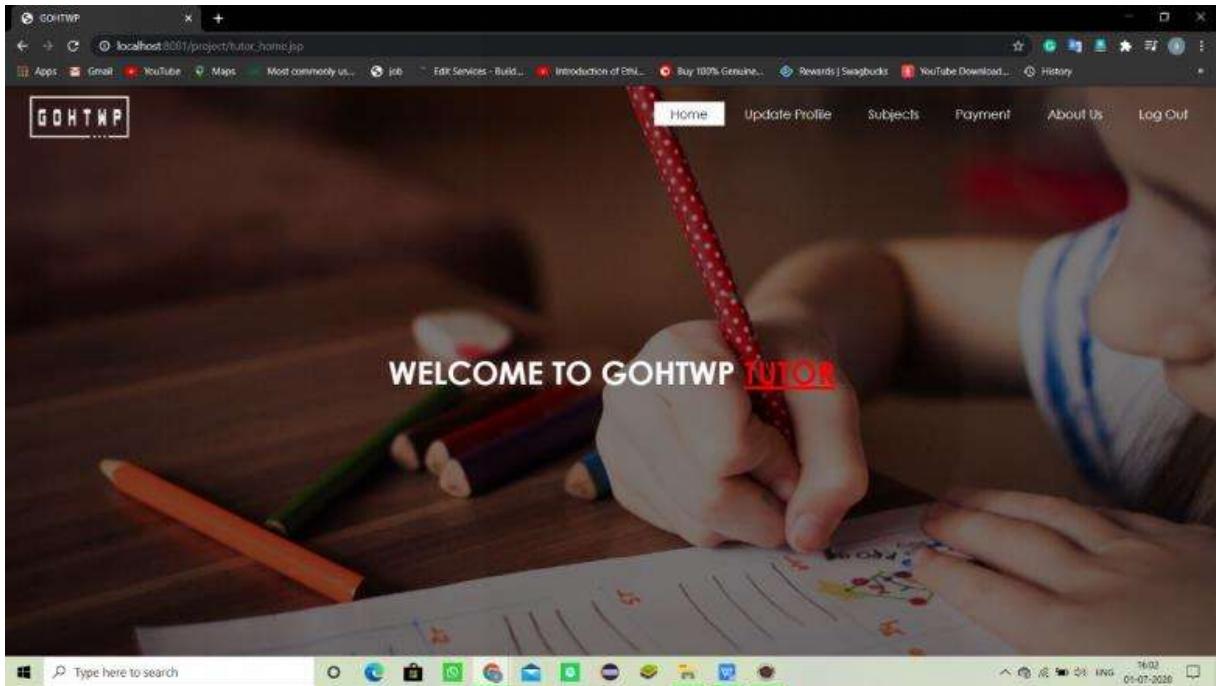
<div class="title">

    <p>Home-tuition is becoming basic need for mostly school going students. In todays context is every parent is looking for a good home tuition which is no so far from their home and they need safe home tuition. Some tutors want to give home tuition. So, those who are looking for a home tuition or who wants to provide home tuition, this web portal is a complete solution. GuruSiksha Online Home tuition Web Portal is an internet portal dedicated to meet every aspect of the consumers needs in the home tuition service. It is a forum where Parents, home tutors can exchange information, quickly, effectively and inexpensively. It features complete solution for every category of home tuition and availability of more than one tutor of one subject and also area wise or distance wise are the highlights of this portal. Our motive is to provides user friendly interface, satisfying the needs of the, employs a new strategy that facilitates easy management of home tuitions. This portal is designed to meet every aspect of the parents and tutors.</p>

</div>
```

```
</header>  
</body>  
</html>
```

Tutor_home.jsp



```
<html>  
<head>  
    <title>GOHTWP</title>  
    <link rel="stylesheet" type="text/css" href="css/tutor_home.css">  
</head>  
<body>  
    <header>  
        <div class="main">  
            <div class="Logo">  
                  
