A

Project Report

On

Project Title

College Web Application

Submitted in partial fulfillment of their requirements for the award of the Three-Year Diploma in

Computer Science

Under the supervision of

Er. Akash Datt Pathak

Arcane Programming Infotech (p) Ltd.

Lucknow (up)

Submitted By:-

Priyanshu Ojha

Submitted To:-

Govt. Polytechnic Premdhar Patti Pratapgarh

PREFACE

"Necessity is Mother of All Inventions"

Online training is an important part of the engineering curriculum. The Diploma course Online training helps a student in getting acquainted with the manner in which his/her knowledge is being practically used outside his/her institute and this is normally different from what he/she has learnt from books. Hence, when the student switches from the process of learning to that of implementing his/her knowledge, he/she finds an abrupt change. This is exactly why online training session during the B.E curriculum becomes all the more important. Online training is prescribed for the student of Technical College as a part of the four-year degree course of engineering by the AICET. We are required to undergo online training for a period of 45 days after the completion of the 2nd year.

This training report describes in detail the training after the 3rd year session, which I completed at the **Arcane Programming Infotech (P.) Ltd.** This report also gives the information about the organization and it's working along with the project undertaken in the training period.

The fundamental step used in **SDLC** process is based on the ISO 9001 guidelines. My aim was to follow the ISO guidelines and develop a perfect system.

The system development was organized into 5 major parts:

1. Requirement Gathering
2. Documentation/Design
3. Development
4. Coding
5. Testing

Candidate Declaration

I hereby certify that the work which is being presented in the project entitled "**College Web Application** " in partial fulfilment of the requirement for the award of the diploma **Government Polytechnic Premdhar Patti Pratapgarh** is an authentic record of my own work carried out under the supervision **Er. Akash Datt Pathak,** Lecturer (IT), Department of Computer Science And Engineering

The matter presented in this report has not been submitted by me for the award of any other diploma of this or any other institute /university. **Priyanshu Ojha**

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Date: **Er. Akash Datt Pathak**
(Project Supervisor)

The Diploma in **Computer Science** Viva-Voice examination of **…….** Polytechnic students, has been held on ……..

Signature of Supervisor **Signature of HOD (IT)** **Signature of External Examiner**

Certificate

This is to certify that the project report entitled "**college web Application"** submitted by **Priyanshu ojha** in partial fulfillment of the requirements for the award of Diploma in **Government Polytechnic Premdhar Patti Pratapgarh** is an authentic work carried out by her under my supervision and guidance.

Date: ….. **Er. Akash Datt Pathak**

To the best of my knowledge, the matter embodied in the project report has not been submitted to any other university / institute for the award of any Diploma.

Date: …… **Priyanshu Ojha**

Acknowledgement

I would like to express my deep and sincere gratitude to my supervisor **Er. Akash Datt Pathak** (**Arcane Programming Infotech (p) Ltd.)** who gave me his full support and encouraged me to work in an innovative and challenging project for Educational field. His wide knowledge and logical thinking gave me right direction all the time. I am deeply grateful my project coordinator for his/her help and support provided at every step of the project. Last but not the least, I thank to all employees of **Arcane Programming Infotech (p) Ltd.** for their support and co-operation

Priyanshu Ojha

Arcane programming Infotech

An ISO Certified Company 9001-2015 *A technology in your hand*

Enrollment No: API/VT/319 **Certificate No:153**

COMPLETION CERTIFICATE

This is to certify that Mr. Priyanshu Ojha **of Diploma (Information Technology)** from **Government Polytechnic Premdhar Patti Raniganj Pratapgarh** was working on the project entitled "**College Website**" in **Arcane Programming Infotech (P.) Ltd.** He/She was engaged with us during **……** to **……** for a period of 45 days.

He/She has done an excellent job during his/her engagement with the Software Development & Testing Division of the company. He/She has completed his/her project during the training tenure. His/her performance has been good and satisfactory.

I would like to take this opportunity to express my appreciation to Mr. **Priyanshu ojha** for his work and wish him all the very best for his future endeavours.

Regards:

Er. Akash Datt Pathak

Project Manager

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CHAPTER: INTRODUCTION

A college management system project allows schools and universities to keep track of their enrollment, students, teachers, attendance, fees, scheduling, and other activities related to tertiary education tasks. It creates automatic reports for data-driven decision-making on all college management aspects. This college management system project report discusses everything you need. College management system is an automated software that provides a more productive way of college management. This college management system project report is used to discuss the details needed for the system development. The project report on college management system includes the project description, proposal, modules, and more which completes the whole documentation.

OBJECTIVES

- The main objective of Consultancy is to make easy for Students to get all the information about college. It acts as a mediator between the Students and Teachers/Faculty.
- The objective of the application is to develop a system using which Students and Teachers/Faculty can communicate with each other.
- Username and password is given for each Students and teacher so that the messaging servlet recognizes them as user. Multiple logins with same identity is not allowed.
- Students can search for information by the help of this website any time anywhere and also apply If user complaint is reasonable, we will attempt to secure a satisfactory resolution for user.
- Easily accessible from any corner of the world if you have internet connection.

PROBLEM DEFINITION

In this section we shall discuss the limitation and drawback of the existing system that forced us to take up this project. Really that work was very typical to manage the daily errors free records and adding or removing any node from server. This problem produces a need to change the existing system. Some of these shortcomings are being discussed below: -

- **Low Functionality**

  With the existing system, the biggest problem was the low functionality. The problem faced hampered the work. For small task like adding any new node to server or deleting a node or keeping daily record we have to appoint minimum two or three employee.

- **Erroneous Input and Output**

  In the existing system, humans performed all the tasks. As in the human tendency, error is also a possibility. Therefore, the inputs entered by the Students who is Studying in the College, in the

registers may not be absolutely foolproof and may be erroneous. As a result of wrong input, the output reports etc. Will also be wrong which would in turn affect the performance.

- **Portability Problem**

  System that existed previously was manual. As a result, the system was less portable. One has to carry the loads of many registers to take the data from one place to another. A big problem was that the system was less flexible and if we wanted to calculate yearly or monthly maintenance report or efficiency report, then it was a big headache.

- **Security-**

  Security concerns were also one of the motives of the College for the need of software. In the registers, the data is not secure as anybody can tamper with the data written in the registers. While in this software, just a password makes it absolutely secure from the reach of unauthorized persons.

- **Data Redundancy**

  In the case of manual system, the registers are maintained in which, a lot of data is written.

- **Processing Speed**

  In manual system maintaining a register and performing the necessary calculation has proved to be troublesome Information, which takes a lot of time and may affect the performance of the College. But with this software we can have all the tasks performed in a fraction of second by a single click thus making the troublesome job much easier.

- **Manual Errors**

  When a number of tough tasks are prepared by the humans like preparation of reports, performing long calculation then some human error are obvious due to a number of factors like mental strain, tiredness etc. But as we all know that computer never get tired irrespective of the amount of work it has to do. So this software can nullify the probability of manual error that improve the performance.

- **Complexity in Work**

  In manual system whenever a record is to be updated or to be deleted a lot of cutting and overwriting needs to be done on the registers that are concerned that are deleted or updated record, which makes the work very complex.

EXISTING SYSTEM DESCRIPTION

The existing system of Government Polytechnic Madhogarh is to manage the relationship with User members by storing the user data in registers. The existing system has following drawbacks:

- Time Consuming
- Manual Errors
- Complexity
- Low Security
- Data Redundancy
- Portability
- No more helpful to improve business.

PROPOSED SYSTEM

The proposed system of Government Polytechnic Madhogarh can also be known as Non-governmental Organization website, because we will use the new technology for managing the relationship with user's , like as web technology.

We proposed complete website solution for the application to create a "User Relationship Management" website. The iterative, time bound approach adopted by Government Polytechnic Madhogarh address the client requirements that are as follows:

- **Define To- Be processes**

i. Come up with the solution of the existing problem
ii. Go through the regressive reviews by different business process
iii. Prepared user interface requirements

Develop High Level Design and Low Level Design before Execution

iv. Built and design all the processes required by Client
v. Conducted survey of all Courier services Dealing Websites and documented realities
vi. Developed the architecture of the Software Solution
vii. Developed the project design in detail for the software developer in company

SYSTEM ANALYSIS

OBJECTIVE:

- The main objective of Consultancy is to make easy for Students to get all the information about the college.. It acts as a mediator between the Students and Teachers/faculty.
- The objective of the application is to develop a system using which Students and Teachers/Faculty can communicate with each other.
- Username and password is given for each user so that the messaging servlet recognizes them as user. Multiple logins with same identity is not allowed.
- User can search Information by the help of this website any time anywhere and also apply.
- If user complaint is reasonable, we will attempt to secure a satisfactory resolution for user.
- Easily accessible from any corner of the world if you have internet connection.

