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Department of Computer Science & Application

“Campus Selection”

A

Project Report Submitted

In Partial Fulfillment of the Requirement

for the Degree of

BACHELOR OF COMPUTER APPLICATION

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Submitted To:-

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DECLARATION

I hereby declare that the work contained in this project entitled "**CAMPUS SELECTION**" towards the partial fulfillment of the requirement for the award of the degree **Bachelor of Computer Applications** in Department of Computer Science and Application, **Dr. Harisingh Gour Central Vishwavidyalaya, Sagar (M.P.)**, of my own work and performed by me. It is an original and authentic record.

I have not submitted the matter embodied in the project for the award of any other degree or diploma to any other institute or university



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Destiny Research & Electronic Training Pvt. Ltd.

CERTIFICATE OF COMPLETION

Ref No. **DRET/2020/CS/0001**

Date: **30 June 2020**

*This is to certified that **Mr. sajal kumar jain** a final semester student of course bachelor of computer application from **Dr. H.S. Gour Central University, Sagar** has successfully completed his four month major project training on "**Campus Placement**" at **Destiny Research & Electronic Training Pvt. Ltd.** during the period of **1st Feb 2020 to 20 March** at center and rest is by online classes, he had provided satisfactory result. This is to certify that he has no pending assignment in relation to his work.*

He trained for HTML/CSS/Bootstrap/PHP/SQL

We wish him all the best for future



adarsh k jain

Director

DRET Pvt. Ltd.

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CONTENTS DESCRIPTION

1. INTRODUCTION _____ 1-2

1.1 INTRODUCTION TO PROJECT

1.2 PURPOSE OF THE PROJECT

1.3 MODULE OF THE PROJECT

2. SYSTEM ANALYSIS _____ 3-8

2.1. INTRODUCTION

2.2. STUDY OF THE SYSTEM

2.3. HARDWARE & SOFTWARE REQUIRMENT

2.4. PROPOSED SYSTEM

2.5. INPUT & OUTPUT

2.6. PROCESS MODELS USED WITH JUSTIFICATION

3. FEASIBILITY REPORT _____ 9-10

3.1. TECHNICAL FEASIBILITY

3.2. OPERATIONAL FEASIBILITY

3.3. ECONOMIC FEASIBILITY

4. SOFTWARE REQUIREMENT SPECIFICATIONS _____ 11-16

4.1. FUNCIONAL REQUIREMENTS

4.2. PERFORMANCE REQUIREMENTS

5. SELECTED SOFTWARE _____ 17-18

5.1. PHP

5.2. HTML

5.3. CSS

5.4. MYSQL

6. SYSTEM DESIGN _____ 19-24

6.1.INTRODUCTION

6.2. NORMALIZATION

6.3. USE-CASE DAIGRAMS

6.4. DATA FLOW DIAGRAMS

6.5. DATA DICTIONARY

7. OUTPUT SCREENS _____ 25-29

8. SYSTEM TESTING AND IMPLEMENTATION _____ 30-31

8.1. INTRODUCTION

8.2. STRATEGIC APPROACH OF SOFTWARE TESTING

8.3. UNIT TESTING

9. SYSTEM SECURITY	<u>32-33</u>
9.1. INTRODUCTION	
9.2. SECURITY IN SOFTWARE	
10. CONCLUSION	<u>34</u>
11. FUTURE IMPROVEMENT	<u>35</u>
12. CODING	<u>36-45</u>
13. BIBLIOGRAPHY	<u>46</u>

Chapter 1

INTRODUCTION

1.1 INTRODUCTION TO PROJECT -

The “**Online Campus Selection System**” developed for HR Department with including automate the functioning of HR Department. This system is helpful for HR Department to make easy student selection process. We can say this system similar to Human Resource Management System.

The online campus selection software work at college or university. The College invited to recruiter/company for register in this system and help to get employee easily as per their qualification and requirements. Other hand college has all the student data submitted in this system so student can get easily job. The system is a mutual place for student and company. The online campus selection system helps student to get job and company to get employee.

1.2 PURPOSE OF THE PROJECT

- Maintain individual Student record.
- Maintain Section wise Student details.
- Evaluating Student performance.
- Generating random ID for each student which is unique.
- Making only eligible Students to take the test.
- Allow online registrations for the On-Line Selection Test.
- Allow online requests and support for the examination.
- Providing proper Technical Assistance to the User.
- Providing On-Line Help

OBJECTIVE :

Development of rich web based Campus Selection System for Universities and any Companies. Online Campus Selection System is developed for smooth working of Human Resource Departments. Universities and companies can get benefited through this system. This Software is fully integrated with Student and Company Relationship Management and developed in a manner that is easily manageable, time and cost saving that shows relieving one from manual works. Online Campus Selection provides automated technical screening, intellectual evaluation, electronic mail integration to

conduct recruitment. This feature's helps in many ways like saving cost, time and paper work, this shows the paperless environment, unlimited Custom and reports.

1.3. MODULES OF THE PROJECT

Campus selection makes management to get the most updated information always by avoiding manual accounting process. This system has the following functional divisions.

Student and campus Administrator

They have their different-2 work and they have some authentication process to follow to enter and come outside of the project.

SCOPE :

This system automates the Selection process activities that the HR Department has to perform prior to and after the actual act of selecting the students. This system helps in various ways such as saving time and cost of selecting Students and companies. That set of concepts is used to build a system for easily Communication between students and companies and company can get required eligible students.

Chapter 2

SYSTEM ANALYSIS

2.1. INTRODUCTION

After analyzing the requirements of the work to be performed, the next step is to analyze the problem and understand its context. The first activity in the phase is studying the existing system and other is to understand the requirements and domain of the new system.

Both the activities are equally important, but the first activity serves as a basis of giving the functional specifications and then successful design of the proposed system. Understanding the properties and requirements of a new system is more difficult and requires creative thinking and understanding of existing running system is also difficult, improper understanding of present system can lead diversion from solution.

ANALYSIS MODEL

The model that is basically being followed is the WATER FALL MODEL, which states that the phases are organized in a linear order. First of all the feasibility study is done. Once that part is over the requirement analysis and project planning begins. The design starts after the requirement analysis is complete and the coding begins after the design is complete. Once the programming is completed, the testing is done. In this model the sequence of activities performed in a software development project are:

- Requirement Analysis
- Project Planning
- System design
- Detail design
- Coding
- Unit testing
- System integration & testing

Here the linear ordering of these activities is critical. End of the phase and the output of one phase is the input of other phase. The output of each phase is to be consistent with the overall requirement of the system. Some of the qualities of spiral model are also

incorporated like after the people concerned with the project review completion of each of the phase the work done.

WATER FALL MODEL was being chosen because all requirements were known beforehand and the objective of our software development is the computerization/automation of an already existing manual working system.

