

PROJECT SYNOPSIS

“LEARNING MANAGEMENT SYSTEM”

E – Gyan Portal”

REPORT SUBMITTED FOR THE PARTIAL FULFILMENT OF THE
REQUIREMENT FOR THE B.TECH. IN

“Computer Science Engineering”

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About Learning Management System (LMS)

LMS stands for Learning Management System, a software application or platform used to plan, deliver, and track educational content and training programs. It allows organizations, educational institutions, and businesses to manage online courses, track learner progress, and provide assessments and certifications. LMS platforms support a wide range of learning materials, including videos, documents, quizzes, and discussion forums. They offer features like user management, course creation, reporting, and integration with other tools and systems. LMS is essential for creating an efficient and scalable learning environment, especially in online or hybrid educational settings, helping both instructors and learners engage with educational content in a structured and measurable way.

Conventional Methods of Distance Education

Distance education is the method of education where students and teaching faculties are not physically present in the educational setting. Traditionally, this method of education focused on students that are not available for a full-time course duration. The process involves students filling up and submitting the admission forms and receiving the learning materials like notes and books at their doorstep. This conventional method of distance education involved long waiting days for their study material or other hindrances such as lack of instant communication with the institute resulting in less to no feedback regarding learning performances. There is an abiding need for a platform to bring about a revolutionary change in this conventional method of distance education. An advanced method to enable effective teaching-learning and evaluation that standardizes and improvises distance education.

About LMS e – Gyan Portal

To overcome the difficulties in the exiting conventional methods of distance education as mentioned in the paragraph above, LMS e-Gyan Portal. The LMS e-Gyan Portal will not only digitalise every

process of learning but focuses on easy access to the self-learning materials and self-assessment tools. The students of the university will experience instant communication and feedback with the concerned faculties or staff eliminating any barriers to an effective flow of information. The portal will also enable the university for a better digital experience in providing the students with their selflearning material and self-assessment tools and study centre associations. All the study centres associated with the university offers all the courses available in the university.

Objective

The e-Gyan Portal is a Learning Management System (LMS) with the objective to facilitate "E-Learning System to the students for the learning purpose from a remote location". The System is Secure, Robust Web Application for E-Learning. It has been designed to provide online study material to the students . The portal is user friendly & easy to access. The whole LMS deployment is on cloud-based architecture so that its resources can be elastic as and when required. The e-Gyan Portal will be accessible from any hook and corner of the world if the system allowed the permission to its users. We can say that it is fully secure and accessible 24x7 to its authorized users. It will resolve the academic issues such as Self-Learning Material distribution, delivery, tracking, assessment, progress monitoring & controlling of all stakeholders of the system i.e., students, teachers, study Centre administrators as well as university administrators when they are at distant.

ABOUT THE PROJECT

This Project is a learning management system. The analysis steps of project are given below:-

Feasibility Study

Feasibility study is the measure of how beneficial or practical the development of an information system will be to an organization. The Feasibility analysis is a cross life cycle activity and should be continuously performed throughout the system life cycle.

Operational Feasibility:-

By providing the web based application, all the users will get a very good facility of accessing the service to fulfil their requirements. All the user information, information sharing and selection process is done properly.

Users will feel comfortable by reduction of their work. The system will make handling of large databases easy. Losing of records will be avoided. Considering all these factors, we can conclude that all the users and end users will be satisfied by the system.

Technical Feasibility:-

For the design and development of the system, several software products have been accommodated.

- Database design – MySql
- Interface design – HTML, CSS, Java Script and Bootstrap, Thymeleaf
- Coding – Java with Spring Boot framework

The technology (Java with Spring Boot framework) has enough efficiency for the development of the system. Therefore the project is technically feasible.

Schedule Feasibility:-

The duration of time required for the project has been planned appropriately and it is the same as the duration of time expected by the client. Therefore the application can be delivered to the client within the expected time duration, satisfying the client. Hence the project is feasible in scheduling.