            </div>  
            <ul >
```

```

<li ><a class="active" href="tutor_home.jsp">Home</a></li>

<li ><a href="update_tutor.jsp">Update Profile</a></li>

<li ><a href="tutor_subjects.jsp">Subjects</a></li>

<li ><a href="payment.jsp">Payment</a></li>

<li ><a href="tutor_about_us.jsp">About Us</a></li>

<li ><a href="Logout.jsp">Log Out</a></li>

</ul>

</div>

<div class="title">

<h1>WELCOME TO GOHTWP <u>TUTOR</u> </h1>

</div>

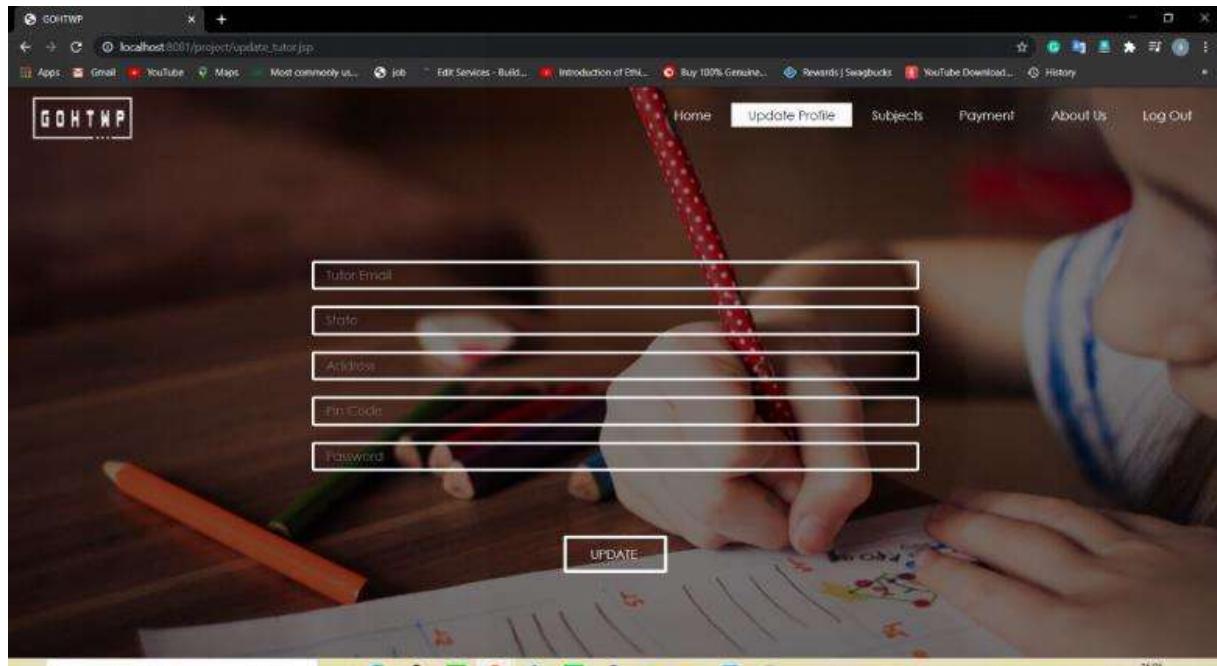
</header>

</body>

</html>

```

Update_tutor.jsp



<html>

```

<head>

    <title>GOHTWP</title>

    <link rel="stylesheet" type="text/css" href="css/update_tutor.css">

</head>

<body>

    <header>

        <div class="main">

            <div class="Logo">

            </div>

            <ul >

                <li ><a href="tutor_home.jsp">Home</a></li>

                <li ><a class="active" href="update_tutor.jsp">Update
Profile</a></li>

                <li ><a href="tutor_subjects.jsp">Subjects</a></li>

                <li ><a href="payment.jsp">Payment</a></li>

                <li ><a href="tutor_about_us.jsp">About Us</a></li>

                <li ><a href="Logout.jsp">Log Out</a></li>

            </ul>

        </div>

        <form action="update_done_tutor.jsp">

            <div class="title">

                <input type="text" name="email" placeholder="Tutor Email"
required>

                <input type="text" name="state" placeholder="State" required>

                <input type="text" name="add" placeholder="Address" required>
<input type="text" name="zip" placeholder="Pin Code" required>

            </div>

        </form>

    </header>

    <div class="content">

        <h2>Update Profile</h2>

        <p>Enter your new profile information below:</p>

        <form>

            <div>

                <label>Email:</label>
                <input type="text" name="email" value="tutor@example.com" required>

            </div>

            <div>

                <label>State:</label>
                <input type="text" name="state" value="California" required>

            </div>

            <div>

                <label>Address:</label>
                <input type="text" name="add" value="123 Main Street" required>

            </div>

            <div>

                <label>Pin Code:</label>
                <input type="text" name="zip" value="90210" required>

            </div>

            <div>

                <input type="submit" value="Update Profile" >

            </div>

        </form>

    </div>

</body>

```

```

        <input type="text" name="pass" placeholder="Password" required>

    </div>
    <div class="button">
        <input type="submit" class="btn" value="UPDATE ">
    </div>
</form>
</header>

</body>
</html>

```

Update_done_tutor.jsp

```

<%@page import="java.sql.*" %>
<html>
<head>
<title>request submitted</title>
</head>
<body>

<%
try {
    String email= request.getParameter("email");
    String state= request.getParameter("state");
    String add= request.getParameter("add");

```

```

String zip= request.getParameter("zip");
String pass= request.getParameter("pass");

Class.forName("oracle.jdbc.driver.OracleDriver");

Connection c =
DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:xe","system","1234");

PreparedStatement ps=c.prepareStatement("update gohtwp set state=?,
address=?, pin_code=? where email=? and pass=?");

ps.setString(1,state);

ps.setString(2,add);

ps.setString(3,zip);

ps.setString(4,email);

ps.setString(5,pass);

int i=ps.executeUpdate();

if(i>0)

{

response.sendRedirect("tutor_home.jsp");

}else{

    out.println("error");

}

}catch(Exception ex){

out.println(ex);

