Future Minds

A

Progress Report of project

Submitted in Partial Fulfillment of the Requirements for the Degree of

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE & ENGINEERING

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MGM's College of Engineering & Technology, Noida

FUTURE MIND

Under

Guidance of

Dr. Sanjay Shrivastav Sir

"Education is the manifestation of perfection present already in man"

Swami Vivekanand

DECLARATION

We hereby declare that this submission is our own work and that, to the best of our knowledge and belief, it contains no material previously published or written by another person nor material which to a substantial extent has been accepted for the award of any other degree or diploma of the university or other institute of higher learning, except where due acknowledgment has been made in the text.

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CERTIFICATE

This is to certify that Project Report entitled "**Future Minds**" which is submitted by Nadeem Akhtar, Raman Rai, Mayank Rawat, and Sahil Bhardwaj in partial fulfilment of the requirement for the award of degree B. Tech. in Department of Computer Science & Engineering of Dr. A.P.J Abdul Kalam Technical University, is a record of the candidate own work carried out by him under my/our supervision. The matter embodied in this thesis is original and has not been submitted for the award of any other degree.

Date: **Supervisor name with signature**

ACKNOWLEDGEMENT

It gives us a great sense of pleasure to present the report of the B. Tech Project undertaken during B. Tech. Final Year. We owe special debt of gratitude to ***Dr. Sanjay Shrivastav, Department of Computer Science & Engineering****, MGM College of Engineering & Technology, Noida for his constant support and guidance throughout the course of our work. His sincerity, thoroughness and perseverance have been a constant source of inspiration for us. It is only his cognizant efforts that our endeavours have seen light of the day. We also take the opportunity to acknowledge the contribution of* ***Mrs. Archna Sar, Head of Department (Computer Science & Engineering)****, MGM College of Engineering & Technology, Noida & Dr. Sanjay Srivastava for their full support and assistance during the development of the project.*

We also do not like to miss the opportunity to acknowledge the contribution of all faculty members of the department for their kind assistance and cooperation during the development of our project. Last but not the least, we acknowledge our friends for their contribution in the completion of the project.

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LIST OF FIGURES

TABLE OF CONTENTS

CHAPTER-1

INTRODUCTION

1.1Problem Definition

In India a substantial number of regions are deprived of any access to schooling facilities mostly in the remote regions or hilly areas. And even if schools are present then in the former areas then also students have to actually travel miles in search for quality education which is hectic as well as expensive. And even if the school problem is solved teachers might not be that qualified enough and therefore it might pose as a threat to the future of students of that very Future Scope

The future implementation will be the test management system.

In this teacher can assign test for a particular student and the marks will be shared with the student and the teachers as well.

It will help the teacher to enhance the capability of the student. region It is not completely an independent way of learning. Chances of exploring more and finding things out for themselves from the students is limited.

1.1.1 Future minds

E-learning is an integral part of smart education. There are many e-learning systems that are widely available to educational institutions. The challenge is to easily integrate the e-learning system into a smart educational environment based on the requirements of the users. Future minds are a web-based application that is designed with the purpose of solving the problem of student who are living in a backward regions and other remote area with negligible access to good education. Here anyone with a decent internet connection can have an access to future minds

Fig.1.1 Model for Online Learning

1.2 Brief Introduction:

Education plays an interim role in bring growth and development in the pocket of the nation. Education is the sole factor behind the wholesome development of a person. Teaching process has stayed the same for decades. The traditional teaching and offline education system are plagued with multiple inefficiencies.

Our vision at Future minds is to re imagine and evolve the way teaching and learning have been happening for decades. By combining quality teachers, engaging content and superior technology we are able to create a superior learning experience for students and aid in their outcome improvement, which is unlike any offline experience.

Teaching and learning are set to transform at a rapid pace and our mission is to accelerate these transformations.

Our aim is to create a knowledge network where any student can tap into a teacher directly and learning can happen in a personalized way, anytime-anywhere. Here personalized learning experiences is created for every type of learner. We will be bringing the best teachers, technology, and interactive content for creating world class learning experience for each and every student.