Phases:

System Development Life Cycle (SDLC) mainly consists of the following 7 phases which can be detailed:-

Preliminary Investigation: -

This is the first phase of the system development life cycle. In this phase we tend to find out the needs of the client –what exactly does the client want? Before the development of any system the important point is to know the needs, objectives and scope of the system

Feasibility Study:-

Feasibility study is the second step of the system development life cycle. Things are always easy at the beginning in any software process. In fact nothing is in feasible with unlimited time and resources. But it is not the fact. So, practically we have to do in limited resources in a restricted time margin. So for the system to be feasible, following points we have to consider.

The feasibility study is conducted to check whether the candidate system is feasible. The system which is selected to be the best against the criteria is there after designed and developed. The feasibility study takes in to consideration, the risks involved in the project development beforehand. Therefore in this phase we have to

do feasibility study which is the test of the website according to its work ability, impact on the organization, ability to meet user need and effective use of resources. We do the feasibility study for website to analyze the risks, costs and benefits relating to economics, technology and user organization. There are several types of feasibility depending on the aspect they cover. Import of these includes:

⚜ Technical Feasibility:

This is an important outcome of preliminary investigation. It comprise of following questions:-

- Can the work of project bed one with the current equipment, existing software and available man power resource?
- If Technology is required what are the possibilities that it can be developed?

⚜ Economic Feasibility:

It deals with question related to the economy. It comprise of the following questions:-

- Are there sufficient benefits in creating the system to make the cost acceptable?
- Are the costs of not creating the system so great that the project must be undertaken?

⚜ Legal Feasibility:

It deals with the question related to the legal issues. It comprise of the following questions: -

- Contract Signing
- Software License agreement
- Issues related to cyber laws.
- Legal issues relating to the man power contract.

⚜ Operational Feasibility:

The operational feasibility consists of the following activity: -

- Will the system be useful if it is developed &implemented?

- Will there be resistance from employee?

Social & Behavioral Feasibility:

It deals with the various issues related to the human behavior like: -

- Whether the user be able to adapt a new change or not?
- Whether the ambiance we are providing suits the user or not?

Request Approval: -

Request approval is the third phase of system development lifecycle. Request approval is the phase in which all the requirements which would be provide in the system are stated. The request approval is a sort of agreement between the client and the company which is building this software. Both the parties should be mutually agreed on the stated requirements.

System Analysis:-

System analysis is the phase following the phase of the request approval. In this phase we tend to analyze the overall system which we have to build. System analysis is the crucial part in SDLC.

System Design:-

System design means the designing of the system. The System can be done in either of the following two ways:-

- Logical System Design
- Physical System Design

Coding:-

Coding is the phase in which a developer codes using any programming languages. Coding constitutes only20 % of the whole project and which is easier to write. The coding work is also done in the teams; development of the system is usually done under the modular programming style, which can be either top-down approach or bottom-up approach.

Testing:-

Testing is the phase in which the system that has been developed is tested. Testing comprises of the 60%ofthe overall development of the system. Testing of the system is important because testing aims to

uncover the different errors in the system. There are various different testing techniques that can be used for the testing of the system.

Implementation:-

Implementation process involved the installation of software on user's side.

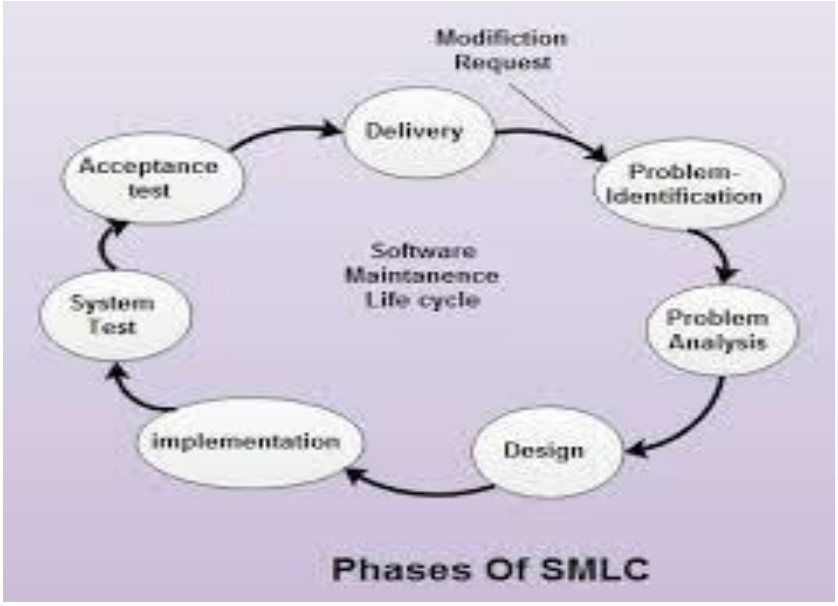
Implementation process actually depends on type of a system & various. Opting for

suitable conversion approach is a step implementation. The conversion processes are as follows:-

- Parallel Conversion
- Direct Conversion Approach
- Pilot Conversion Approach
- Phase In Conversion Approach

Maintenance: -

Merely developing the system is not important but also maintenance is important. The company that has built the system provides for some time free of cost maintenance to the client and after that period it is usually a paid service.



Process Description

Gantt charts mainly used to allocate resources to activities. The resources allocated to activities include staff, hardware, and software. Gantt charts (named after its developer Henry Gantt) are useful for resource planning. A Gantt chart is special type of bar chart where each bar represents an activity. The bars are drawn along a timeline. The length of each bar is proportional to the duration of the time planned for the corresponding activity. Gantt chart is a project scheduling technique. Progress can be represented easily in a Gantt chart, by

coloring each milestone when completed. The project will start in the month of January and end after 4 months at the beginning of April.

PROJECT MODEL USED

Iterative Enhancement Model

- This model has the same phases as the waterfall model, but with fewer restrictions. Generally the phases occur in the same order as in the waterfall model, but they may be conducted in several cycles.

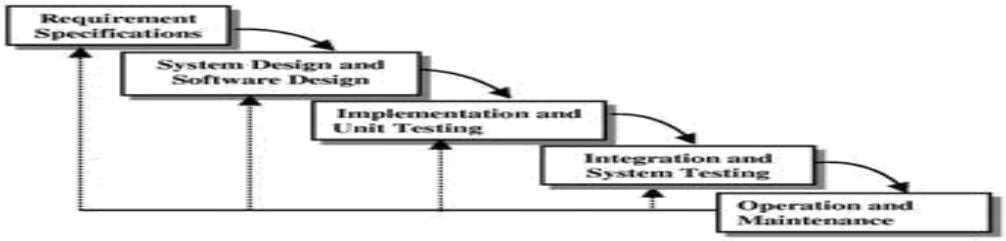
- Useable product is released at the end of the each cycle, with each release providing additional functionality. Customers and developers specify as many requirements as possible and prepare a SRS document. Developers and customers then prioritize these requirements. Developers implement the specified requirements in one or more cycles of design, implementation and test based on the defined priorities.
- The procedure itself consists of the initialization step, the iteration step, and the Project Control List. The initialization step creates a base version of the system. The goal for this initial implementation is to create a product to which the user can react. It should offer a sampling of the key aspects of the problem and provide a solution that is simple enough to understand and implement easily. To guide the iteration process, a project control list is created that contains a record of all tasks that need to be performed. It includes such items as new features to be implemented and areas of redesign of the existing solution. The control list is constantly being revised as a result of the analysis phase.