Economical Feasibility:-

According to the resources available and the project scheduling process it is estimated that the expenses allocated for the web application to be developed, by the client is sufficient enough. Hence the economical factor has been considered feasible.

Project Planning & Scheduling:-

Planning is very important part of any software development. In the planning phase we decide which features are to be included in the system to make a good system, how much time do we need to complete the project, what will the cost of the system etc...

A Software Life Cycle or software process is a series of identifiable stages that a software product undergoes during its development. A software product development effort usually starts with a project identification and selection stage and then requirements analysis; design, coding, testing, implementation and maintenance are undertaken.

A life cycle model identifies all the activities required to develop and maintain a software product and establishes a precedence ordering among the different activities.

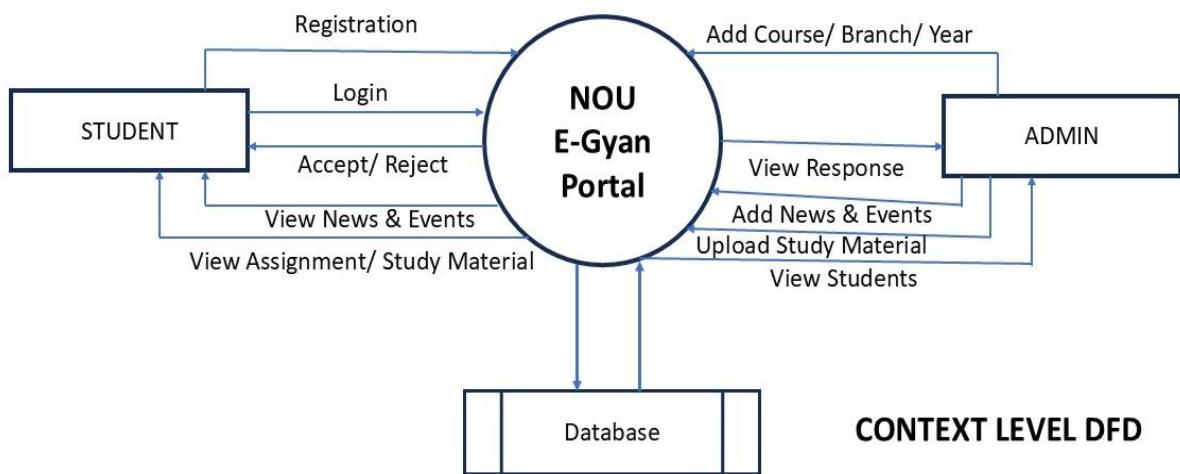
The various phases of Software Development Life Cycle-