}

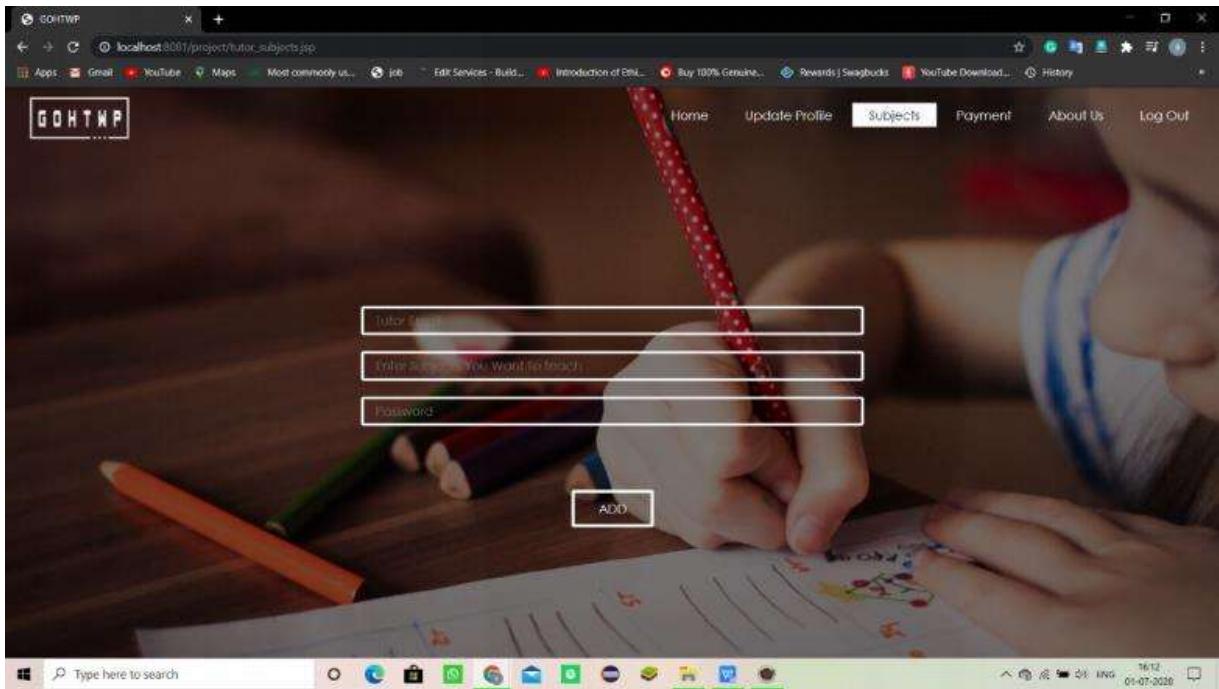
%>

</body>

```

```
</html>
```

Tutor_subjects.jsp



```
<html>
```

```
<head>
```

```
    <title>GOHTWP</title>
```

```
    <link rel="stylesheet" type="text/css" href="css/tutor_subjects.css">
```

```
</head>
```

```
<body>
```

```
    <header>
```

```
        <div class="main">
```

```
            <div class="Logo">
```

```
                
```

```
            </div>
```

```
            <ul >
```

```
                <li ><a href="tutor_home.jsp">Home</a></li>
```

```
                <li ><a href="update_tutor.jsp">Update Profile</a></li>
```

```

        <li ><a class="active"
href="tutor_subjects.jsp">Subjects</a></li>

        <li ><a href="payment.jsp">Payment</a></li>

        <li ><a href="tutor_about_us.jsp">About Us</a></li>

        <li ><a href="Logout.jsp">Log Out</a></li>

    </ul>

</div>

<form action="tutor_subject_added.jsp">

<div class="title">

    <input type="text" name="name" placeholder="Tutor Email"
required>

    <input type="text" name="sub" placeholder="Enter Subjects You
Want To Teach" required>

    <input type="text" name="pass" placeholder="Password" required>

</div>

<div class="button">

    <input type="submit" class="btn" value="ADD">

</div>

</form>

</header>

</body>

</html>

```

Tutor_subject_added.jsp

```
<%@page import="java.sql.*" %>

<html>
<head>
<title>request submitted</title>
</head>
<body>

<%
try
{
    String email= request.getParameter("email");
    String sub= request.getParameter("sub");
    String pass= request.getParameter("pass");

    Class.forName("oracle.jdbc.driver.OracleDriver");
    Connection c =
DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:xe","system","1234");
    PreparedStatement ps=c.prepareStatement("update gohtwp set sub=? where email=? and
pass=?");
    ps.setString(1,sub);
    ps.setString(2,email);
    ps.setString(3,pass);

    int i=ps.executeUpdate();
    if(i>0)
    {

```

```

        response.sendRedirect("tutor_home.jsp");