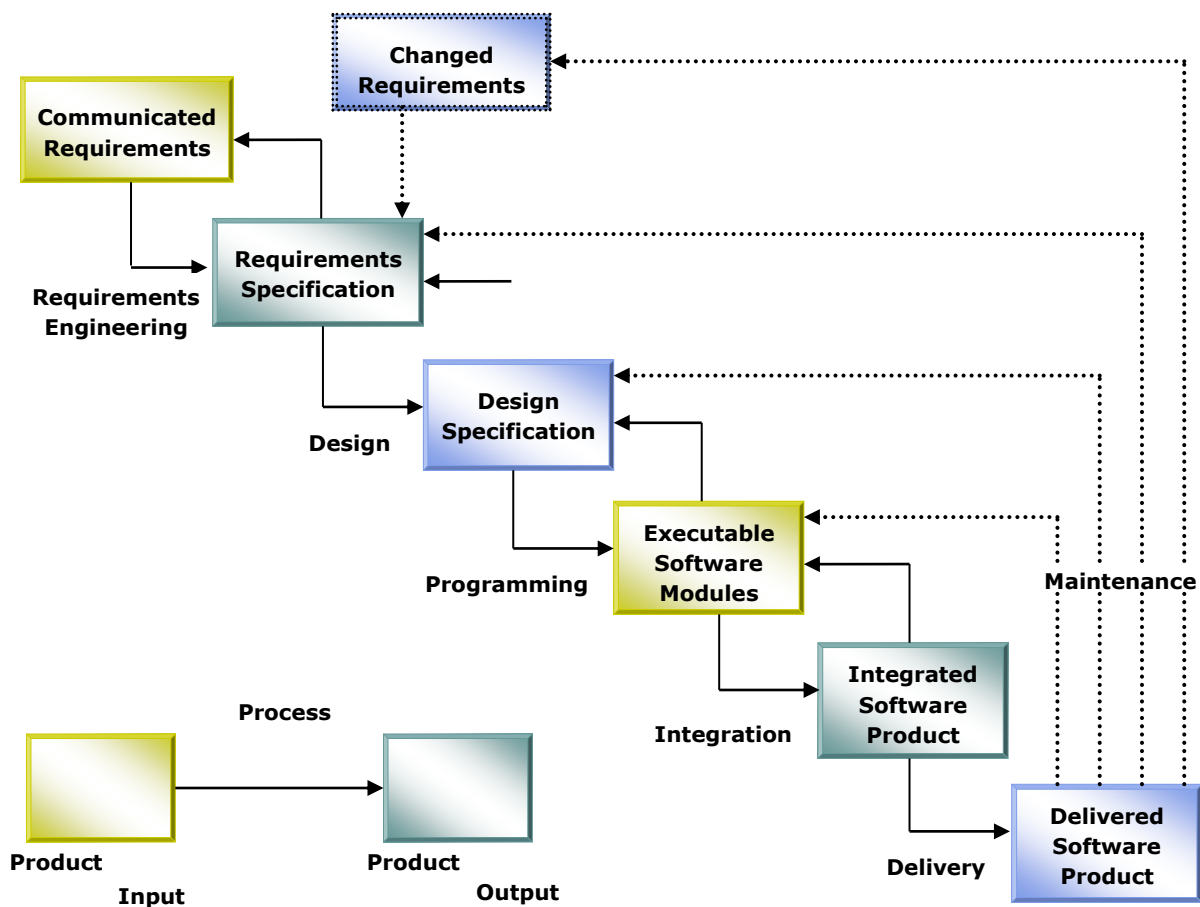


Fig 2.2: Water Fall Model.

2.2. STUDY OF THE SYSTEM -

GUI'S

In the flexibility of the uses the interface has been developed a graphics concept in mind, associated through a browses interface. The GUI'S at the top level have been categorized as

Administrative user interface

The operational or generic user interface

The administrative user interface concentrates on the consistent information that is practically, part of the organizational activities and which needs proper authentication for the data collection. The interfaces help the administrations with all the transactional states like Data insertion, Data deletion and Date updation along with the extensive data search capabilities.

The operational or generic user interface helps the users upon the system in transactions through the existing data and required services. The operational user interface also helps the ordinary users in managing their own information helps the ordinary users in managing their own information in a customized manner as per the assisted flexibilities.

NUMBER OF MODULES

The system after careful analysis has been identified to be presented with the following modules:

The module is

Admin

Admin

In this module Admin has all authority to access all details and modify them and they can show details of register Hotels and Vehicles. They have a session to capture all things after successfully logout it can send to home page.

PROJECT INSTRUCTIONS:

Based on the given requirements, conceptualize the Solution Architecture. Choose the domain of your interest otherwise develop the application for ultimatedotnet.com. Depict the various architectural components, show interactions and connectedness and show internal and external elements. Design the web services, web methods and database infrastructure needed both and client and server. Provide an environment for up gradation of application for newer versions that are available in the same domain as web service target.

2.3. HARDWARE SPEDIFICATIONS

HARDWARE REQUIREMENTS:

PIV 2.8 GHz Processor and Above

RAM 512MB and Above

HDD 20 GB Hard Disk Space and Above

SOFTWARE REQUIREMENTS:

WINDOWS OS (XP / 2000 / 200 Server / 2003 Server)

WAMP SERVER OR

EASY PHP

DREAMVIEWER

MYSQL

2.4. PROPOSED SYSTEM -

To debug the existing system, remove procedures those cause data redundancy, make navigational sequence proper. To provide information about audits on different level and also to reflect the current work status depending on organization/auditor or date. To build strong password mechanism.

NEED FOR COMPUTERIZATION

We all know the importance of computerization. The world is moving ahead at lightening speed and everyone is running short of time. One always wants to get the information and perform a task he/she/they desire(s) within a short period of time and too with amount of efficiency and accuracy. The application areas for the computerization have been selected on the basis of following factors:

1. Minimizing the manual records kept at different locations.
2. There will be more data integrity.
3. Facilitating desired information display, very quickly, by retrieving infor. from users.
4. Facilitating various statistical information which helps in decision-making?
5. To reduce manual efforts in activities that involved repetitive work.

6. Updating and deletion of such a huge amount of data will become easier.

FUNCTIONAL FEATURES OF THE MODEL

As far as the project is developed the functionality is simple, the objective of the proposal is to strengthen the functioning of Audit Status Monitoring and make them effective and better. The entire scope has been classified into five streams known as Coordinator Level, management Level, Auditor Level, User Level and State Web Coordinator Level. The proposed software will cover the information needs with respect to each request of the user group viz. accepting the request, providing vulnerability document report and the current status of the audit.

WORKING OF THE SYSTEM

The entire scope has been classified into five streams known as: -

Coordinator Level

(Addressing the information management needs of coordinator)

Management Level

(Addressing the information management needs of management)

2.5. INPUT AND OUTPUT

The major inputs and outputs and major functions of the system are follows:

Inputs/outputs:

1. Administrator enter his user id and password for login to authenticate
2. Administrator creates the job category
3. While booking can able to provide their details.
4. Add Company and Job id
5. Add Company and Job name .
6. Address Information of Company
7. Administrator can create the various Companies details in this website.

2.6. PROCESS MODELS USED WITH JUSTIFICATION

ACCESS CONTROL FOR DATA WHICH REQUIRE USER AUTHENTICATION

The following commands specify access control identifiers and they are typically used to authorize and authenticate the user (command codes are shown in parentheses)

USER NAME (USER)

The Customer identification is that which is required by the server for access to its file system. This command will normally be the first command transmitted by the user after the control connections are made (some servers may require this).

PASSWORD (PASS)

This command must be immediately preceded by the user name command, and, for some sites, completes the user's identification for access control. Since password information is quite sensitive.