The iteration involves the redesign and implementation of iteration is to be simple, straightforward, and modular, supporting redesign at that stage or as a task added to the project control list. The level of design detail is not dictated by the iterative approach. In a light-weight iterative project the code may represent the major source of documentation of the system; however, in a critical iterative project a formal Software Design Document may be used. The analysis of an iteration is based upon user feedback, and the program analysis facilities available. It involves analysis of the structure, modularity, usability, reliability, efficiency, & achievement of goals. The project control list is modified in light of the analysis results.

PHASES:

Incremental development slices the system functionality into increments (portions). In each increment, a slice of functionality is delivered through cross-discipline work, from the requirements to the deployment. The unified process groups increments/iterations into phases: inception, elaboration, construction, and transition.

- Inception identifies project scope, requirements (functional and non-functional) and risks at a high level but in enough detail that work can be estimated.
- Elaboration delivers a working architecture that mitigates the top risks and fulfills the non-functional requirements.
- Construction incrementally fills-in the architecture with production-ready code produced from analysis, design, implementation, and testing of the functional requirements.
- Transition delivers the system into the production operating environment.



ER-Diagram

Introduction: -

In software engineering, an entity-relationship model (ERM) is an abstract and conceptual representation of data. Entity-relationship modeling is a database modeling method, used to produce a type of conceptual schema or semantic data model of a system, often a relational database, and its requirements in a top-down fashion. Diagrams created by this process are called entity-relationship diagrams, ER diagrams, or ERDs. ER Diagrams depicts relationship between data objects. The attribute of each data objects noted in the entity-relationship diagram can be described using a data object description. Entity relationship diagram is very basic, conceptual model of data and it is fundamental to the physical database design. This analysis is then used to organize data as relations, normalizing relations, and obtaining a Relational database.

The entity-relationship model for data uses three features to describe data. These are:

1. Entities which specify distinct real-world items in an application.
2. Relationship, which connect entities and represent meaningful dependencies between them.
3. Attributes which specify properties of entities & relationships.

E-R Diagram

Data Flow Diagram

Introduction: -

DFD is an acronym for the word Data Flow Diagram. DFD is pictorial representation of the system. DFD is a graphical representation of the ―flow of data through the information system. DFD are also used for the visualization of data processing (structured design). ADFD provides no information about the timings of the process, or about whether process will operate in parallel or sequence. DFD is an important technique for modeling a system's high-level detail by showing how input data is transformed to output results through sequence of functional transformations. DFD reveal relationships among between the various components in a program or system. The strength of DFD lies in the fact that using few symbols we are able to express program design in an easier manner. A DFD can be used to represent the following: -

- Process that change the data.
- Flow of data with in the system.
- Data Storage locations.

Uses of DFD:-

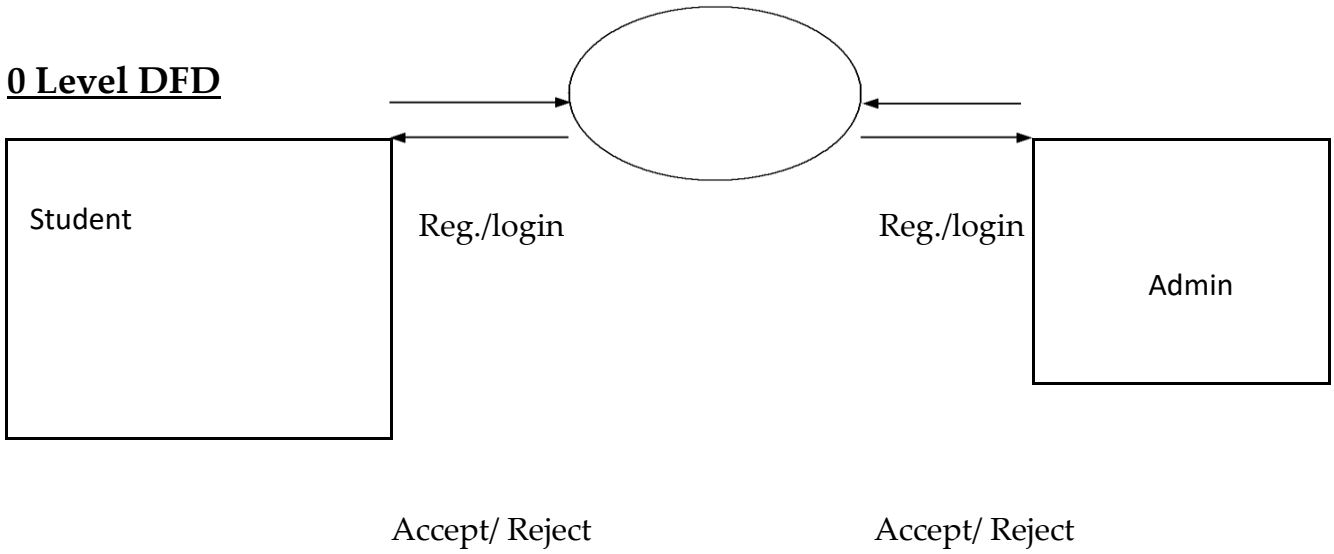
The main uses of data flow diagrams are as follows: -

DFD is a method of choice for representation of showing of information through a system because of the following reasons: -

- DFDs are easier to understand by technical and non-technical audiences.

- DFDs can provide high level system overview, complete with boundaries and connections to other system.
- DFDs can provide a detailed representation of system components.

0 Level DFD



SOFTWARE REQUIREMENT SPECIFICATION

A requirements specification for a software system is a complete description of the behavior of a system to be developed and it includes a set of use cases that describe all the interactions the users will have with the software. In addition to use cases, the SRS also contains non-functional requirements.

Non-functional requirements are requirements which impose constraints on the design or implementation (such as performance engineering requirements, quality standards, or design constraints). Requirements are a sub-field of software engineering that deals with the elicitation, analysis, specification, and validation of requirements for software.

The software requirement specification document enlists all necessary requirements for project development. To derive the requirements, we need to have clear and thorough understanding of the products to be developed. This is prepared after detailed communications with project team and the customer.

Software Specification: -

Programming Language Support

- .Net with MVC
- Java Script for client-side validation
- jQuery

Server-side Software Requirement

- IDE- Visual studio
- Ms SQL

Client-side Software Requirement

- Google Chrome Browser
- Operating System

Front-end Tool

- User friendly
- Low cost solution
- GUI feature
- Better designing aspects

Back-end Tool: -Ms SQL

- Security
- Portability
- Quality

Platform:

Windows platform like: 2000 Server, Professional, XP & Vista

Hardware Specification:

- Intel Pentium and Celeron class processor
- RAM – 2 G.B. (min)
- HDD - 40 GB

- Monitor-14" SVGA
- Printer – Dot Matrix /Inkjet /Laser Printer
- Mouse & Keyboard- Normal

For Client side: Web browser- IE 7 or above, Google chrome, Safari.

Platform: Windows platform like: windows 98 or above higher version.

SUPPORT AND MAINTENANCE: -

One-year free support for rectifying system bugs including front end and beck end will be Provided . During warranty period Software Engineers will be responsible for removing bugs and improving it. After one-year support can be extended @ 20% of the total product deployment cost.

SYSTEM DESIGN APPROACH

Top – Down designing:

The top - down designing approach started with major components of the system. It is astepwise refinement which starts from an abstract design, in each steps the design is refined two or more concrete levels until we reach a level where no – more refinement is possible or not needed.

Bottom – Up designing:

In bottom – up designing the most basic and primitive components are designed first, and we proceed to higher level components. We work with layers of abstractions and abstraction are implemented until the stage is reached where the operations supported by the layer is complete.