    }else{
        out.println("error");
    }

}catch(Exception ex){

out.println(ex);
}

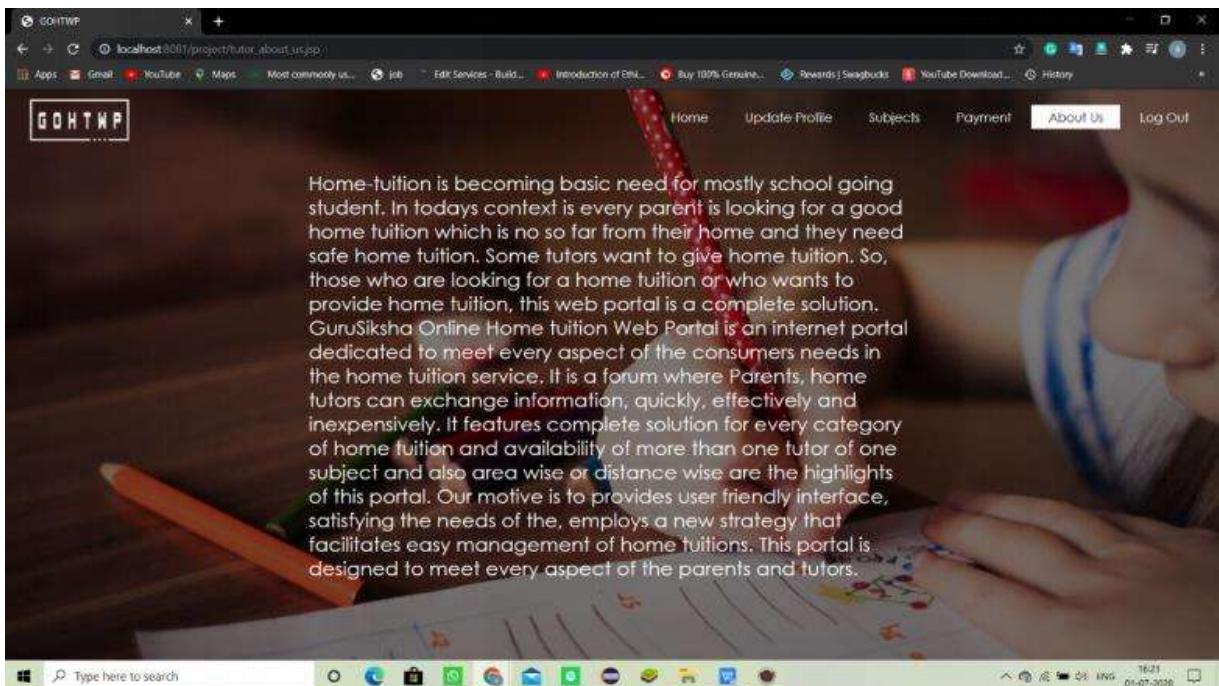
%>

</body>

</html>

```

Tutor_about_us.jsp



```

<html>

<head>

<title>GOHTWP</title>

<link rel="stylesheet" type="text/css" href="css/tutor_about_us.css">

```

```
</head>

<body>

    <header>
        <div class="main">

            <div class="Logo">
                
            </div>

            <ul >

                <li ><a href="tutor_home.jsp">Home</a></li>
                <li ><a href="update_tutor.jsp">Update Profile</a></li>
                <li ><a href="tutor_subjects.jsp">Subjects</a></li>
                <li ><a href="payment.jsp">Payment</a></li>
                <li ><a class="active" href="tutor_about_us.jsp">About Us</a></li>
                <li ><a href="Logout.jsp">Log Out</a></li>
            </ul>

        </div>

        <div class="title">
            <p>Home-tuition is becoming basic need for mostly school going student. In todays context is every parent is looking for a good home tuition which is no so far from their home and they need safe home tuition. Some tutors want to give home tuition. So, those who are looking for a home tuition or who wants to provide home tuition, this web portal is a complete solution. GuruSiksha Online Home tuition Web Portal is an internet portal dedicated to meet every aspect of the consumers needs in the home tuition service. It is a forum where
        </div>
    </header>
```

Parents, home tutors can exchange information, quickly, effectively and inexpensively. It features complete solution for every category of home tuition and availability of more than one tutor of one subject and also area wise or distance wise are the highlights of this portal. Our motive is to provides user friendly interface, satisfying the needs of the, employs a new strategy that facilitates easy management of home tuitions. This portal is designed to meet every aspect of the parents and tutors.</p>

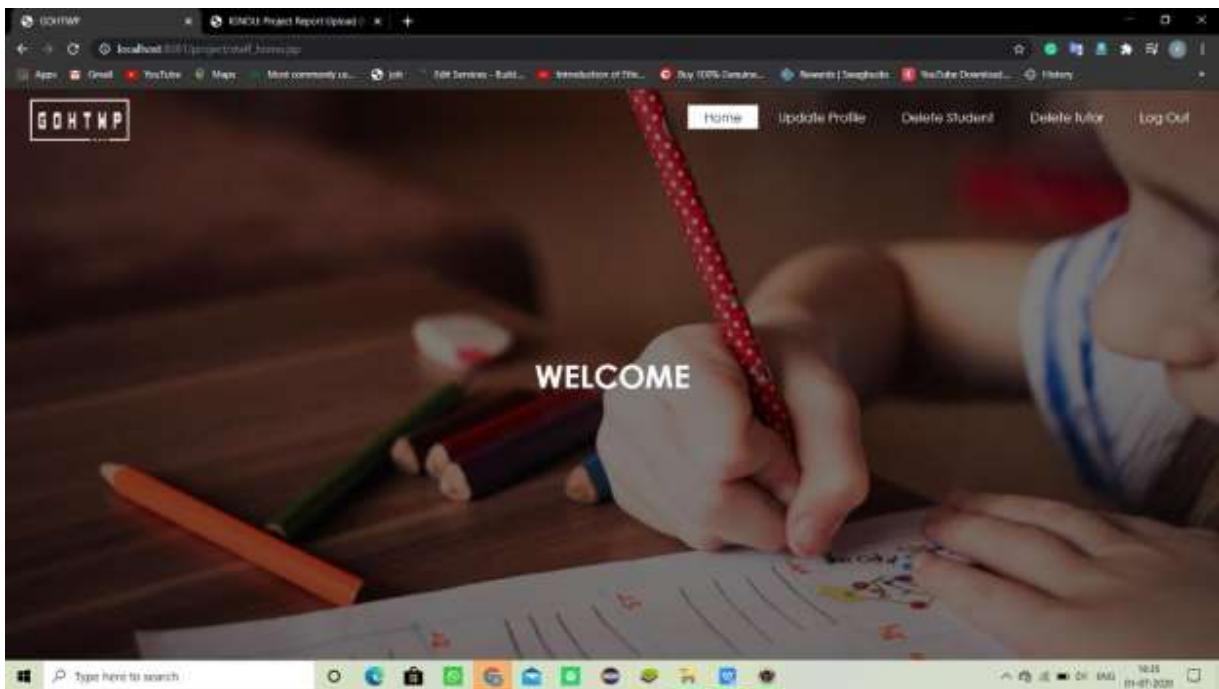
</div>

</header>

</body>

</html>

Staff_home.jsp



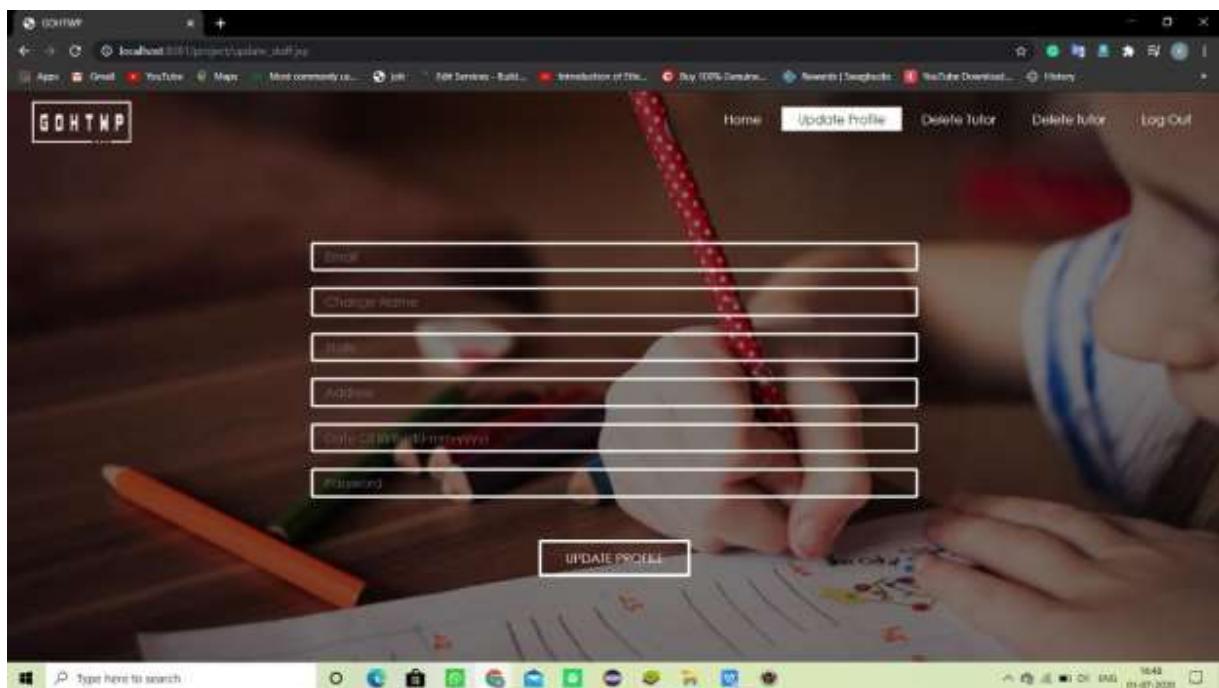
```
<html>
<head>
    <title>GOHTWP</title>
    <link rel="stylesheet" type="text/css" href="css/adminhome.css">
</head>
<body>
    <header>
        <div class="main">
            <div class="Logo">
                