1.3) Objectives of this project:

- To create a platform where students are served with best quality study material that too in a very minimal cost
- Crafting learning journeys for every student in order to address their needs
- Encourage one to one learning so for addressing the needs of each and every child so that they are more holistically involved in their education and are more active
- Creating environment for personalized learning for students
- Comprehensive coverage of multiple concepts with animated videos, questions, fun quizzes and flash cards
- Providing best notes to the students in terms of study
- Analyzing and tracking the performance of the student on a regular basis
- Based on student performance creating personalized profiles which will be helping them out in identifying their strong and weak spots
- Covering all the complex concepts in a very lucified format in terms of interactive videos
- Toppers section that will be guiding the students through toppers note as well as their exam sheets for better understanding

1.4) **System Analysis**

The purpose of providing online education is to give students a platform where they can have access to optimum study material at a very minimal cost. The system should be: -

 Legally sustainable

 Mutually acceptable

 Easily understandable

 Highly flexible

Basically, System Analysis is defined as “The process of studying a procedure or business in order to identify its goals and purposes and create systems and procedures that will achieve them in an efficient way”. The field of system analysis relates closely to requirements analysis or to operational Research. System Analysis is divided into percent phases: -

Scope Definition: denoting an instrument for observing, viewing or examining.

Problem Analysis: Analyzing the problem that arises.

Requirements Analysis: determining the conditions that need to be met.

Logical Design: looking at the logical relationship among the objects.

Decision Analysis: making a final decision.

1.5) Existing system

Various online education providing platforms are there but they are actually charge a huge amount of money for providing content also the content that is being provided to them is not in a very interactive format. Another problem that most of the students are facing is that most of online education sites fail to take up their doubts and even if it does it fails to get back to students in a time bound manner. The idea here implemented is purely new one.

1.6) Proposed system

In the proposed systems good quality content will be provided to students at a very minimal cost. Secondly special doubt classes will be held for addressing the doubts of the students. Comprehensive coverage of multiple concepts with animated videos, questions, fun quizzes and flash cards. Best quality notes will be provided to the students. Analyzing and tracking the performance of the student will be carried out on a regular basis through weekly held test. Based on student performance creating personalized profiles which will be helping them out in identifying their strong and weak spots. Covering all the complex concepts in a very lucified format in terms of interactive videos. Toppers section that will be guiding the students through toppers note as well as their exam sheets for better understanding

1.7) Identification of needs

To identify the need for application, principles of requirement engineering is used. Requirement engineering provides the appropriate mechanism for understanding what the customer wants, analyzing need, assessing feasibility, negotiating a reasonable solution,

specifying the solution unambiguously, validating the specification and managing the requirement as they are transformed into an operational system.

1.8) Feasibility Study of the Project

The Feasibility of the project is analyzed in this phase and the proposed solution is put forth with a very general plan for the project and some cost estimates. During the system analysis the feasibility study of the proposed system is to be carried out. This is to ensure that the proposed system is not a burden to the organization/college. For Feasibility analysis, some understanding of the major requirements for the systems is essential. The key considerations involved in feasibility study are: -

- Economic Feasibility
- Technical Feasibility
- Operational Feasibility

1.8.1 Economical Feasibility

Economic analysis could also be referred to as cost/benefit analysis. It is the most important method for evaluating the effectiveness of the system. Our system is economically feasible as the project is economically possible in the given resource contents. The cost savings includes reduced travelling cost, getting free reviews of places. etc. As it is a college level project so we can say that it is economically feasible to implement.

1.8.2 Technical Feasibility

Generally, new system brings new technology into an organization. The proposed system requires technology and equipment, which is android mobile. Moreover, the maintenance system has a lot of scope of being expanded and developed to generate even more better suggestions of places to user. The present technology assures technical guarantee of accuracy, reliability and ease of access. The study is carried out to check the technical feasibility i.e. the technical requirements of the system. The hardware needed to carry out this project includes 4GB or above RAM, Processor i3 or above. The software needed to carry out this project includes Windows 7 or higher configuration, Firebase database, Android Studio.

1.8.3 Operational Feasibility

This refers to the ability of a system to perform all its operations effectively and efficiently. This application is developed using Android studio. The user interface of the application is kept simple and understandable. A common user can easily understand the functionality of this application. Our system is satisfying the requirements identified in the requirement analysis phase of system development. It is solving the problems well and takes advantage of the opportunities identified during scope development.

1.9 Proposed Modules

Registration/Login UI:
The Registration/Login Interface will be easily accessed and fast response in time easily.

Teachers Portal:
The Teachers can also sign up to the website to be the member of the Future Minds Society.

Interactive Test Module:
Test will be conducted to check the caliber and the logical way of the student to grade him/her.