Approach we are following:

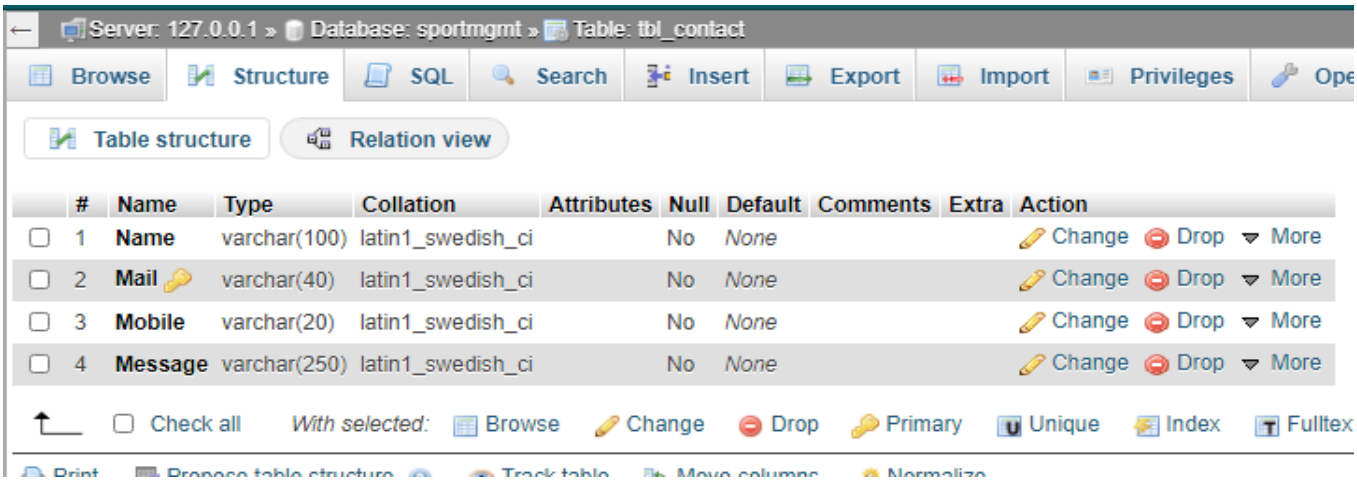
In this project we are following **Mixed Approach** i.e. a combination of top – down and bottom – up. We are developing some of the components using top – down designing approach (e.g. the Web Pages) and the some components in bottom – up designing approach (e.g. the middle tier classes).

DATA MODELING

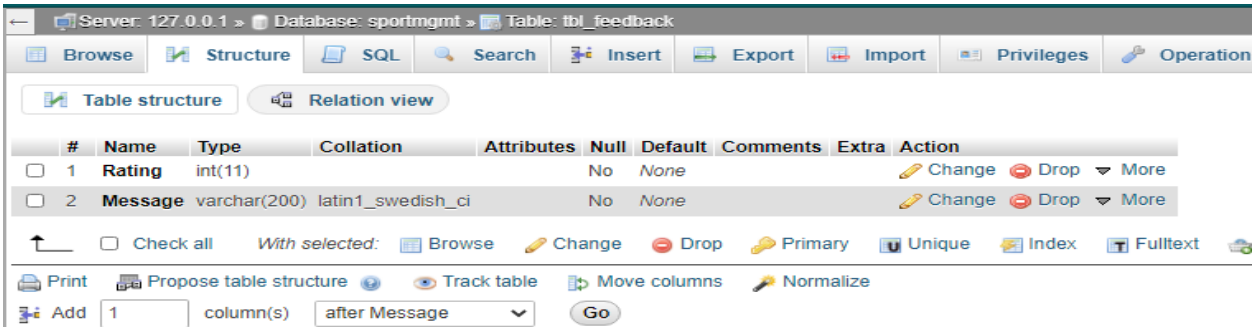
LIST OF TABLES:

1. **Tbl_Contect Us**
2. **Tbl_Login**
3. **Tbl_Feedback**

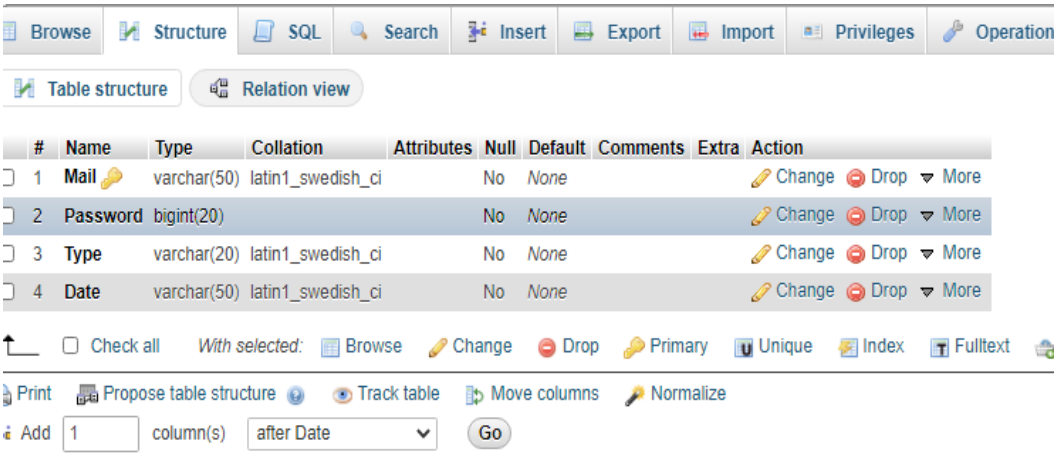
Tbl_Contect Us



Tbl_Feedback



Tbl_login



Low Level Design

Description: Low Level Design creation is one of the most important activities in the development of any software product. The low-level design document gives the design of the actual software application. Low level design document is based on High Level Design document. It defines internal logic of every sub module. A good low-level design document will make the application very easy to develop by the developer. An effective design document results in very low efforts in developing a Software product.

Each project's low-level design document should provide a complete and detailed specification of the design for the software that will be developed in the project, including the classes, member and non-member functions, and associations between classes that are involved.

The low-level design document should contain a listing of the declarations of all the classes, non-member-functions, and class member functions that will be defined during the subsequent implementation stage, along with the associations between those classes and any other details of those classes (such as member variables) that are firmly determined by the low-level design stage. The low-level design document should also describe the classes, function signatures, associations, and any other appropriate details, which will be involved in testing and evaluating the project according to the evaluation plan defined in the project's requirements document.

TESTING:

Testing is the integral part of any System Development Life Cycle insufficient and interested application tends to crash and result in loss of economic and manpower investment besides user’s dissatisfaction and downfall of reputation.

Software Testing includes selecting test data that have more probability of giving errors.” The first step in System testing is to develop the plan that all aspect of system. Complements, Correctness , Reliability and Maintainability.

Software is to be tested for the best quality assurance, an assurance that system meets the specification and requirement for its intended use and performance.

System Testing is the most useful practical process of executing the program with the implicit intention of finding errors that makes the program fail.

Types of Testing:

Black Box (Functional) Testing:

Testing against specification of system or components. Study it by examining its inputs and related outputs. Key is to devise inputs that have a higher likelihood of causing outputs that reveal the presence of defects. Use experience and knowledge of domain to identify such test cases. Failing this a systematic approach may be necessary. Equivalence partitioning is where the input to a program falls into a number of classes, e.g. positive numbers vs. negative numbers. Programs normally behave the same way for each member of a class. Partitions exist for both input and output. Partitions may be discrete or overlap. Invalid data (i.e. outside the normal partitions) is one or more partitions that should be tested. Internal System design is not considered in this type of testing. Tests are based on requirements and functionality.

This type of test case design method focuses on the functional requirements of the software, ignoring the control structure of the program. Black box testing attempts to find errors in the following categories:

- Incorrect or missing functions.
- interface errors.
- Errors in data structures or external database access.
- Performance errors.
- Initialization and termination errors.

White Box (Structural) Testing:

Testing based on knowledge of structure of component (e.g. by looking at source code). Advantage is that structure of code can be used to find out how many test case need to be performed. Knowledge of the algorithm (examination of the code) can be used to identify the equivalence partitions. Path testing is where the tester aims to exercise every independent execution path through the component. All conditional statements tested for both true and false cases. If a unit has no control statements, there will be up to 2n possible paths through it. This demonstrates that it is much easier to test small program units than large ones. Flow graphs are a pictorial representation of the paths of control through a program (ignoring assignments, procedure calls and I/O statements). Use flow graph to design test cases that execute each path. Static tools may be used to make this easier in programs that have a complex branching structure. Tools support. Dynamic program analyzers instrument a program with additional code. Typically, this will count how many times each

statement is executed. At end print out report showing which statements have and have not been executed. Problems with flow graph derived testing:

- Data complexity could not take into account.
- We cannot test all paths in combination.
- In really only possible at unit and module testing stages because beyond that complexity is too high.

This testing is based on knowledge of the internal logic of an application's code. Also known as a Glass Box Testing. internal software and code working should be known for this type of testing. Tests are based on coverage of code statements, branches, paths, conditions.