            </div>
            <ul >
                <li ><a class="active" href="#">Home</a></li>
                <li ><a href="update_staff.jsp">Update Profile</a></li>
```

```

        <li><a href="delete_student.jsp">Delete Student</a></li>
        <li><a href="delete_tutor.jsp">Delete tutor</a></li>
        <li><a href="Logout.jsp">Log Out</a></li>
    </ul>
</div>
<div class="title">
    <h1>WELCOME </h1>
</div>
</header>
</body>
</html>

```

Update_staff.jsp



```

<html>
<head>
    <title>GOHTWP</title>

```

```

<link rel="stylesheet" type="text/css" href="css/update_staff.css">

</head>

<body>

<header>

<div class="main">

<div class="Logo">
    
</div>

<ul >

<li ><a href="staff_home.jsp">Home</a></li>

<li ><a class="active" href="update_staff.jsp">Update
Profile</a></li>

<li ><a href="delete_student.jsp">Delete Student</a></li>

<li ><a href="delete_tutor.jsp">Delete Tutor</a></li>

<li ><a href="index.jsp">Log Out</a></li>

</ul>

</div>

<form action="update_done_staff.jsp">

<div class="title">

<input type="text" name="email" placeholder="Email" required>

<input type="text" name="name" placeholder="Change Name"
required>

<input type="text" name="state" placeholder="State" required>

<input type="text" name="add" placeholder="Address" required>

<input type="text" name="dob" placeholder="Date Of Birth(dd-
mm-yyyy)" required>

<input type="text" name="pass" placeholder="Password" required>

</div>

<div class="button">

```

```

        <input type="submit" class="btn" value="UPDATE PROFILE">

    </div>
</form>
</header>
</body>
</html>

```

Update_done_staff.jsp

```

<%@page import="java.sql.*" %>
<html>
<head>
<title>request submitted</title>
</head>
<body>

<%
try
{
    String email= request.getParameter("email");
    String name= request.getParameter("name");
    String state= request.getParameter("state");
    String add= request.getParameter("add");
    String dob= request.getParameter("dob");
    String pass= request.getParameter("pass");
Class.forName("oracle.jdbc.driver.OracleDriver");
    Connection c =
DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:xe","system","1234");

```

```

PreparedStatement ps=c.prepareStatement("update gohtwp set name=?, state=?,
address=?, dob=?, where email=? and pass=? ");
ps.setString(1,name);
ps.setString(2,state);
ps.setString(3,add);
ps.setString(4,dob);
ps.setString(5,email);
ps.setString(6,pass);