Animated Learning:
Chemistry Physics and Mathematics will be more fun to learn via Animated Learning.

Assisting Bot
The Assistance Bot is so intelligent that can act as a mentor for students and to help them to get them out from the problems.

CHAPTER – 2

Designing Phase

4.2.2 ER DIAGRAM (Entity Relationship Diagram)

ER diagram is a visual representation of data that describes how data is related to each other. In our ER Model, we have disintegrated data into entities, attributes and setup relationships between entities, all this is represented visually using the ER diagram. Various entities like admin is related to customer and branch manager with manage relationship, customer is related to offers, status and shipments and branch manager related to staff. This diagram will be used for defining tables in database, data entered by the user and all of its details will be stored at back end only with help of ER diagram.

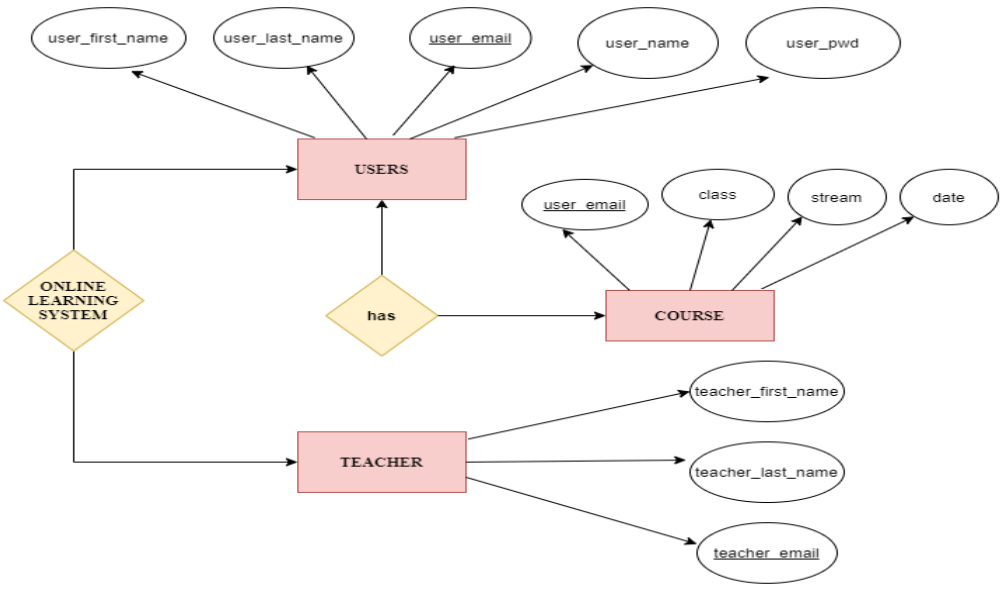


Fig.1.2 ER Diagram

LEVEL 0 DFD

Here we are explaining the two different entities: -

User and the admin

The roles of the user clarify the context that the login system and the registration system will be there to get registered from the user's end. The admin will validate and verify the data of the student logged/registered.