Unit Testing: Unit testing concentrates on each unit of the software as implemented in the code. This is done to check syntax and logical errors in programs. At this stage, the test focuses on each module individually, assuring that it functions properly as a unit. In our case, we used extensive white-box testing at the unit testing stage. A developer and his team typically do the unit testing do the unit testing is done in parallel with coding; it includes testing each function and procedure.

Incremental integration Testing:

Bottom up approach for testing i.e. continuous testing of an application as new functionality is added; Application functionality and modules should be independent enough to test separately done by programmers or by testers.

Integration Testing:

Testing of integration modules to verify combined functionality after integration. Modules are typically code modules, individual applications, client and server and distributed systems.

Functional Testing:

This type of testing ignores the internal parts and focus on the output is as per requirement or not. Black box type testing geared to functionality requirements of an application.

System Testing:

Entire system is tested as per the requirements. Black box type test that is based on overall requirement specifications covers all combined parts of a system.

End-to-End Testing:

Similar to system testing, involves testing of a complete application environment in a situation that mimics real-world use, such as interacting with a database, using network communications, or interacting with hardware, applications, or system if appropriate.

Regression Testing:

Testing the application as a whole for the modification in any module or functionality. Difficult to cover all the system in regression testing so typically automation tools are used for these testing types.

Acceptance Testing:

Normally this type of testing is done to verify if system meets the customer specified requirements. User or customers do this testing to determine whether to accept application.

Performance Testing:

Term often used interchangeably with “stress” and “load” testing, To check whether system meets performance requirements, Used different performance and load tools to do this.

Alpha Testing:

In house virtual user environment can be created for this type of testing. Testing is done at the end of development. Still minor design changes may be made as a result of such testing.

Description of Classes and Methods:

Datamanager class and Method:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Data;
using System.Data.SqlClient;
using System.Configuration;
namespace crud.Models
{
   public class ConnectionManager
```

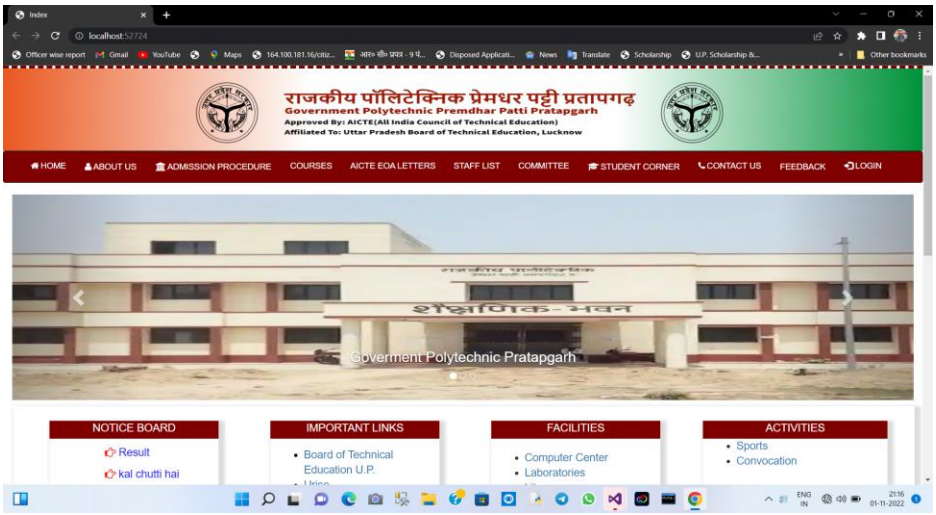
```
{
    SqlConnection con = null;
        SqlCommand cmd = null;