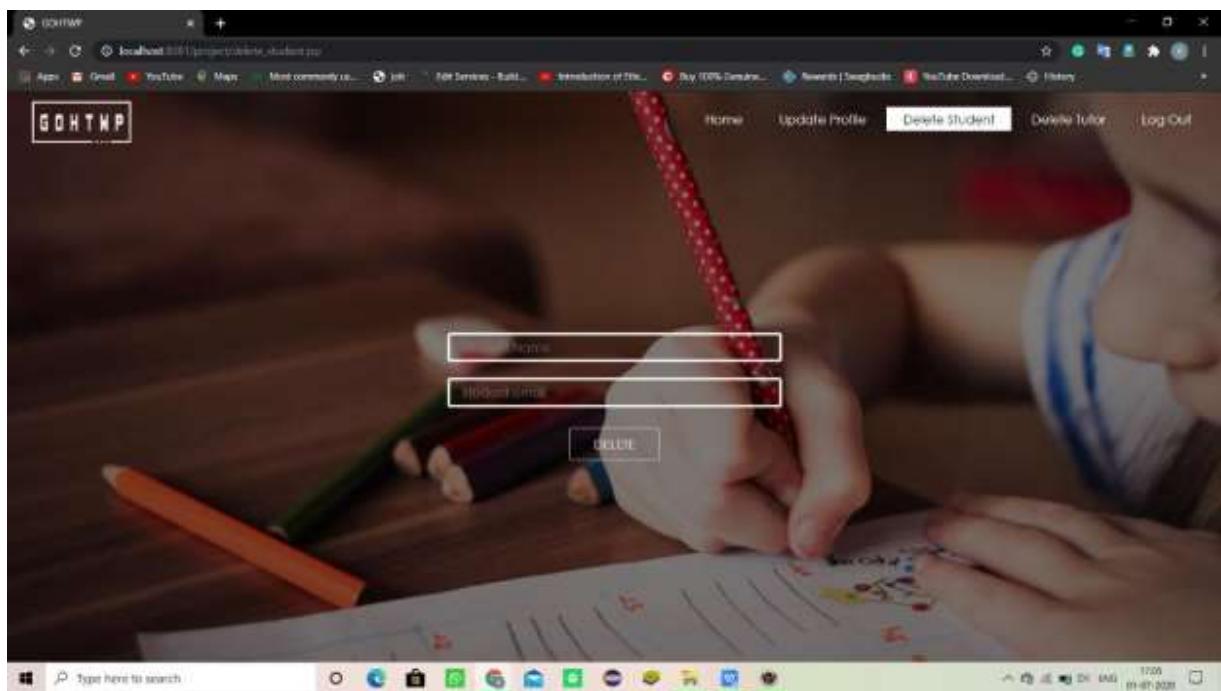
int i=ps.executeUpdate();
if(i>0)
{
    response.sendRedirect("staff_home.jsp");
}else{
    out.println("error");
}
}catch(Exception ex){
out.println(ex);
}

%>

</body>
</html>

```

Delete_student.jsp



```
<html>
<head>
    <title>GOHTWP</title>
    <link rel="stylesheet" type="text/css" href="css/delete_student.css">
</head>
<body>
    <header>
        <div class="main">
            <div class="Logo">
                
            </div>
            <ul >
```

```

<li ><a href="staff_home.jsp">Home</a></li>

<li ><a href="update_staff.jsp">Update Profile</a></li>

<li ><a class="active" href="delete_student.jsp">Delete
Student</a></li>

<li ><a href="delete_tutor.jsp">Delete Tutor</a></li>

<li ><a href="Logout.jsp">Log Out</a></li>

</ul>

</div>

<form action="student_deleted.jsp">

<div class="title">
    <input type="text" name="name" placeholder="Student Name"
required>
    <input type="text" name="email" placeholder="Student email"
required>
</div>

<div class="button">
    <input type="submit" class="btn" value="DELETE">
</div>
</form>
</header>

</body>
</html>

```

Student_deleted.jsp

```
<%@page import="java.sql.*" %>

<html>
<head>
<title>request submitted</title>
</head>
<body>
<% try
{
    String name= request.getParameter("name");
    String email= request.getParameter("email");
    Class.forName("oracle.jdbc.driver.OracleDriver");
    Connection c =
    DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:xe","system","1234");
    PreparedStatement ps =c.prepareStatement("select * from gohtwp where name=? and email=?");
    ps.setString(1,name);
    ps.setString(2,email);

    ResultSet rs=ps.executeQuery();
    if(rs.next())
    {
        PreparedStatement ps1 =c.prepareStatement("DELETE from gohtwp WHERE name=? and email=?");
        ps1.setString(1,name);
        ps1.setString(2,email);

        ps1.executeUpdate();
        response.sendRedirect("staff_home.jsp");
    }
}
```