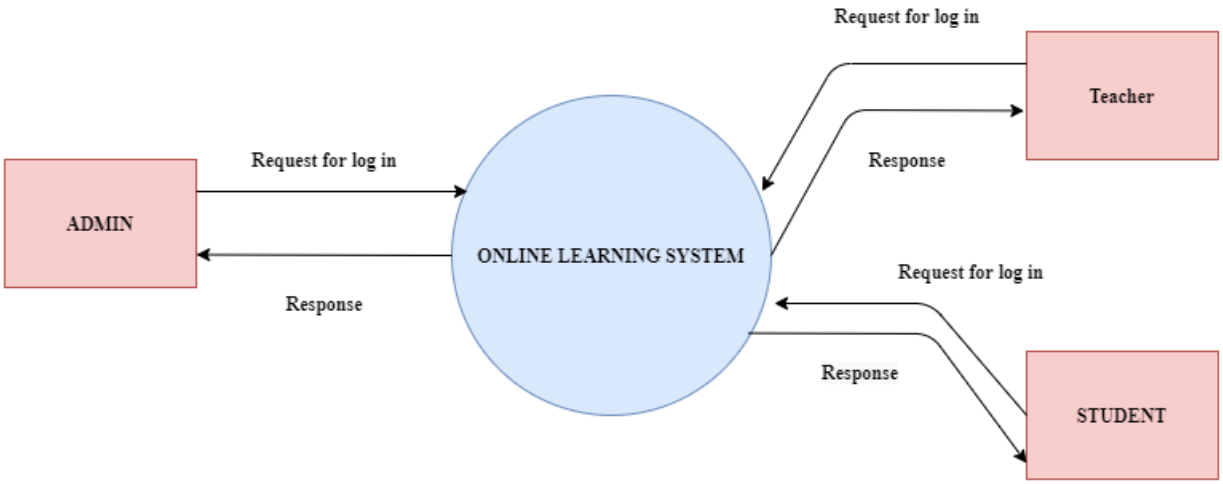


Fig.1.3 DFD (LEVEL 0)

LEVEL 1 DFD

It goes in more detail then Level 0. In a level 1 data flow diagram the process node is broken down into various sub-process this is shown like Process, login system is extracted in multiple domains and more clarified. The role of admin is defined in terms of different roles performed throughout the system. The Admin can give feedback and can do other operations also.

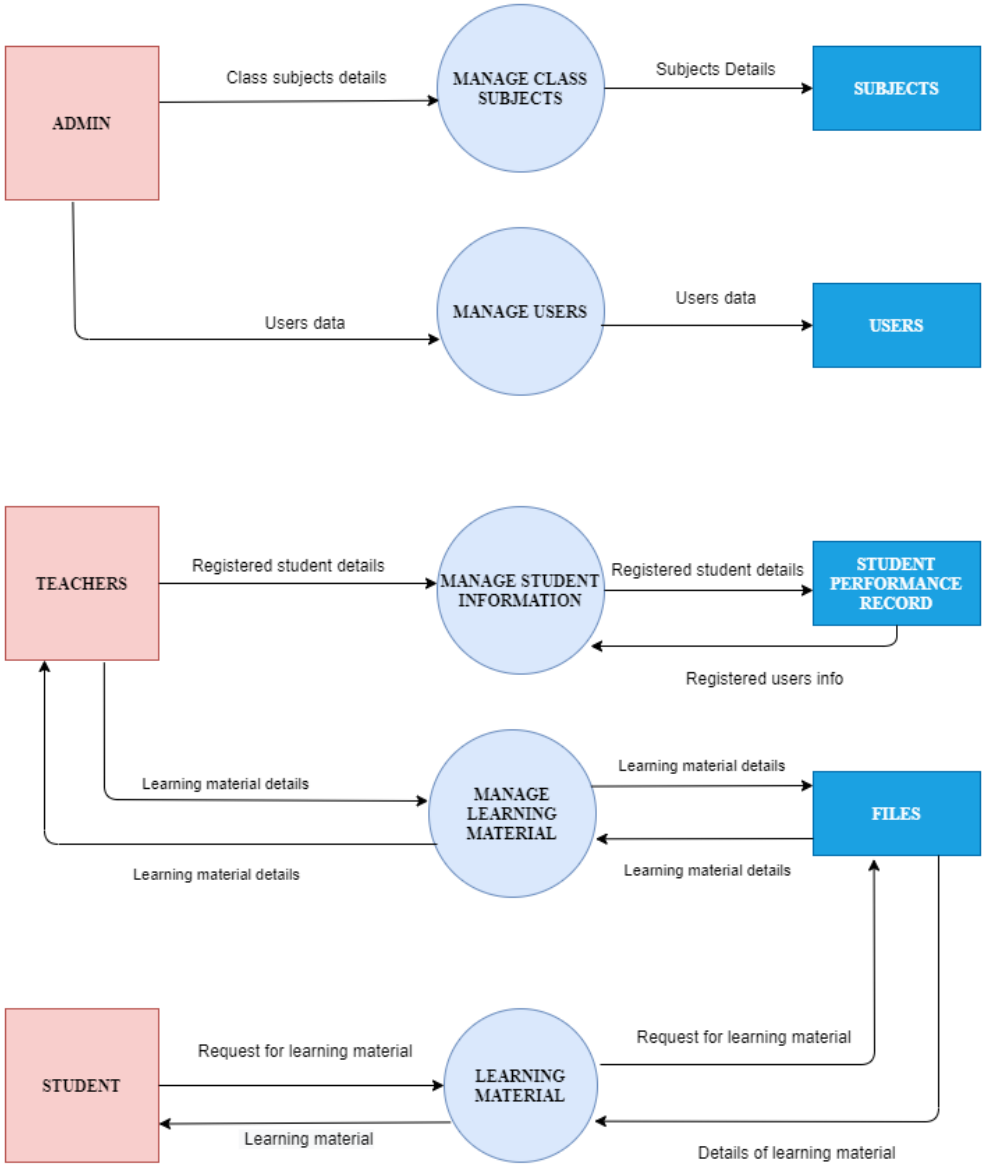


Fig.1.4 DFD (LEVEL 1)