Chapter 3

Feasibility Report -

Preliminary investigation examine project feasibility, the likelihood the system will be useful to the organization. The main objective of the feasibility study is to test the Technical, Operational and Economical feasibility for adding new modules and debugging old running system. All system is feasible if they are unlimited resources and infinite time. There are aspects in the feasibility study portion of the preliminary investigation:

1. Technical Feasibility
2. Operation Feasibility
3. Economical Feasibility

3.1. Technical Feasibility

The technical issue usually raised during the feasibility stage of the investigation includes the following:

1. Does the necessary technology exist to do what is suggested?
2. Do the proposed equipments have the technical capacity to hold the data required to use the new system?
3. Will the proposed system provide adequate response to inquiries, regardless of the number or location of users?
4. Can the system be upgraded if developed?
5. Are there technical guarantees of accuracy, reliability, ease of access and data security?

Earlier no system existed to cater to the needs of 'Secure Infrastructure Implementation System'. The current system developed is technically feasible. It is a web based user interface for audit workflow at NIC-CSD. Thus it provides an easy access to the users.

The database's purpose is to create, establish and maintain a workflow among various entities in order to facilitate all concerned users in their various capacities or roles. Permission to the users would be granted based on the roles specified.

Therefore, it provides the technical guarantee of accuracy, reliability and security. The software and hard requirements for the development of this project are not many and are already available in-house at NIC or are available as free as open source. The work for the

project is done with the current equipment and existing software technology. Necessary bandwidth exists for providing a fast feedback to the users irrespective of the number of users using the system.

3.2. Operational Feasibility

Proposed projects are beneficial only if they can be turned out into information system. That will meet the organization's operating requirements. Operational feasibility aspects of the project are to be taken as an important part of the project implementation. Some of the important issues raised are to test the operational feasibility of a project includes the following: -

1. Is there sufficient support for the management from the users?
2. Will the system be used and work properly if it is being developed and implemented?
3. Will there be any resistance from the user that will undermine the possible application benefits?

This system is targeted to be in accordance with the above-mentioned issues. Beforehand, the management issues and user requirements have been taken into consideration. So there is no question of resistance from the users that can undermine the possible application benefits.

The well-planned design would ensure the optimal utilization of the computer resources and would help in the improvement of performance status.

3.3. Economic Feasibility

A system can be developed technically and that will be used if installed must still be a good investment for the organization. In the economical feasibility, the development cost in creating the system is evaluated against the ultimate benefit derived from the new systems. Financial benefits must equal or exceed the costs.

The system is economically feasible. It does not require any addition hardware or software. Since the interface for this system is developed using the existing resources and technologies available at NIC, There is nominal expenditure and economical feasibility for certain.

Chapter 4

SOFTWARE REQUIREMENT SPECIFICATION

The software, Site Explorer is designed for management of web sites from a remote location.

INTRODUCTION

Purpose: The main purpose for preparing this document is to give a general insight into the analysis and requirements of the existing system or situation and for determining the operating characteristics of the system.

Scope: This Document plays a vital role in the development life cycle (SDLC) and it describes the complete requirement of the system. It is meant for use by the developers and will be the basic during testing phase. Any changes made to the requirements in the future will have to go through formal change approval process.

DEVELOPERS RESPONSIBILITIES OVERVIEW:

The developer is responsible for:

1. Developing the system, which meets the SRS and solving all the requirements of the system?
2. Demonstrating the system and installing the system at client's location after the acceptance testing is successful.
3. Submitting the required user manual describing the system interfaces to work on it and also the documents of the system.
4. Conducting any user training that might be needed for using the system.
5. Maintaining the system for a period of one year after installation.

4.1. FUNCTIONAL REQUIREMENTS:

OUTPUT DESIGN

Outputs from computer systems are required primarily to communicate the results of processing to users. They are also used to provides a permanent copy of the results for later consultation. The various types of outputs in general are:

1. External Outputs, whose destination is outside the organization.
2. Operational outputs whose use is purely with in the computer department.

3. Interface outputs, which involve the user in communicating directly with

OUTPUT DEFINITION

The outputs should be defined in terms of the following points:

- A. Type of the output
- B. Content of the output
- C. Format of the output
- D. Location of the output
- E. Frequency of the output
- F. Volume of the output
- G. Sequence of the output

It is not always desirable to print or display data as it is held on a computer. It should be decided as which form of the output is the most suitable.

For Example

Will decimal points need to be inserted

Should leading zeros be suppressed.

Output Media:

In the next stage it is to be decided that which medium is the most appropriate for the output. The main considerations when deciding about the output media are:

The suitability for the device to the particular application.

The need for a hard copy.

The response time required.

The location of the users

The software and hardware available.

Keeping in view the above description the project is to have outputs mainly coming under the category of internal outputs. The main outputs desired according to the requirement specification are:

The outputs were needed to be generated as a hot copy and as well as queries to be viewed on the screen. Keeping in view these outputs, the format for the output is taken from the outputs, which are currently being obtained after manual processing. The standard printer is to be used as output media for hard copies.

INPUT DESIGN

Input design is a part of overall system design. The main objective during the input design is as given below:

1. To produce a cost-effective method of input.
2. To achieve the highest possible level of accuracy.
3. To ensure that the input is acceptable and understood by the user.

INPUT STAGES:

The main input stages can be listed as below:

1. Data recording
2. Data transcription
3. Data conversion
4. Data verification
5. Data control
6. Data transmission
7. Data validation
8. Data correction

INPUT TYPES:

It is necessary to determine the various types of inputs. Inputs can be categorized as follows:

1. External inputs, which are prime inputs for the system.
2. Internal inputs, which are user communications with the system.
3. Operational, which are computer department's communications to the system?

INPUT MEDIA:

At this stage choice has to be made about the input media. To conclude about the input media consideration has to be given to;

1. Type of input
2. Flexibility of format
3. Speed
4. Accuracy
5. Verification methods
6. Rejection rates
7. Ease of correction
8. Storage and handling requirements
9. Security
10. Easy to use
11. Portability

Keeping in view the above description of the input types and input media, it can be said that most of the inputs are of the form of internal and interactive. As Input data is to be the directly keyed in by the user, the keyboard can be considered to be the most suitable input device.

ERROR AVOIDANCE

At this stage care is to be taken to ensure that input data remains accurate from the stage at which it is recorded up to the stage in which the data is accepted by the system. This can be achieved only by means of careful control each time the data is handled.

ERROR DETECTION

Even though every effort is made to avoid the occurrence of errors, still a small proportion of errors is always likely to occur, these types of errors can be discovered by using validations to check the input data.

DATA VALIDATION

Procedures are designed to detect errors in data at a lower level of detail. Data validations have been included in the system in almost every area where there is a

possibility for the user to commit errors. The system will not accept invalid data. Whenever an invalid data is keyed in, the system immediately prompts the user and the user has to again key in the data and the system will accept the data only if the data is correct. Validations have been included where necessary.

The system is designed to be a user friendly one. In other words the system has been designed to communicate effectively with the user. The system has been designed with pop up menus.

USER INTERFACE DESIGN

It is essential to consult the system users and discuss their needs while designing the user interface:

USER INTERFACE SYSTEMS CAN BE BROADLY CLASIFIED AS:

1. User initiated interface the user is in charge, controlling the progress of the user/computer dialogue. In the computer-initiated interface, the computer selects the next stage in the interaction.
2. Computer initiated interfaces

In the computer initiated interfaces the computer guides the progress of the user/computer dialogue. Information is displayed and the user response of the computer takes action or displays further information.

USER_INITIATED INTERGFACES

User initiated interfaces fall into tow approximate classes:

1. Command driven interfaces: In this type of interface the user inputs commands or queries which are interpreted by the computer.
2. Forms oriented interface: The user calls up an image of the form to his/her screen and fills in the form. The forms oriented interface is chosen because it is the best choice.