```

}else
{
out.println("record not found.");
}

} catch(Exception ex){
out.println(ex);
}

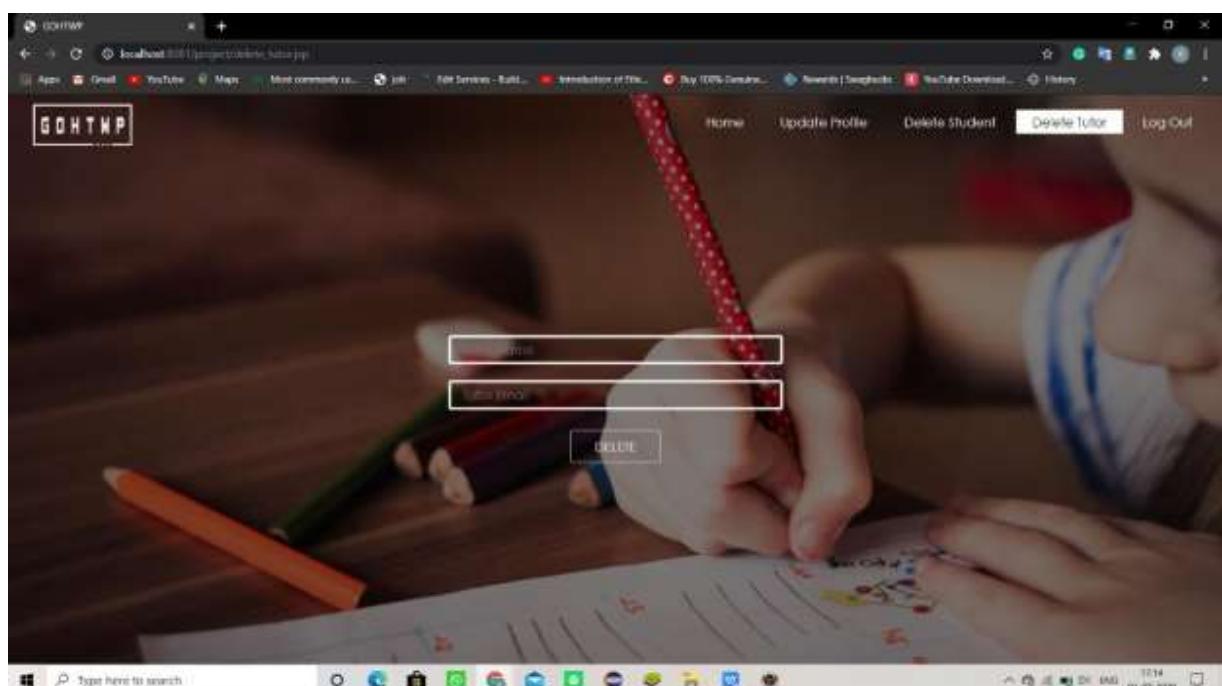
%>

</body>

</html>

```

Delete_tutor.jsp



```

<html>

<head>

<title>GOHTWP</title>

<link rel="stylesheet" type="text/css" href="css/delete_staff.css">

</head>

<body>

```

```

<header>

    <div class="main">

        <div class="Logo">
            
        </div>

        <ul >

            <li ><a href="staff_home">Home</a></li>

            <li ><a href="update_staff.jsp" >Update Profile</a></li>

            <li ><a href="delete_student.jsp">Delete Student</a></li>

            <li ><a class="active" href="delete_tutor.jsp">Delete
Tutor</a></li>

            <li ><a href="Logout.jsp">Log Out</a></li>

        </ul>

    </div>

    <form action="tutor_deleted.jsp">

        <div class="title">

            <input type="text" name="name" placeholder="Tutor Name"
required>

            <input type="text" name="email" placeholder="Tutor Email"
required>

        </div>

        <div class="button">

            <input type="submit" class="btn" value="DELETE">

        </div>

    </form>

</header>

```

```
</body>
```

```
</html>
```

Tutor_deleted.jsp

```
<%@page import="java.sql.*" %>

<html>
<head>
<title>request submitted</title>
</head>
<body>
<% try
{
    String name= request.getParameter("name");
    String email= request.getParameter("email");
    Class.forName("oracle.jdbc.driver.OracleDriver");
    Connection c =
    DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:xe","system","1234");
    PreparedStatement ps =c.prepareStatement("select * from gohtwp where name=? and email=?");
    ps.setString(1,name);
    ps.setString(2,email);

    ResultSet rs=ps.executeQuery();
    if(rs.next())
    {
        PreparedStatement ps1 =c.prepareStatement("DELETE from gohtwp WHERE name=? and email=?");
        ps1.setString(1,name);
        ps1.setString(2,email);
    }
}
```

```

ps1.executeUpdate();

response.sendRedirect("staff_home.jsp");