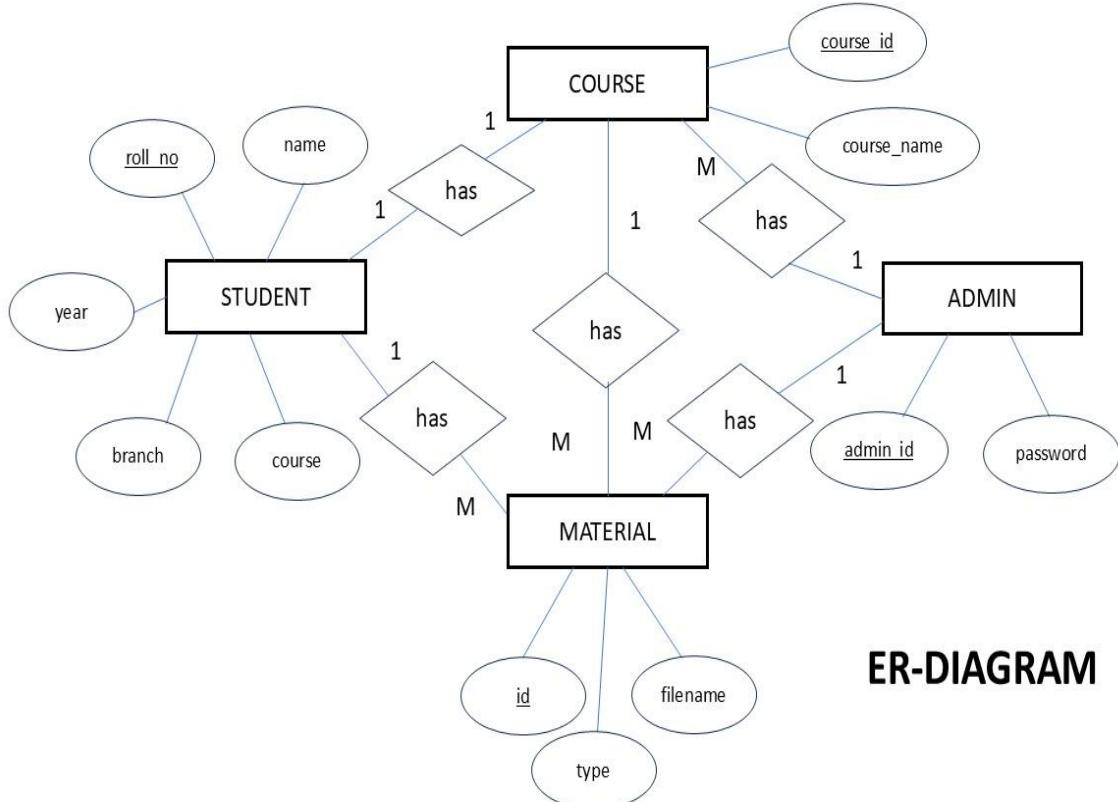
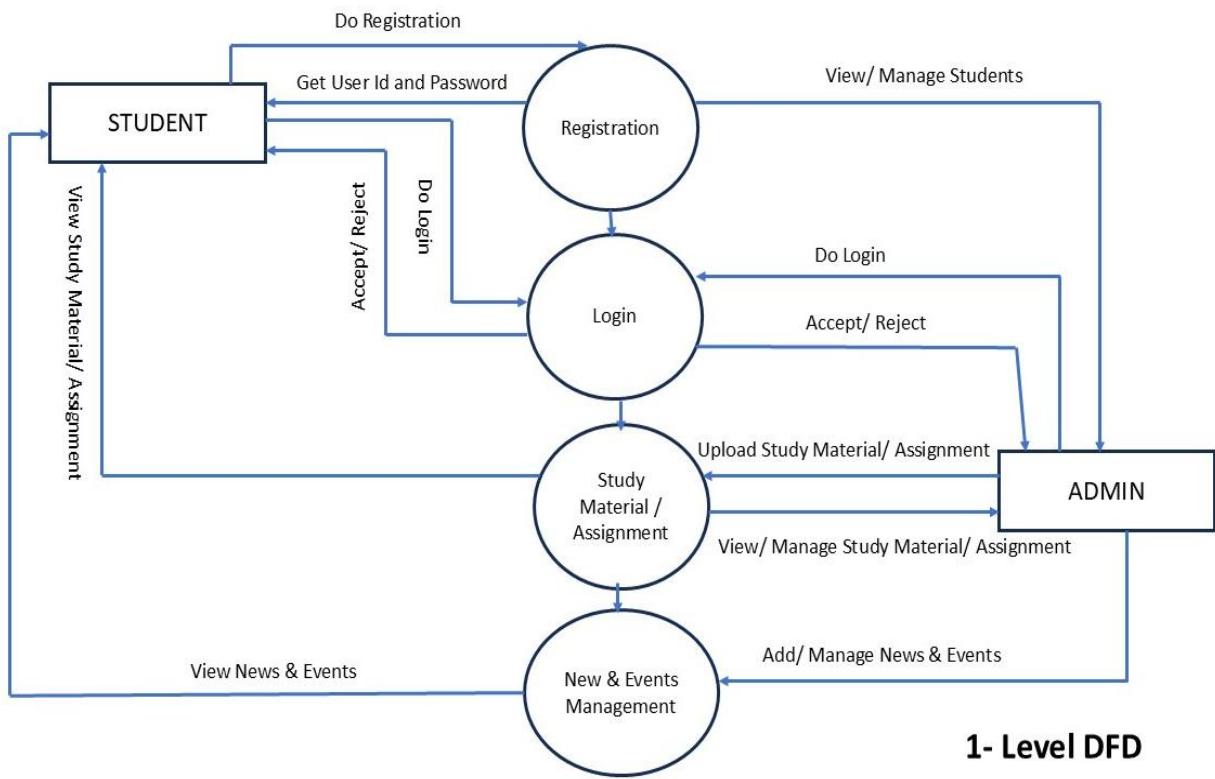
- Requirement Analysis
- System Design
- Coding
- Testing
- Implementation