COMPUTER-INITIATED INTERFACES

The following computer – initiated interfaces were used:

1. The menu system for the user is presented with a list of alternatives and the user chooses one; of alternatives.
2. Questions – answer type dialog system where the computer asks question and takes action based on the basis of the users reply.

Right from the start the system is going to be menu driven, the opening menu displays the available options. Choosing one option gives another popup menu with more options. In this way every option leads the users to data entry form where the user can key in the data.

ERROR MESSAGE DESIGN:

The design of error messages is an important part of the user interface design. As user is bound to commit some errors or other while designing a system the system should be designed to be helpful by providing the user with information regarding the error he/she has committed.

This application must be able to produce output at different modules for different inputs.

4.2. PERFORMANCE REQUIREMENTS

Performance is measured in terms of the output provided by the application.

Requirement specification plays an important part in the analysis of a system. Only when the requirement specifications are properly given, it is possible to design a system, which will fit into required environment. It rests largely in the part of the users of the existing system to give the requirement specifications because they are the people who finally use the system.

This is because the requirements have to be known during the initial stages so that the system can be designed according to those requirements. It is very difficult to change the system once it has been designed and on the other hand designing a system, which does not cater to the requirements of the user, is of no use.

The requirement specification for any system can be broadly stated as given below:

1. The system should be able to interface with the existing system
2. The system should be accurate
3. The system should be better than the existing system

The existing system is completely dependent on the user to perform all the duties.

Chapter 5

SOFTWARE

5.1 PHP

The PHP Hypertext Preprocessor (PHP) is a programming language that allows web developers to create dynamic content that interacts with databases. PHP is basically used for developing web based software applications. This tutorial helps you to build your base with PHP. PHP started out as a small open source project that evolved as more and more people found out how useful it was. Rasmus Lerdorf unleashed the first version of PHP way back in 1994.

- PHP is a recursive acronym for "PHP: Hypertext Preprocessor".
- PHP is a server side scripting language that is embedded in HTML. It is
- used to manage dynamic content, databases, session tracking, even build
- entire e-commerce sites.
- It is integrated with a number of popular databases, including MySQL,

5.2 HTML

Hyper Text Markup Language is the standard language for creating documents for the World Wide Web. An HTML document is a text file, which contains the elements, in the form of tags that a web browser uses to display text, multimedia objects, and hyperlinks using HTML; we can format a document for display and add hyperlinks to other documents.

The user interface has been designed in HTML hence can be browsed in any web browser.

5.3 CSS

Cascading Style Sheets: These have been used to separate data from presentation. By using these style sheets throughout the project, a uniform look and feel can be maintained for all the HTML elements and tags that have been used in the project. If there is any revamp the way the content has been presented in the website, the changes can be made to the appropriate style sheet, which will be reflected across all the style sheets

5.4 **MYSQL**

MySQL provides APIs for the languages like C, C++, Eiffel, JAVA, Perl, PHP and Python. MySQL is most commonly used for web applications and for embedded applications and has become a popular alternative to proprietary database system because of its speed and reliability. MySQL can run on UNIX, Windows and Mac OS.

MySQL is the most popular Open Source Relational SQL database management system

It is one of the best RDBMS being used for developing web based software applications. MySQL is an open source relational database management system (RDBMS) based on Structured Query Language (SQL). MySQL runs on virtually all platforms, including Linux, UNIX, and Windows. Although it can be used in a wide range of applications, MySQL is most often associated with web-based applications and online publishing and is an important component of an enterprise stack called LAMP. LAMP is a Web development platform that uses Linux as the operating system, Apache as the Web server, MySQL as the relational database management system and PHP as the object oriented scripting language. (Sometimes Perl or Python is used instead of PHP.)

Features of MYSQL

MySQL is an English-like language. It uses words such as select, insert, delete as part of its command set.

MySQL is a non-procedural language: you specify *what* information you require, not how to get it. In other words, SQL does not require you to specify the access method to the data. All MYSQL statements use the query optimizer – a part of the RDBMS – to determine the fastest means of retrieving the specified data. This feature makes it easier for you to concentrate on obtaining the desired result.

MYSQL provides commands for a variety of tasks including:

Querying data

Inserting, updating and deleting rows in a table

Creating, modifying and deleting database objects

Controlling access to the database and database objects

Guaranteeing database consistency.

Chapter 6

SYSTEM DESIGN -

6.1. INTRODUCTION

Software design sits at the technical kernel of the software engineering process and is applied regardless of the development paradigm and area of application. Design is the first step in the development phase for any engineered product or system. The designer's goal is to produce a model or representation of an entity that will later be built. Beginning, once system requirements have been specified and analyzed, system design is the first of the three technical activities - design, code and test that is required to build and verify software.

The importance can be stated with a single word "Quality". Design is the place where quality is fostered in software development. Design provides us with representations of software that can be assessed for quality. Design is the only way that we can accurately translate a customer's view into a finished software product or system. Software design serves as a foundation for all the software engineering steps that follow. Without a strong design we risk building an unstable system – one that will be difficult to test, one whose quality cannot be assessed until the last stage.

During design, progressive refinement of data structure, program structure, and procedural details are developed, reviewed and documented. System design can be viewed from either technical or project management perspective. From the technical point of view, design is comprised of four activities – architectural design, data structure design, interface design and procedural design.

6.2. NORMALIZATION

It is a process of converting a relation to a standard form. The process is used to handle the problems that can arise due to data redundancy i.e. repetition of data in the database, maintain data integrity as well as handling problems that can arise due to insertion, updation, deletion anomalies.

Decomposing is the process of splitting relations into multiple relations to eliminate anomalies and maintain data integrity. To do this we use normal forms or rules for structuring relation.

Insertion anomaly: Inability to add data to the database due to absence of other data.

Deletion anomaly: Unintended loss of data due to deletion of other data.

Update anomaly: Data inconsistency resulting from data redundancy and partial update

6.3. ER Diagram

.The Entity-Relationship Data Model (ERD) perceives the real world as consisting of basic objects, called entity & relationship among these objects.

It was developed to facilitate database design by allowing specification of an enterprise schema, which represents overall logical structure of a database. The ERD model is very useful in mapping the meaning & interactions of the outside world enterprises onto a conceptual schema.

The ERD model consists of the following major components

ELLIPSE which represents attributes.

RECTANGLES which represents entity-sets.

DIAMONDS which represents the relationship sets.

LINES which link attributes to entity sets to relationship sets.

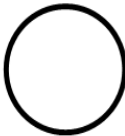
Symbols	Name	Description
	Data Flow	Represents the connectivity between various processes
	Process	Performs some processing of input data
	External Entity	Defines source or destination of system data. The entity which receives or supplies information.
	Data Store	Repository of data

Figure (2). ER Diagram of campus selection

6.4. DATA FLOW DIAGRAMS -

A data flow diagram is graphical tool used to describe and analyze movement of data through a system. These are the central tool and the basis from which the other components are developed. The transformation of data from input to output, through processed, may be described logically and independently of physical components associated with the system.

These are known as the logical data flow diagrams. The physical data flow diagrams show the actual implements and movement of data between people, departments and workstations. A full description of a system actually consists of a set of data flow diagrams. Using two familiar notations Yourdon, Gane and Sarson notation develops the data flow diagrams.