}

}else
{
    out.println("record not found.");
}

}
catch(Exception ex){
    out.println(ex);
}

%>

</body>

</html>

```

Testing And Implementation

- testing Methodology
- Unit Testing
- Module Testing
- System Testing
- Alpha/Beta Testing
- White box/black box testing

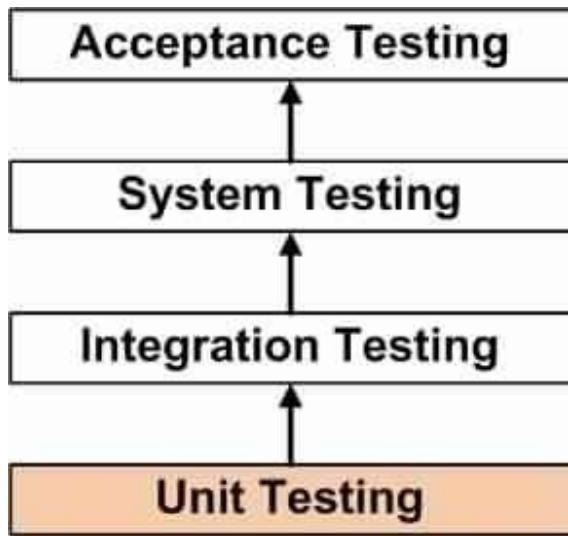
- Implementation Manual
- Implementation
- Post Implementation Modification

Testing methodology :

The testing of software is a means of assessing or measuring the software to determine its quality. The idea of testing is one of the key process areas in ensuring the quality of the software.

Unit Testing :

UNIT TESTING is a level of software testing where individual units/ components of a software are tested. The purpose is to validate that each unit of the software performs as designed. A unit is the smallest testable part of any software. It usually has one or a few inputs and usually a single output. In procedural programming, a unit may be an individual program, function, procedure, etc. In object-oriented programming, the smallest unit is a method, which may belong to a base/ super class, abstract class or derived/ child class. (Some treat a module of an application as a unit. This is to be discouraged as there will probably be many individual units within that module.) Unit testing frameworks, drivers, stubs, and mock/ fake objects are used to assist in unit testing.



Unit Testing Method

It is performed by using the [White Box Testing](#) method.

When is it performed?

Unit Testing is the first [level of software testing](#) and is performed prior to [Integration Testing](#).

Who performs it?

It is normally performed by software developers themselves or their peers. In rare cases, it may also be performed by independent software testers.

Module Testing:

Module testing is primarily focused on testing software modules or subprogram instead of testing the entire software application at once. Module testing in software engineering is very beneficial and always recommended as it is very easy to identify, understand and fix the defects at the module level instead of fixing them at the Application level.

System testing:

Integrated testing of the system with emphasis on interfaces between configuration items and modules is the essence of the System Testing. The emphasis is on testing the functionality of the system, its security, recovery and restart procedures and interfaces with external systems, if any.

Alpha/beta testing

- Alpha Testing: The system was run in a simulated environment using simulated data. This simulated test is something called as verification testing. It primarily looks for errors and omissions regarding end users and design specifications that were specified in the earlier phase but not fulfilled during construction. After alpha testing the user will have an idea of how the project has shaped if it is according to their requirements and what changes are required.
- Beta testing : in beta testing main s/w is run in user live environment and when user detects any bugs, reports it to the developer. The developer modifies the actual software, removes the bug in the final software. Then the final software is launched in the market. The earlier copy of the project is called the beta version of the project.

White box/black box testing

Black box Testing : this form of testing is used during System or Acceptance testing where the system is regarded as a “black box”, i.e., its internals are not known to the tester. The tester gives the required inputs and checks the outputs. If the outputs don’t tally with expected results, an error is reported.

White box Testing : this is used in Unit Testing and System Testing where the internals of the system are known to the technical people. Testing is done by checking that all branches and loops of code are executed, intermediate and temporary files are updated properly and hand offs to other systems or modules are written in the correct format.

IMPLEMENTATION

Old system to the new one. In our case, the implementation include all the activities that take place to convert existing system to new computerized system.

The implementation view of software requirements presents the real world manifestation of processing functions and information structures. An implementation structure model represents the current mode of operation, that is, the proposed allocation for all system elements. The essential model of function or data is generic that realization of function is not explicitly indicated.

This is a stage when you hand over the system to the user. The implementation consists of the following steps.

- Usage of the new system.
- Final checkout and acceptable.

We have to take care about these points when we are handing over the new system to the user. User training about handling the Hardware and Software are extremely important if we want minimum complaints of failure of the system from the user.

Technically, elegant system fails due to poor quality running imparted to the operators & user. Operator's focuses on the basis of hardware and operation of computers.

Conversion is one another important part in implementation. There were various methods of handling system conversion like:

- Pilot Conversion.
- Phase Conversion.

Every system requires periodic evaluation after implementation. This post implementation review measures the system's performance against predefined requirements. It determines how well the system continues to meet the performance specification. It provides an evaluation of the system accomplishes the stated objectives. It usually a review of the major problem that needs conversion and issues that arose during the implementation phase. The preliminary liability in such a case lies with the user organization, which assigns a special staff for the purpose.

Since request for evaluation was received during my training period so on description about this stage.

Maintenance is the enigma of the system environment. Maintenance could be through to be the implementation of the post implementation review. It is very expensive in nature. Its need is when new information is inconsistent with the design specification and changes have to be made.

Add test cases:-

A test case is a set of conditions or variables under which a tester will determine whether a system under test satisfies requirements or works correctly.

The process of developing test cases can also help find problems in the requirements or design of an application.

WRITING GOOD TEST CASES

- As far as possible, write test cases in such a way that you test only one thing at a time. Do not overlap or complicate test cases. Attempt to make your test cases 'atomic'.

- Ensure that all positive scenarios and negative scenarios are covered.
- Language:
 - Write in simple and easy to understand language.
 - Use active voice: Do this, do that.
 - Use exact and consistent names (of forms, fields, etc).
- Characteristics of a good test case:
 - Accurate: Exacts the purpose.
 - Economical: No unnecessary steps or words.
 - Traceable: Capable of being traced to requirements.
 - Repeatable: Can be used to perform the test over and over.
 - Reusable: Can be reused if necessary.

FUTURE SCOPE

This project can be used in the online service provider after adding or by upgrading some more useful modules in the project for which the company are providing services. This website can be converted to distributed system with little modification. The company also has a plan to develop intranet system in future to increase the productivity and to enhance the growth.

This website is proved to be necessity for the development and growth of the company which is needs a very good decision support system for the manager. As the basic trend of the market does not change coming four or five years this website has a tremendous potential to fulfill the market need at present also in future.

This website contains various analysis reports or crystal reports about home tutor and Client which will be much more helpful to the managers. Also the analytical reports are very much helpful for the manager of the company to take decision about the demand and how much stock has to be made to optimize the profit.

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