SOFTWARE REQUIREMENTS FOR DEVELOPMENT

User Interface Designing	HTML5, CSS3, Java Script, Bootstrap, Thymeleaf
Programming Language	Java with Spring Boot Framework
Database	MySql
IDE	STS (Spring Tool Suit)

High Level Designing





Low Level Designing

Database Designing

Table Name : student

Column Name	Data Type
Rollno	int primary key
Name	varchar(50)
Fname	varchar(50)
Mname	varchar(50)
Gender	varchar(6)
Address	varchar(255)
Program	varchar(50)
Branch	varchar(50)
Year	varchar(50)
Contactno	varchar(10)
Emailaddress	varchar(50)
Regdate	varchar(30)

Table Name : login

Column Name	Data Type
Userid	varchar(50) primary key
Password	varchar(30)
Usertype	varchar(50)
Status	Varchar(10)

Table Name : enquiry

Column Name	Data Type
Id	int primary key auto_increment
Name	varchar(50)
Gender	varchar(20)
Address	varchar(255)
Contactno	varchar(10)
Emailaddress	varchar(50)
Enquirytext	Varchar(255)

Enquirydate	Varchar(30)
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Table Name : response

Column Name	Data Type
id	int primary key auto_increment
Rollno	Int
name	varchar(50)
Program	varchar(50)
Branch	varchar(50)
Year	varchar(50)
Contactno	varchar(10)
Emailaddress	varchar(50)
Responsetype	varchar(50)
subject	varchar(500)
Responsetext	Varchar(1000)
respondedate	varchar(30)

Table Name : news

Column Name	Data Type
nid	int primary key auto_increment
Newstext	varchar(255)
newsdate	varchar(30)

Table Name : program

Column Name	Data Type
Id	int primary key auto_increment
program	varchar(50)

Table Name : branch

Column Name	Data Type
Id	int primary key, auto_increment
branch	varchar(50)

Table Name : year

Column Name	Data Type
Id	int primary key, auto_increment
Year	varchar(50)

Table Name : material

Column Name	Data Type
Ids	int primary key, auto_increment
Program	varchar(50)
branch	Varchar(50)
Year	Varchar(50)
Subject	Varchar(100)
File_name	Varchar(255)
My_file	Varchar(255)

Modules in Project

There are following modules in this project:-

- Student Information System
- Login Management System
- Complain Management System
- Feedback Management System
- Enquiry Management
- Study Material Management
- SMS API Integration

Modules Description

Student Information System:- This module contains information of students with given fields like rollno, name, program, branch, year etc.

Login Management System:- This module validates user login. It also tracks user after identification of user whether he/she is admin or student.

Complain Management System:- Through this module student can raise complain and student's complain will show on admin panel, admin will resolve complain.

Feedback Management System:- Through this module, students can send feedback and student feedback will be shown on admin panel.

Enquiry Management:- In this module, any end user can raise enquiry, which display on admin zone.

Study Material Management:- Through this module admin can upload study material for students according to their course and subject. The study material is displayed on student panel.

SMS API Integration:- Through this module when end user do enquiry a system generated SMS is send to end user registered mobile no.

Future Scope Of Project

The system is flexible enough to ensure well coordinated efforts to face the strategic challenges emerging from rapidly changing economic environment and global trends. Facilities have been incorporated in the software so that online processing can be done easily and thus the effort and time can be saved.

In future it is planned to develop our own web server to host the web application.

Building Android Application for the system is also one of the future scope's of this project.