Each component in a DFD is labeled with a descriptive name. Process is further identified with a number that will be used for identification purpose. The development of DFD'S is done in several levels. Each process in lower level diagrams can be broken down into a more detailed DFD in the next level. The lop-level diagram is often called context diagram. It consists a single process bit, which plays vital role in studying the current system. The process in the context level diagram is exploded into other process at the first level DFD.

The idea behind the explosion of a process into more process is that understanding at one level of detail is exploded into greater detail at the next level. This is done until further explosion is necessary and an adequate amount of detail is described for analyst to understand the process.

Larry Constantine first developed the DFD as a way of expressing system requirements in a graphical from, this lead to the modular design.

A DFD is also known as a "bubble Chart" has the purpose of clarifying system requirements and identifying major transformations that will become programs in system design. So it is the starting point of the design to the lowest level of detail. A DFD consists of a series of bubbles joined by data flows in the system.

DFD SYMBOLS:

In the DFD, there are four symbols

1. A square defines a source(originator) or destination of system data
2. An arrow identifies data flow. It is the pipeline through which the information flows
3. A circle or a bubble represents a process that transforms incoming data flow into outgoing data flows.

4. An open rectangle is a data store, data at rest or a temporary repository of data

DFD '0' LEVEL

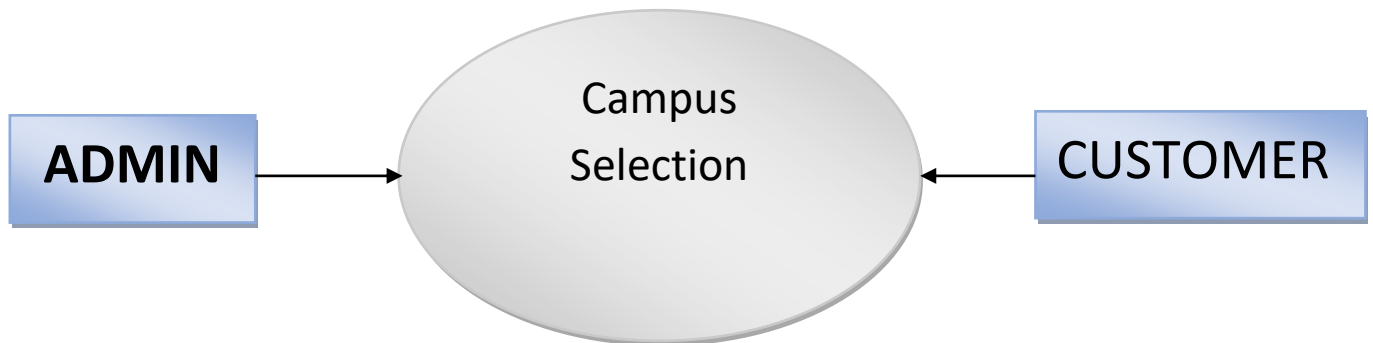
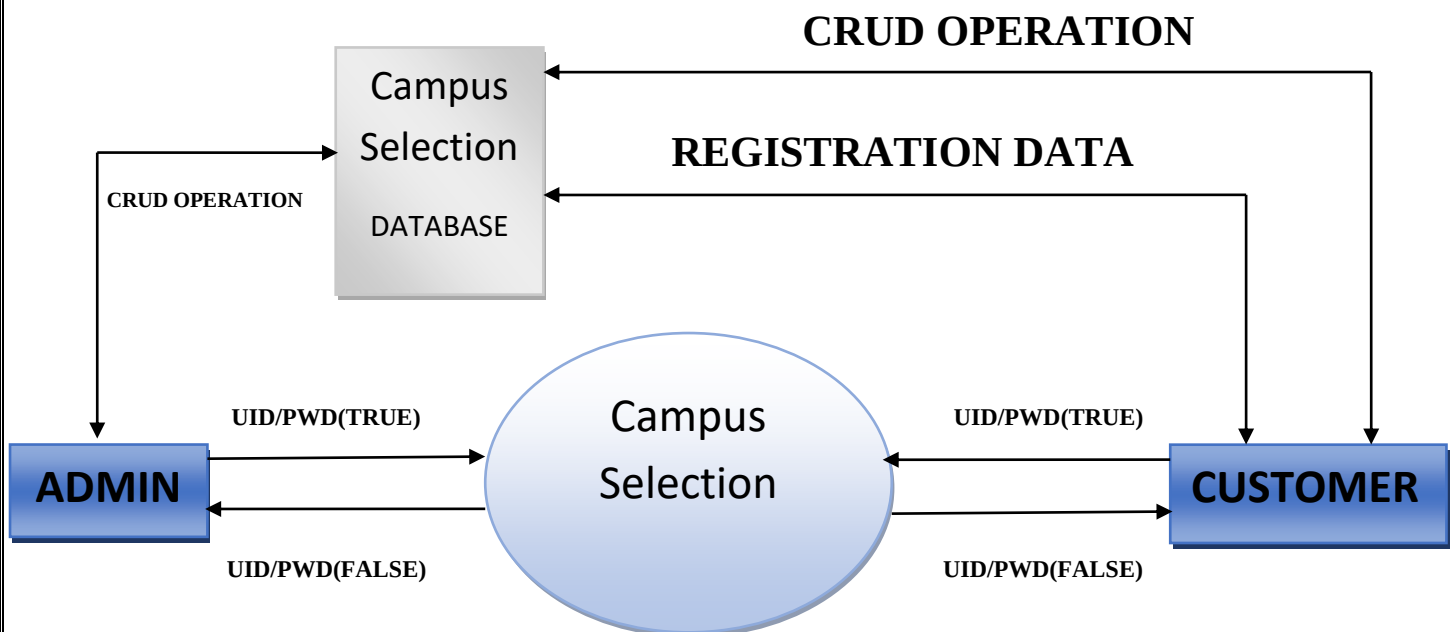