        public ConnectionManager()
        {
            con =new SqlConnection(ConfigurationManager.ConnectionStrings["mycon"].ConnectionString);
        }
    //this function are used to insert,delete,update commands.
    public bool InsertUpdateDelete(string command)
    {
        cmd=new SqlCommand(command,con);
        if(con.State==ConnectionState.Closed)
        {
            con.Open();
        }
        int n = cmd.ExecuteNonQuery();
        if(n>0)
            return true;
        else
            return false;
    }
    //this command used for select query return data with datatable
    public DataTable Display_All_Records(string Command)
    {
        cmd=new SqlCommand(Command,con);
        DataTable dt=new DataTable();
        SqlDataAdapter sa=new SqlDataAdapter(cmd);
        sa.Fill(dt);
```

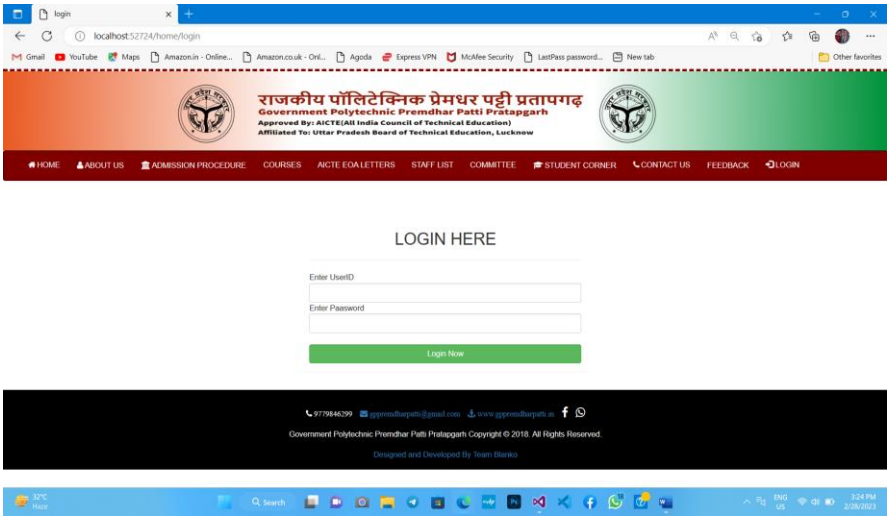
```
        return dt;
    }
    public int GetCount(string command)
    {
        cmd=new SqlCommand(command,con);
        int n=(Int32)cmd.ExecuteScalar();
        if(n>0)
        {
            return n;
        }
        return n;
    }
    }
}
```

User Screenshots

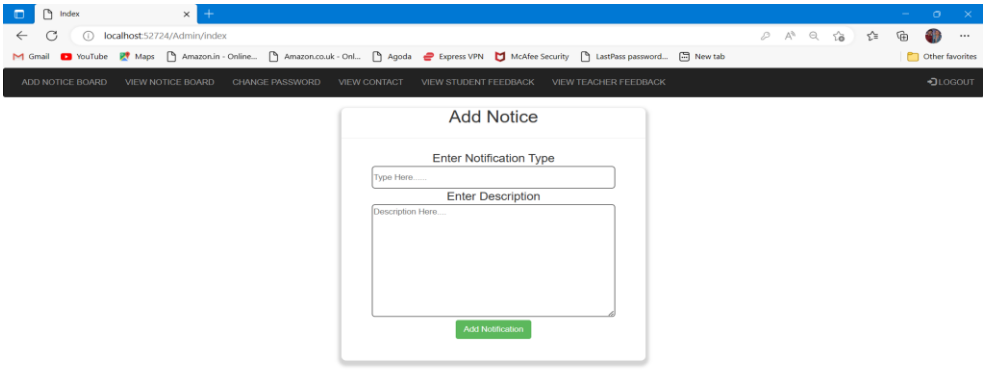
Index



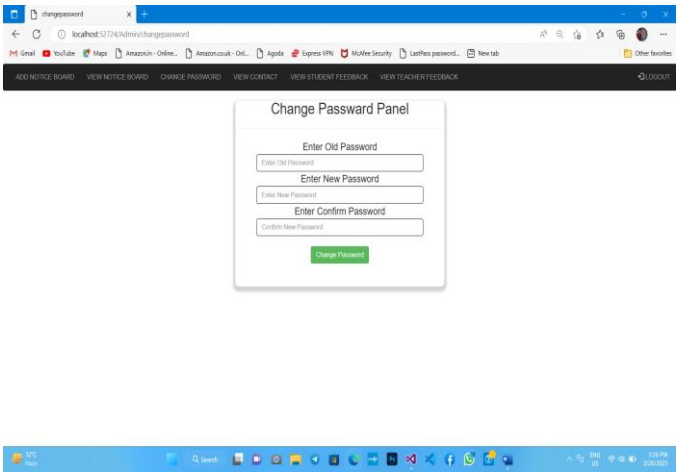
Login



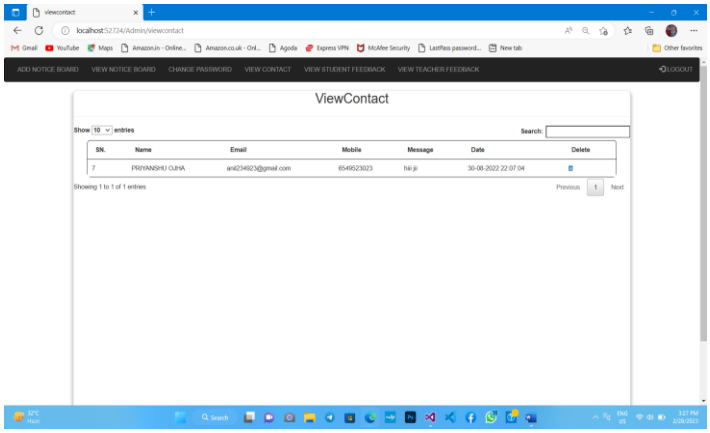
User Zone



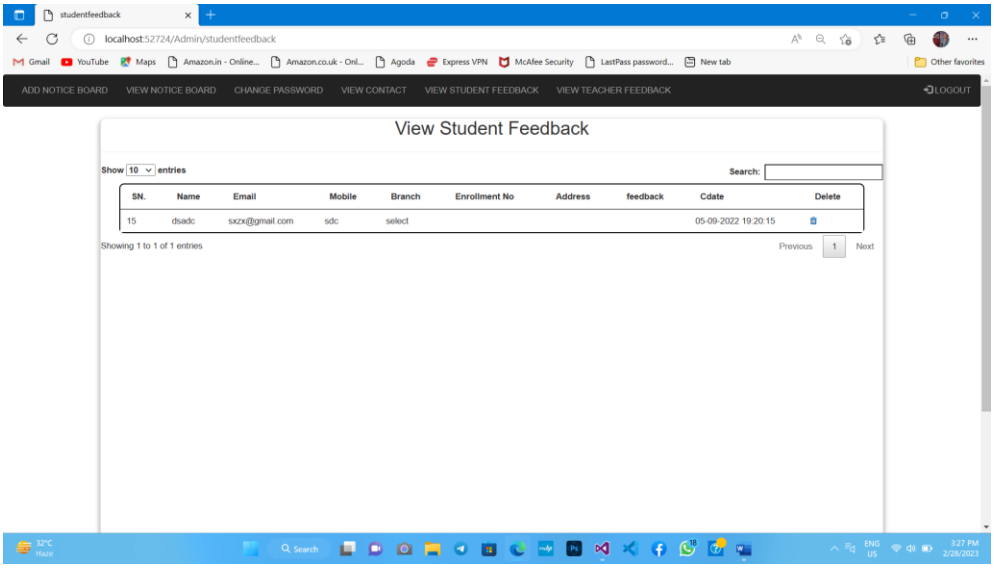
ChangePassword



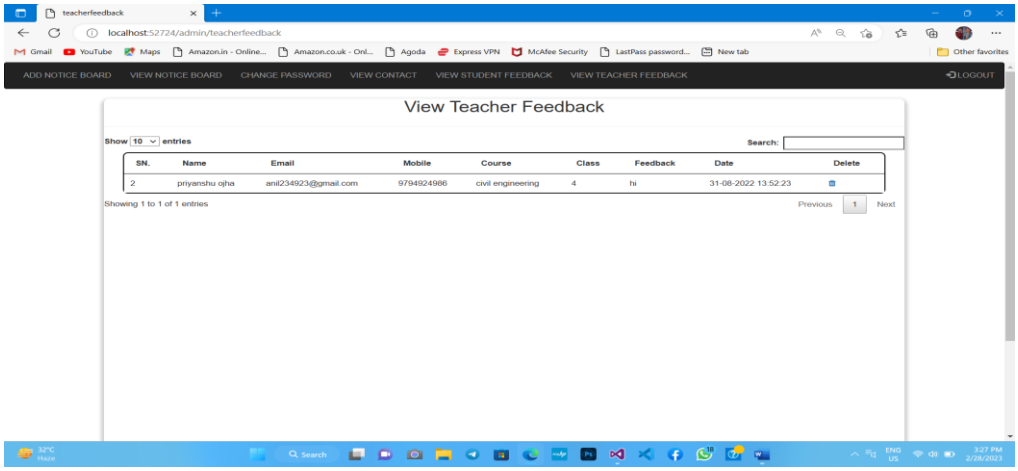
View contact



View student feedback



View teacher feedback



Index.net

Index

```
@{
    ViewBag.Title = "Index";
    Layout = "/Views/Shared/GeneralMaster.cshtml";
}
@using System.Data;
@using System.Data.SqlClient;
@using college.Models;
<!---code for slider---->
<div class="col-sm-12">
    <div id="myCarousel" class="carousel slide" data-ride="carousel">
        <!-- Indicators -->
        <ol class="carousel-indicators">
            <li data-target="#myCarousel" data-slide-to="0" class="active"></li>
            <li data-target="#myCarousel" data-slide-to="1"></li>
            <li data-target="#myCarousel" data-slide-to="2"></li>
        </ol>
        <!-- Wrapper for slides -->
        <div class="carousel-inner">
            <div class="item active">
                <img src="~/Content/image/clg1.jpg" style="height:350px;width:100%" />
                <div class="carousel-caption">
                    <h3>Goverment Polytechnic Pratapgarh</h3>
                </div>
            </div>

           <div class="item">
                <img src="~/Content/image/clg4.jpg" style="height:350px;width:100%" />

                <div class="carousel-caption">
                    <h3>Goverment Polytechnic Pratapgarh</h3>
                </div>
            </div>

            <div class="item">

                <img src="~/Content/image/clg5.jpg" style="height:350px;width:100%" />
                <div class="carousel-caption">
                    <h3>Goverment Polytechnic Pratapgarh</h3>
                </div>
```

```
            </div>
        </div>
        <!-- Left and right controls -->
        <a class="left carousel-control" href="#myCarousel" data-slide="prev">
            <span class="glyphicon glyphicon-chevron-left"></span>
            <span class="sr-only">Previous</span>
        </a>
        <a class="right carousel-control" href="#myCarousel" data-slide="next">
            <span class="glyphicon glyphicon-chevron-right"></span>
            <span class="sr-only">Next</span>
        </a>
    </div>
</div>
<!---end code for slider---->
<!------space for link and other------>
<div class="col-sm-12" style=" height: 450px; width: 98%; margin-left: 17px; margin-top: 10px; margin-
bottom: 3px; box-shadow: 5px 5px 5px 5px gainsboro">
    <div class="col-sm-3"style="height:100%">
        <div class="col-sm-1"></div>
<div class="col-sm-10" style=" height: 400px; margin-top: 25px; box-shadow: 5px 5px 5px 5px gainsboro;
">
    <div class="row"style="background: maroon;color:white; height: 30px;"><span style="font-
size:18px;margin-top:20px"><center>NOTICE BOARD</center></span></div>
    @{
        DBmanager db = new DBmanager();
        string cmd = "select * from clg_notification";
        DataTable dt = db.GetAllRecords(cmd);
        if (dt.Rows.Count > 0)
        {      <marquee style="height:250px;color:blue;font-size:18px;cursor:pointer"
behaviour="alternate" direction="left" onmouseover="stop()" onmouseout="start()">
            @for (int i = 0; i < dt.Rows.Count; i++)
            {
                <span class="fa fa-hand-o-right" style="color:red;font-size:18px;margin-
top:15px"></span>
                <span>@dt.Rows[i]["ndese"]</span><br />
            }
        </marquee>
        }
    }
</div>