Figure (3). 0 level DFD Campus Selection

LEVEL '1' DFD



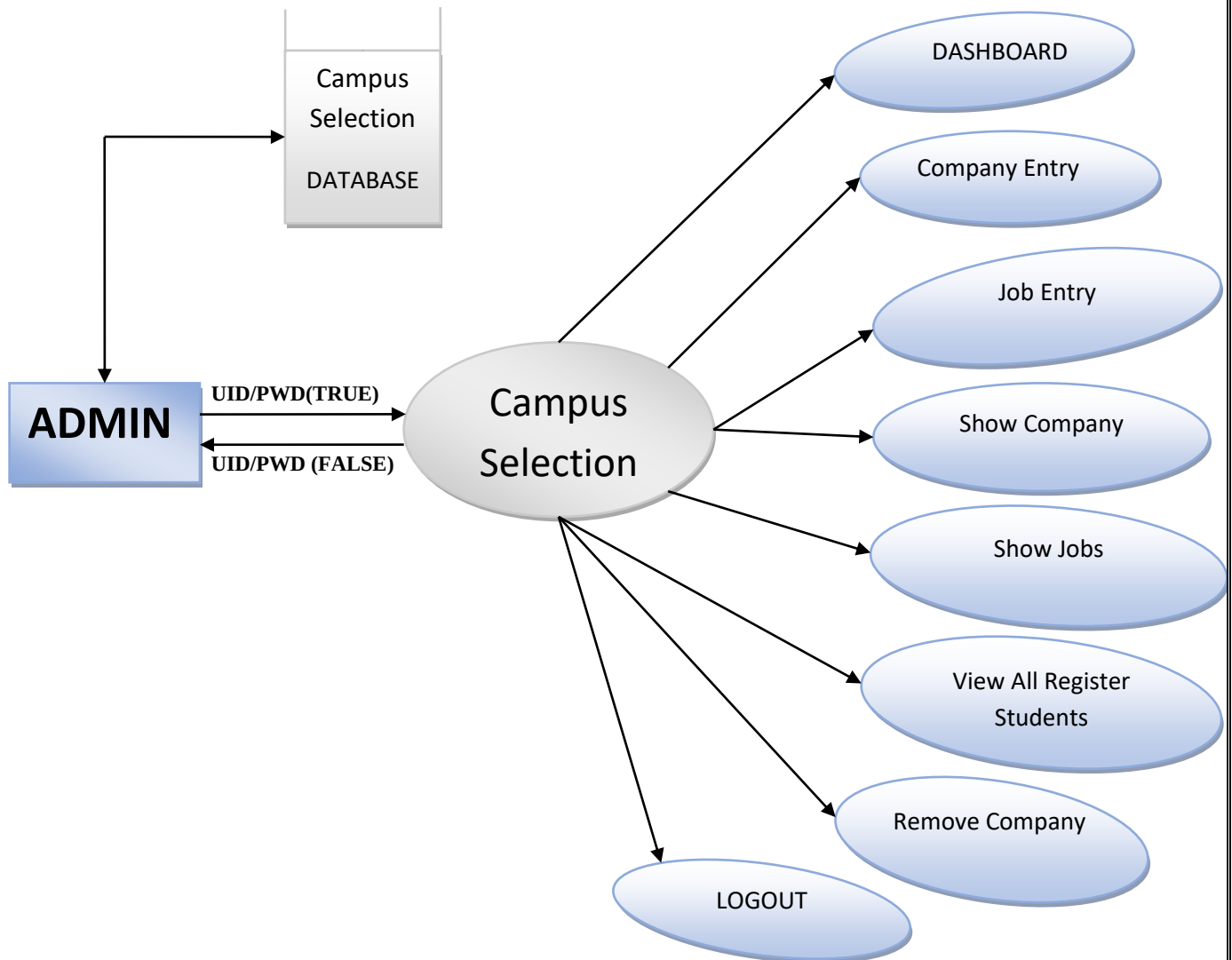


Figure (4). 1 level DFD MP Tours and Travels

6.5. DATA DICTIONARY

A data dictionary, or Metadata Repository, as defined in the IBM Dictionary of Computing, is a "centralized repository of information about data such as meaning, relationships to other data, origin, usage, and format. The term can have one of several closely related meanings pertaining to databases and database management systems (DBMS):

- A document describing a database or collection of databases.

- An integral component of a DBMS that is required to determine its structure.
- A piece of middleware that extends or supplants the native data dictionary of a DBMS.

The terms data dictionary and data repository indicate a more general software utility than a catalogue. A catalogue is closely coupled with the DBMS software. It provides the information stored in it to the user and the DBA, but it is mainly accessed by the various software modules of the DBMS itself, such as DDL and DML compilers, the query optimizer, the transaction processor, report generators, and the constraint enforcer. On the other hand, a data dictionary is a data structure that stores metadata, i.e., (structured) data about information. The software package for a stand-alone data dictionary or data repository may interact with the software modules of the DBMS, but it is mainly used by the designers, users and administrators of a computer system for information resource management. These systems maintain information on system hardware and software configuration, documentation, application and users as well as other information relevant to system administration.

If a data dictionary system is used only by the designers, users, and administrators and not by the DBMS Software, it is called a passive data dictionary. Otherwise, it is called inactive data dictionary or data dictionary. When a passive data dictionary is updated, it is done so manually and independently from any changes to a DBMS (database) structure. With an active data dictionary, the dictionary is updated first and changes occur in the DBMS automatically as a result.

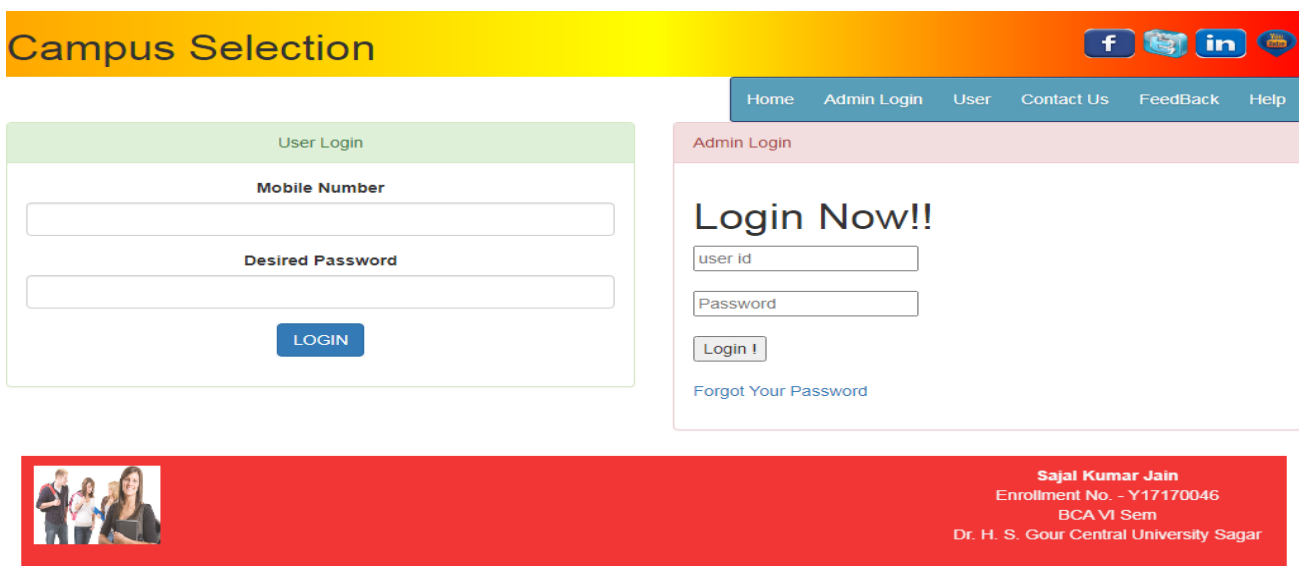
Chapter 7

7. OUTPUT SCREEN

- HOME:-



- Admin and User Login



- **User Registration**

[Home](#)
[Admin Login](#)
[User](#)
[Contact Us](#)
[Feedback](#)
[Help](#)

Registration

Name

Gender

----select--

Course

----select--

Percentage

Mobile

E-Mail

Desired Password

[Save](#)



- **Manage Companies**

Campus Selection

[f](#)
[t](#)
[in](#)
[v](#)

[Home](#)
[Manage](#)
[Manage Admission](#)
[Contact Us](#)
[FeedBack](#)
[Help](#)

[Company Entry](#)
[Campus Entry](#)
[View All Company](#)
[View All Campus](#)





Sajal Kumar Jain
 Enrollment No. - Y17170046
 BCA VI Sem
 Dr. H. S. Gour Central University Sagar

- **Company Entry**

Home	Manage	Manage Admission	Contact Us	FeedBack	Help
Registration Company Name Work Field ----select-- Address City ----select-- Mobile E-Mail Save					
					

- **View Registered Students**

Campus Selection

f

in

YouTube

Home

Manage

Manage Admission

Contact Us

FeedBack

Help



Student Name	Gender	Course	Mobile	E-Mail	Action
prahalad	male	msccsit	9425188646	prahalad.namdeo@gmail.com	Delete
Radha	female	mca	9876543211	radha@gmail.com	Delete
Radhekrishna	female	mca	1234567890	radhek@gmail.com	Delete
Bahubali	male	becsit	1234567800	bahubali@gmail.com	Delete
Ritika	female	bca	1122334455	ritika@gmail.com	Delete

- **View All Campus Details**

Campus Selection



Home Manage Manage Admission Contact Us FeedBack Help

Company Name	Required Course	Required Division	Description	Action
TCS	beet	first	Require Freshers For Chip Designing No. Of Posts - 3	Delete
TCS	becsit	first	For Web Development	Delete



Sajal Kumar Jain
Enrollment No. - Y17170046
BCA VI Sem
Dr. H. S. Gour Central University Sagar

- **Contact Us**

Campus Selection



Home Admin Login User Contact Us FeedBack Help



Contact Us



Sajal Kumar Jain
Enrollment No. - Y17170046
BCA VI Sem
Dr. H. S. Gour Central University Sagar

- **Feedback**

[Home](#) [Admin Login](#) [User](#) [Contact Us](#) [FeedBack](#) [Help](#)

Registration

Name

Address

Mobile

Email

City

sugession

Submit



Chapter 8

SYSTEM TESTING AND IMPLEMENTATION -

8.1. INTRODUCTION

Software testing is a critical element of software quality assurance and represents the ultimate review of specification, design and coding. In fact, testing is the one step in the software engineering process that could be viewed as destructive rather than constructive.

A strategy for software testing integrates software test case design methods into a well-planned series of steps that result in the successful construction of software. Testing is the set of activities that can be planned in advance and conducted systematically. The underlying motivation of program testing is to affirm software quality with methods that can economically and effectively apply to both strategic to both large and small-scale systems.

8.2. STRATEGIC APPROACH TO SOFTWARE TESTING

The software engineering process can be viewed as a spiral. Initially system engineering defines the role of software and leads to software requirement analysis where the information domain, functions, behavior, performance, constraints and validation criteria for software are established. Moving inward along the spiral, we come to design and finally to coding. To develop computer software we spiral in along streamlines that decrease the level of abstraction on each turn.

8.3. Unit Testing

Unit testing focuses verification effort on the smallest unit of software design, the module. The unit testing we have is white box oriented and some modules the steps are conducted in parallel.

1. WHITE BOX TESTING

This type of testing ensures that

1. All independent paths have been exercised at least once
2. All logical decisions have been exercised on their true and false sides
3. All loops are executed at their boundaries and within their operational bounds
4. All internal data structures have been exercised to assure their validity.

To follow the concept of white box testing we have tested each form .we have created independently to verify that Data flow is correct, All conditions are exercised to check their validity, All loops are executed on their boundaries.

2. BASIC PATH TESTING

Established technique of flow graph with Cyclomatic complexity was used to derive test cases for all the functions. The main steps in deriving test cases were:

Use the design of the code and draw correspondent flow graph.Determine the Cyclomatic complexity of resultant flow graph, using formula:

$$V(G)=E-N+2 \text{ or}$$

$$V(G)=P+1 \text{ or}$$

$$V(G)=\text{Number Of Regions}$$

Where $V(G)$ is Cyclomatic complexity,

E is the number of edges,

N is the number of flow graph nodes,

P is the number of predicate nodes.

Determine the basis of set of linearly independent paths.

3. CONDITIONAL TESTING

In this part of the testing each of the conditions were tested to both true and false aspects. And all the resulting paths were tested. So that each path that may be generate on particular condition is traced to uncover any possible errors.

4. DATA FLOW TESTING

This type of testing selects the path of the program according to the location of definition and use of variables. This kind of testing was used only when some local variable were declared. The definition-use chain method was used in this type of testing. These were particularly useful in nested statements.

5. LOOP TESTING

In this type of testing all the loops are tested to all the limits possible. The following exercise was adopted for all loops:

1. All the loops were tested at their limits, just above them and just below them.
2. All the loops were skipped at least once.
3. For nested loops test the inner most loop first and then work outwards.

Chapter 9

System Security -

9.1. Introduction

The protection of computer based resources that includes hardware, software, data, procedures and people against unauthorized use or natural

Disaster is known as System Security.

System Security can be divided into four related issues:

Security

Integrity

Privacy

Confidentiality

SYSTEM SECURITY refers to the technical innovations and procedures applied to the hardware and operation systems to protect against deliberate or accidental damage from a defined threat.

DATA SECURITY is the protection of data from loss, disclosure, modification and destruction.

SYSTEM INTEGRITY refers to the power functioning of hardware and programs, appropriate physical security and safety against external threats such as eavesdropping and wiretapping.

PRIVACY defines the rights of the user or organizations to determine what information they are willing to share with or accept from others and how the organization can be protected against unwelcome, unfair or excessive dissemination of information about it.

CONFIDENTIALITY is a special status given to sensitive information in a database to minimize the possible invasion of privacy. It is an attribute of information that characterizes its need for protection.

9.2. SECURITY IN SOFTWARE

System security refers to various validations on data in form of checks and controls to avoid the system from failing. It is always important to ensure that only valid data is entered and only valid operations are performed on the system. The system employees two types of checks and controls:

CLIENT SIDE VALIDATION

Various client side validations are used to ensure on the client side that only valid data is entered. Client side validation saves server time and load to handle invalid data. Some checks imposed are:

1. JAVASCRIPT is used to ensure those required fields are filled with suitable data only. Maximum lengths of the fields of the forms are appropriately defined.
2. Forms cannot be submitted without filling up the mandatory data so that manual mistakes of submitting empty fields that are mandatory can be sorted out at the client side to save the server time and load.

SERVER SIDE VALIDATION

Some checks cannot be applied at client side. Server side checks are necessary to save the system from failing and intimating the user that some invalid operation has been performed or the performed operation is restricted. Some of the server side checks imposed is:

1. Server side constraint has been imposed to check for the validity of primary key and foreign key. A primary key value cannot be duplicated. Any attempt to duplicate the primary value results into a message intimating the user about those values through the forms using foreign key can be updated only of the existing foreign key values.
2. User is intimating through appropriate messages about the successful operations or exceptions occurring at server side.

Chapter 10

CONCLUSION -

In the existing Placement system, maximum work goes manually and it takes time for any changes in the system. This big problem is the searching; sorting and updating of the student data and no any notification method available for giving information to student except the notice board. Proposed system gets automated in the online registration all the user, activation of the user and deactivation of the user, personalization to the user, resources to be provided online, communication between the users, and gives online feedback. The admin can see the user information and will validate it, generate the student list on the basis of company criteria; company details can be provided to the user, searching and sorting can be done, and reports to be generated.

LIMITATIONS:

1. The size of the database increases day-by-day, increasing the load on the database back up and data maintenance activity.
2. Training for simple computer operations is necessary for the users working on the system.

Chapter 11

FUTURE IMPROVEMENT -

It can be implemented to upload files with an huge amount of size with the support of various file formats.

This System being web-based and an undertaking of Cyber Security Division, needs to be thoroughly tested to find out any security gaps.

A console for the data centre may be made available to allow the personnel to monitor on the sites which were cleared for hosting during a particular period.

Moreover, it is just a beginning; further the system may be utilized in various other types of auditing operation viz. Network auditing or similar process/workflow based applications.