<div class="col-sm-1"></div>
    </div>
    <div class="col-sm-3" style=" height: 100%; ">
        <div class="col-sm-1"></div>
        <div class="col-sm-10"style=" height: 400px; margin-top: 25px; box-shadow: 5px 5px 5px 5px
gainsboro; ">
            <div class="row" style="background: maroon;color: white; height: 30px; "><span style="font-
size:18px;margin-top:20px"><center>IMPORTANT LINKS</center></span>
                <div class="col-sm-12"style="margin-top:20px;color:black">
                    <ul style="font-size:18px">
                        <li>   <a href="http://www.bteup.ac.in" class="pa-link1">Board of Technical
Education U.P.</a></li>
                        <li>   <a href="https://urise.up.gov.in/" class="pa-link1">Urise</a></li>

                        <li> <a href="http://www.jeecup.org" class="pa-link1">Joint Entrance Exam
Council</a></li>
                        <li> <a href="http://www.up.gov.in" class="pa-link1">U.P.Government official
Web site</a></li>

                        <li> <a href="http://www.upted.gov.in" class="pa-link1">Director of Technical
Education U.P.</a></li>
```

```
                    <li><a href="https://www.aicte-india.org" class="pa-link1">All India Council of
            Technical Education</a></li>

                </ul>
            </div>
        </div>
    </div>
    <div class="col-sm-1"></div>
</div>
<div class="col-sm-3" style=" height: 100%; "><div class="col-sm-1"></div>
<div class="col-sm-10" style=" height: 400px; margin-top: 25px; box-shadow: 5px 5px 5px 5px gainsboro;
">
    <div class="row" style="background: maroon; color: white; height: 30px; ">
<span style="font-size:18px;margin-top:20px"><center>FACILITIES</center></span></div>
<ul style="font-size:18px;margin-top:20px">
    <li><a href="/home/computercenter">Computer Center</a></li>
    <li><a href="/home/laboratories">Laboratories</a></li>
    <li><a href="/home/library">Library</a></li>
    <li><a href="/home/workshop"> Workshop</a></li>
    <li><a href="/home/hostel">Hostel</a></li>
</ul>
</div>
<div class="col-sm-1"></div>
</div>
<div class="col-sm-3" style=" height: 100%; ">

    <div class="col-sm-12"style="height:400px;margin-top:25px">
        <div class="col-sm-12" style="height: 190px; box-shadow: 5px 5px 5px 5px gainsboro; ">
        <div class="row" style="background: maroon; color: white; height: 30px;"><span style="font-
size:18px;margin-top:20px">
            <center>ACTIVITIES</center></span></div>
            <ul style="font-size:18px">
                <li><a href="/home/sports">Sports</a></li>
                <li><a href="/home/Convocation">Convocation</a></li>
            </ul>
        </div>
        <div class="col-sm-12" style="height: 190px; margin-top: 20px;  box-shadow: 5px 5px 5px 5px
gainsboro">
        <div class="row" style="background: maroon; color: white; height: 30px; "><span
style="font-size:18px;margin-top:20px">
            <span><CENTER>DEPARTMENTS</CENTER></span></div>
        <ul style="font-size:18px">
            <li><a href="/home/computerscience">Computer Science And Engineering</a></li>
            <li><a href="/home/civil">Civil Engineering</a></li>
            <li><a href="/home/electrical">Electrical Engineering</a></li>
        </ul>
        </div>
    </div>

</div>
</div>
<!------space for link and other------>
<!------code for about my portal------>
    <center>
        <div class="col-sm-12 col-md-12 panel panel-body" style="text-align:justify;font-size:18px;box-
shadow:5px 5px 14px 5px gainsboro;width:90% ;margin-top:30px;margin-left:70px">
        <h3 class="text-center">ABOUT COLLEGE</h3>
        <hr style="height:2px;width:100%;background:forestgreen" />
        <p>
```

Government Polytechnic College Pratapgarh was established in the year 2018 with the aim of imparting professional education to the students. College is offering three year diploma courses in three branches i.e., Electrical engineering, Computer Engineering and

Civil Engineering.
The institute is running in the overall control of Ministry of Technical Education, Government
of uttar pradesh. The courses are affiliated with
Uttar Pradesh Board of Technical Education ,Lucknow and Approved by All India Council for Technical Education (AICTE).
The GPC Pratapgarh campus spreads over 5 acres in a beautiful and serene atmosphere ideally suited for technical education.
The infrastructure and facilities available on campus are amongst the very best. It is a wholly self-contained campus with cctv camra
and comprising of everything that students on campus would ever require.The campus is completely networked and interconnected.
The Internet facility is free for all the staff and students. Teachers make use of various educational Portals and web sites for teaching,
research & learning.
With this infrastructure, the students of GPC Pratapgarh have access to all e-learning materials related to academics. In addition,
online access to various reference books, journals, international papers has also been made available for the benefit of students.

```
            </p>
         </div>
    </center>
<!------end code for about my portal------>
```

Login

```
@{
    ViewBag.Title = "login";
    Layout = "~/Views/Shared/GeneralMaster.cshtml";
}
<div class="col-sm-12">
    <div class="col-sm-4"></div>
    <div class="col-sm-4 panel panel-body" style="margin-top:2%">
        <center><h2>LOGIN HERE</h2></center>
        <hr />
        <form action="/Home/Login" method="post">
            Enter UserID
            <input type="text" class="form-control" name="txtname" />
            Enter Paasword
            <input type="password" class="form-control" name="txtpass" />
            <br />
            <input type="submit" class="form-control btn-success" value="Login Now" />
        </form>
    </div>
    <div class="col-sm-4"></div>
                                                </div>
```

Userhome

```
      @{
    ViewBag.Title = "Index";
    Layout = "~/Views/Shared/AdminMaster.cshtml";
}

<center>
    <div class="Row" style="height: 450px; width: 500px;  border-radius: 8px; box-shadow: 0px 5px 5px 5px lightgrey">
        <h2>Add Notice</h2>
        <hr style="height:1px"/>
```

```
        <form action="~/Admin/index" method="post">
            <span style="font-size:20px">Enter Notification Type</span>
            <input type="text" name="txtname1" required placeholder="Type Here..... "style="width:
400px; height: 40px; border-radius: 5px; border: 1px solid black" /><br />
            <span style="font-size:20px">Enter Description</span>
            <textarea name="txtmsg1" placeholder="Description Here...." style="height: 200px; width:
400px; border-radius: 5px;border:1px solid black"></textarea>
            <br />
            <input type="submit" class="btn btn-success"  value="Add Notification" />
        </form>
    </div>
</center>
```

Student Feedback

```
@{
    ViewBag.Title = "studentfeedbackform";
    Layout = "~/Views/Shared/GeneralMaster.cshtml";
}

<style>
    /* Style inputs with type="text", select elements and textareas */
    input[type=text], select, textarea {
        width: 100%; /* Full width */
        padding: 12px; /* Some padding */
        border: 1px solid #ccc; /* Gray border */
        border-radius: 4px; /* Rounded borders */
        box-sizing: border-box; /* Make sure that padding and width stays in place */
        margin-top: 6px; /* Add a top margin */
        margin-bottom: 16px; /* Bottom margin */
        resize: vertical; /* Allow the user to vertically resize the textarea (not horizontally) */
    }

    input[type=email], select, textarea {
        width: 100%; /* Full width */
        padding: 12px; /* Some padding */
        border: 1px solid #ccc; /* Gray border */
        border-radius: 4px; /* Rounded borders */
        box-sizing: border-box; /* Make sure that padding and width stays in place */
        margin-top: 6px; /* Add a top margin */
        margin-bottom: 16px; /* Bottom margin */
        resize: vertical; /* Allow the user to vertically resize the textarea (not horizontally) */
    }

    /* Style the submit button with a specific background color etc */
    input[type=submit] {
        background-color: #04AA6D;
        color: white;
        padding: 12px 20px;
        border: none;
        border-radius: 4px;
        cursor: pointer;
    }

        /* When moving the mouse over the submit button, add a darker green color */
        input[type=submit]:hover {
            background-color: #45a049;
        }
```

```
    /* Add a background color and some padding around the form */
    .container {
        border-radius: 5px;
        box-shadow: 0px 5px 5px 5px lightgrey;
         padding: 20px;
    }
</style>

<center><h2>Feedback Form For Students</h2></center>
<div class="container">
    <form action="/Home/studentfeedbackform" method="post">

        <label for="name">First Name</label>
        <input type="text" id="fname" name="sname" placeholder="Your  name..">