Chapter 12

About :-

Index Page:-

```
<?php
    // put your code here
?>
```

```
<!DOCTYPE html>
```

```
<!--
```

To change this license header, choose License Headers in Project Properties.

To change this template file, choose Tools | Templates

and open the template in the editor.

```
-->
```

```
<?php include 'header.php' ?>
```

```
<div class="row">
```

```
<div class="col-md-12" style="text-align: center;">
```

```
    
```

```
</div>
```

```
</div>
```

```
<?php include 'footer.php' ?>
```

Header

```
<?php
/*
 * To change this template, choose Tools | Templates
 * and open the template in the editor.
 */
```

?>

<html>

<head>

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">

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

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

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

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

<!-- Start WOWSlider.com HEAD section --> <!-- add to the <head> of your page
-->

<link rel="stylesheet" type="text/css" href="engine1/style.css" />

<script type="text/javascript" src="engine1/jquery.js"></script>

<!-- End WOWSlider.com HEAD section -->

<style type="text/css">

.iconimg

{

width: 40px;

height: 30px;

}

</style>

<title></title>

</head>

<body onload="blinking_header()" onunload="stoptimer()">

<div class="row" style="background: linear-gradient(to left,red, yellow,
orange);">

<div class="col-md-4">

<h1>Campus Selection</h1>

</div>

<div class="col-md-2">

</div>

<div class="col-md-6" style="text-align: right; margin-top: 20px;">

Terre">

</div>

<div class="row">

<div class="col-md-12">

<div id="cssmenu" >

<li class="active">Home

Admin Login

<li class='active has-sub'>User

Login

Registration

Contact Us

FeedBack

```

        <li><a href="help.php">Help</a></li>

    </ul>

</div>

</div>

</div>

</center>

```

Company Entry :-

```

<?php
require_once 'dbdetail.php';

$msg="";

if(isset($_POST['submit']))
{
{
$sql="insert into companylist
values(null,$_POST[nm'],$_POST[wf'],$_POST[addr'],$_POST[city'],$_POST[mob'],'
$_POST[mid]')";

if(!mysqli_query($con,$sql))
{
    die('error:'.mysqli_error($con));
}

$msg="Registration Success.....";

mysqli_close($con);
}
}

?>

<?php include 'header1.php'?>

<style>

```

```

    label
    {
        color:black;
    }
</style>

<div class="row" style="padding-left: 40px;">
    <div class="col-md-8">
<div class="panel panel-primary">
    <div class="panel-heading">Registration</div>
    <div class="panel-body" >
        <form action="companyentry.php" method="POST">
            <?php echo $msg?>

            <div class="form-group">
                <label>Company Name</label>
                <input type="text" name="nm" class="form-control"/>
            </div>

            <div class="form-group">
                <label>Work Field</label>
                <select class="form-control" name="wf">
                    <option value="">----select--</option>
                    <option value="cs">Computer Science</option>
                    <option value="ec">Electricals</option>
                    <option value="et">Electronics</option>
                    <option value="civil">Civil</option>
                    <option value="me">Mechanical</option>
                </select>

```

```
</div>
```

```
<div class="form-group">
```

```
  <label>Address</label>
```

```
  <input type="text" name="addr" class="form-control"/>
```

```
</div>
```

```
<div class="form-group">
```

```
  <label>City</label>
```

```
    <select class="form-control" name="city">
```

```
      <option value="">----select--</option>
```

```
      <option value="sagar">Sagar</option>
```

```
      <option value="bhopal">Bhopal</option>
```

```
      <option value="indore">Indore</option>
```

```
      <option value="jabalpur">Jabalpur</option>
```

```
      <option value="gwalior">Gwalior</option>
```

```
    </select>
```

```
</div>
```

```
<div class="form-group">
```

```
  <label>Mobile</label>
```

```
  <input type="text" name="mob" class="form-control"/>
```

```
</div>
```

```
<div class="form-group">
```

```
  <label>E-Mail</label>
```

```
  <input type="text" name="mid" class="form-control"/>
```

```
</div>
```

```
  <div class="form-group">
```

```

        <input type="submit" class="btn btn-primary" name="submit"
value="Save">
    </div>
</form>
</div>
</div>
</div>
    <div class="col-md-4" style="text-align: center; vertical-align: center;">
        
    </div>
</div>
<?php include 'footer.php'?>

```

- **Campus Job Entry**

```

php
<?php
require_once 'dbdetail.php';
$msg="";
if(isset($_POST['submit']))
{
    {
        $sql="insert into campuslist
values(null,$_POST[cnm'],$_POST[crs'],$_POST[div'],$_POST[cdesc]);"
        if(!mysqli_query($con,$sql))
        {
            die('error:'.mysqli_error($con));
        }
        $msg="Registration Success.....";
        mysqli_close($con);
    }
}

```



```

}
}
?>
<?php include 'header1.php'?>
<style>
    label
    {
        color:black;
    }
</style>

<div class="row" style="padding-left: 40px;">
    <div class="col-md-8">
<div class="panel panel-primary">
    <div class="panel-heading">Registration</div>
    <div class="panel-body" >
        <form action="campusentry.php" method="POST">
            <?php echo $msg?>
            <div class="form-group">
                <label>Company Name</label>
                <?php
                    $sql="SELECT Distinct cname from companylist";
                    $result=mysqli_query($con,$sql);
                    echo "<select class='form-control' name='cnm' id='cnm'>";
                    echo "<option value='select'>select</option>";
                    while ($row = mysqli_fetch_array($result))
                    {
                        echo "<option value='".$row['cname']."'>".$row['cname']."
</option>";

```

```

        }
        echo "</select>";
    ?>
</select>
</div>
<div class="form-group">
    <label>Course Required</label>
    <select class="form-control" name="crs">
        <option value="">----select--</option>
        <option value="mca">MCA</option>
        <option value="bca">BCA</option>
        <option value="msccsit">M.Sc.(CS/IT)</option>
        <option value="bsccsit">B.Sc.(CS/IT)</option>
        <option value="becsit">BE(CS/IT)</option>
        <option value="beet">BE(ET)</option>
        <option value="beec">BE(EC)</option>
        <option value="beme">BE(ME)</option>
        <option value="becivil">BE(Civil)</option>
        <option value="other">Other Technical</option>
    </select>
</div>

<div class="form-group">
    <label>Division Required</label>
    <select class="form-control" name="div">
        <option value="">----select--</option>
        <option value="first">First</option>
        <option value="second">Second</option>
        <option value="thired">Thired</option>
    </select>
</div>

```

```

        <option value="pass">Pass</option>
    </select>
</div>
<div class="form-group">
    <label>Description</label>
    <textarea id="cdesc" name="cdesc" rows="10" cols="80"></textarea>
</div>
    <div class="form-group">
<input type="submit" class="btn btn-primary" name="submit" value="Save">
    </div>
</form>
</div>
</div>
</div>
    <div class="col-md-4" style="text-align: center; vertical-align: center;">
        
    </div>
</div>
<?php include 'footer.php'?>

```

Chapter 13

BIBLIOGRAPHY

- FOR MYSQL, HTML and CSS

www.w3school.com

- FOR PHP

Php black book

www.msdn.microsoft.com/net/quickstart/aspplus/default.com

www.phptutorials.com

www.fmexpense.com/quickstart/aspplus/default.com

The following books were referred during the analysis and execution phase of the project

MySql the compleate reference By MySql Press

Software engineering By Roger.S.Pressman

Professional php By Wrox

THANK YOU