        <label for="lname">Email</label>
        <input type="email" id="lname" name="semail" placeholder="Your email..">

        <label for="mnumber">Mobile Number</label>
        <input type="text" id="lname" name="smobile" placeholder="Your mobile..">



        <label for="branch">Branch</label>
        <select id="branch" name="sbranch">
            <option value="select">Select</option>
            <option value="computer science and engineering ">Computer Science And Engineering</option>
            <option value="civil engineering">Civil Engineering</option>
            <option value="electrical engineering">Electrical Engineering</option>
        </select>

        <label for="enrollment">Enrollment Number</label>
        <input type="text" id="enum" name="senrollment" placeholder="Your enrollment..">

        <label for="address">Address</label>
        <input type="text" id="address" name="saddress" placeholder="Your address..">

        <label for="feedback">Feedback</label>
        <textarea id="sfeedback" name="sfeedback" placeholder="Write something.."
style="height:200px"></textarea>
        <input type="submit" value="Submit">

    </form>
</div>
```

Teacher Feedback

```
@{
    ViewBag.Title = "teacherfeedbackform";
    Layout = "~/Views/Shared/GeneralMaster.cshtml";
}

<style>
    /* Style inputs with type="text", select elements and textareas */
    input[type=text], select, textarea {
        width: 100%; /* Full width */
        padding: 12px; /* Some padding */
        border: 1px solid #ccc; /* Gray border */
        border-radius: 4px; /* Rounded borders */
        box-sizing: border-box; /* Make sure that padding and width stays in place */
        margin-top: 6px; /* Add a top margin */
        margin-bottom: 16px; /* Bottom margin */
```

```
        resize: vertical; /* Allow the user to vertically resize the textarea (not horizontally) */
    }

    input[type=email], select, textarea {
        width: 100%; /* Full width */
        padding: 12px; /* Some padding */
        border: 1px solid #ccc; /* Gray border */
        border-radius: 4px; /* Rounded borders */
        box-sizing: border-box; /* Make sure that padding and width stays in place */
        margin-top: 6px; /* Add a top margin */
        margin-bottom: 16px; /* Bottom margin */
        resize: vertical; /* Allow the user to vertically resize the textarea (not horizontally) */
    }

    /* Style the submit button with a specific background color etc */
    input[type=submit] {
        background-color: #04AA6D;
        color: white;
        padding: 12px 20px;
        border: none;
        border-radius: 4px;
        cursor: pointer;
    }

        /* When moving the mouse over the submit button, add a darker green color */
        input[type=submit]:hover {
            background-color: #45a049;
        }

    /* Add a background color and some padding around the form */
    .container {
        border-radius: 5px;
        box-shadow: 0px 5px 5px 5px lightgrey;
         padding: 20px;
    }
</style>

<center><h2>Feedback Form For Teacher</h2></center>
<div class="container">
    <form action="/Home/teacherfeedbackform" method="post">

        <label for="name">Teacher Name</label>
        <input type="text" id="fname" name="tname" placeholder="Your  name..">

        <label for="lname">Email</label>
        <input type="email" id="lname" name="temail" placeholder="Your email..">

        <label for="mnumber">Mobile Number</label>
        <input type="text" id="lname" name="tmobile" placeholder="Your mobile..">



        <label for="branch">Select Course</label>
        <select id="branch" name="tcourse">
            <option value="select">Select</option>
            <option value="computer science and engineering ">Computer Science And Engineering</option>
            <option value="civil engineering">Civil Engineering</option>
            <option value="electrical engineering">Electrical Engineering</option>
        </select>

        <label for="tclass">Class</label>
        <input type="text" id="tclass" name="tclass" placeholder="Enter class..">
```

```
        <label for="feedback">Feedback</label>
        <textarea id="sfeedback" name="tfeedback" placeholder="Write something.."
style="height:200px"></textarea>



        <input type="submit" value="Submit">

    </form>
</div>
```

View Contact

```
@{
    ViewBag.Title = "viewcontact";
    Layout = "~/Views/Shared/AdminMaster.cshtml";
}
@using System.Data;
@using System.Data.SqlClient;
@using college.Models;
<link href="~/Content/css/akash.css" rel="stylesheet" />
<script src="~/Content/js/akash.js"></script>
<script>
    $(document).ready(function () {
        $("#example").DataTable();
    })
</script>
<center>
<div class="Row" style="height: 800px; width: 80%; border-radius: 8px; box-shadow: 0px 5px 5px 5px
lightgrey;margin-bottom:20px">
    <h2 class="text text-center">ViewContact</h2>
    <hr />

            @{
    string cmd = "select * from clg_contact";
    DBmanager db = new DBmanager();
    DataTable dt = db.GetAllRecords(cmd);
    if (dt.Rows.Count > 0)
    {
        <table class="table table-responsive" id="example" style="width: 95%; border: 1px solid black;
border-radius: 8px">
            <thead>
                <tr>
                    <th>SN.</th>
                    <th>Name</th>
                    <th>Email</th>
                    <th>Mobile</th>
                    <th>Message</th>
                    <th>Date</th>
                    <th>Delete</th>

                </tr>
            </thead>
            <tbody>
                @for (int i = 0; i < dt.Rows.Count; i++)
                {
                    <tr>
                        <td>
                            @dt.Rows[i]["cid"]
```

```
                        </td>
                        <td>
                            @dt.Rows[i]["name"]
                        </td>
                        <td>
                            @dt.Rows[i]["email"]
                        </td>
                        <td>
                            @dt.Rows[i]["mobile"]
                        </td>
                        <td>
                            @dt.Rows[i]["message"]
                        </td>
                        <td>
                            @dt.Rows[i]["cdate"]
                        </td>
                        <td>
                            <a href="/Admin/DeleteContact?del=@dt.Rows[i]["cid"]">
                                <span class="fa fa-trash"></span>
                            </a>
                        </td>
                    </tr>
                }

            </tbody>
        </table>
    }
    else
    {
                    <h2>No Record Found</h2>
                }
            }
        </div>
       </center>
```

Changepassword

```
@{
    ViewBag.Title = "changepassword";
    Layout = "~/Views/Shared/AdminMaster.cshtml";
}
<center>
    <div class="Row" style="height: 360px; width: 500px;  border-radius: 8px; box-shadow: 0px 5px 5px
5px lightgrey">
        <h2 class="text text-center"style="margin-top:8px">Change Passward Panel</h2>
        <hr style="height:1px"/>
        <form action="/Admin/changepassword" method="post">
           <span style="font-size:20px"> Enter Old Password</span>
            <input type="text" class="form-control" name="txtoldpass"style="width:400px;border:1px
solid black;border-radius:5px"placeholder="Enter Old Password" />
            <span style="font-size:20px">Enter New Password</span>
            <input type="password" class="form-control" name="txtnewpass" style="width:
400px;border:1px solid black; border-radius: 5px" placeholder="Enter New Password" />
            <span style="font-size:20px">Enter Confirm Password </span>
            <input type="password" class="form-control" name="txtcpass" style="width: 400px; border:
1px solid black; border-radius: 5px"placeholder="Confirm New Password" />
            <br />
            <input type="submit" class="btn btn-success" value="Change Password" />
        </form>
    </div>
                                            </center>
```

Logout

```
public ActionResult Logout()
{ mySession();
Session.Abandon();
 Session.Clear();
Session.RemoveAll();
 Response.Write("<script>window.location.href='/home/login'</script>");
  return View();
```

FUTURE SCOPE

Following modification or upgrades can be done in system.

1. More than one Student can be integrated through this software.
2. Students can check their application status online.

CONCLUSION:

At last it can be concluded that the College Web Application was a real learning experience. The principles of software production were well implemented throughout the system. The whole project undergoes with full of enthusiasm and with full of joyous moments. The project has been made as per as the given specification. Working on the Project was really a learning experience and we have come a long way in building our concepts of Software engineering. The “College Web Application “developed by us is purely based on .Net . The overall purpose of this system is to computerized the whole process and thus prevent the intervening errors. During the course of this assignment we have gone through many obstacles which made us to research and though increased our knowledge. After applying all the data modeling, object modeling and process modeling techniques now we are very well clear with all these concepts and fundamentals which will be going to help us in the future.