LEVEL 2 DFD: -

This is the compressed form of Level 1 DFD represents the flow of the data precisely and in details throughout the process the functioning of the admin and the different head roles included from the user details to the deletion of the record from the database. The main aim of the admin here clarify is to give the detailed explanation throughout the process. The particular domain will be classified throughout the process and the particular representation of the roles are defined in

such manner that it will be explained easily and in a hierarchal manner. Particularly, we can say that the admin has the major role play in this concept of the online education system.

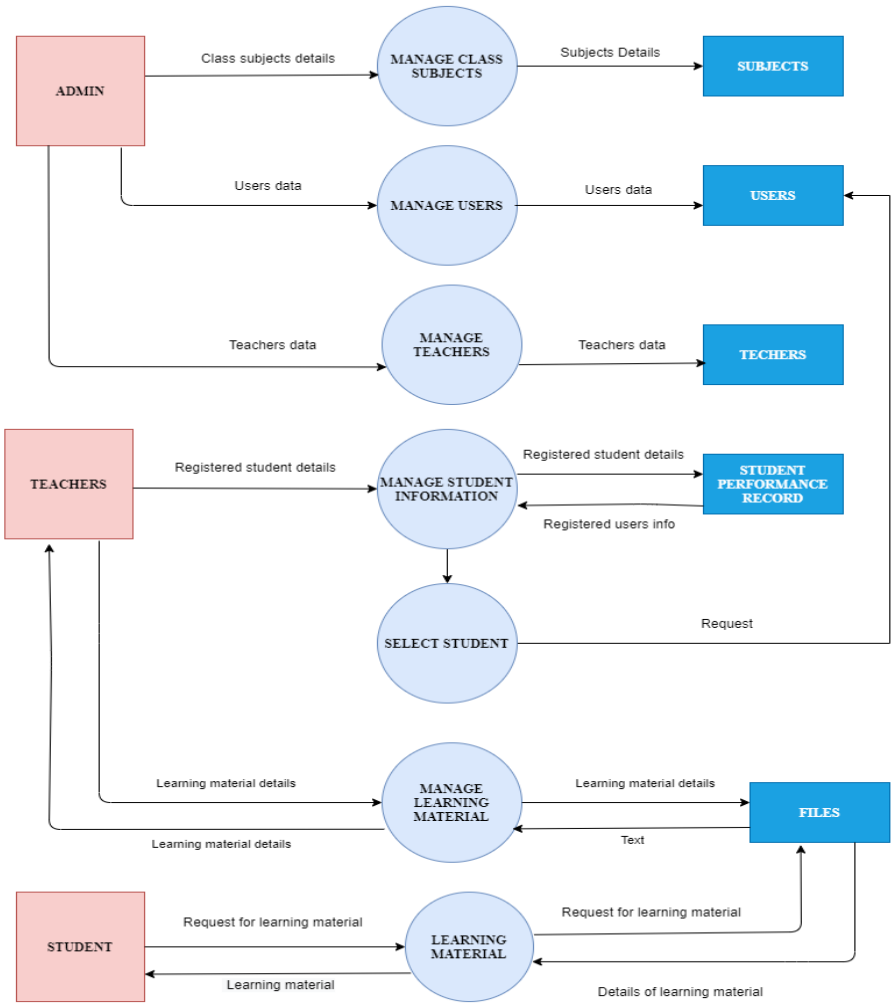


Fig.1.5 DFD (LEVEL 2)

4.2.4 SEQUENCE DIAGRAM

This diagram tells the sequences of the overall operations which are being performed during the whole process right from the login of the customer or the end use which request for the delivery form and where admin provides that form back to customer. All the roe rations are performed by the branch manager and order is being processed and the person who is

assigned the delivery will be from the post office that is nearest to the delivering address. So, that the delivery is being confirmed within a day or within few hours both for any entity or product or any document which are scanned and uploaded.

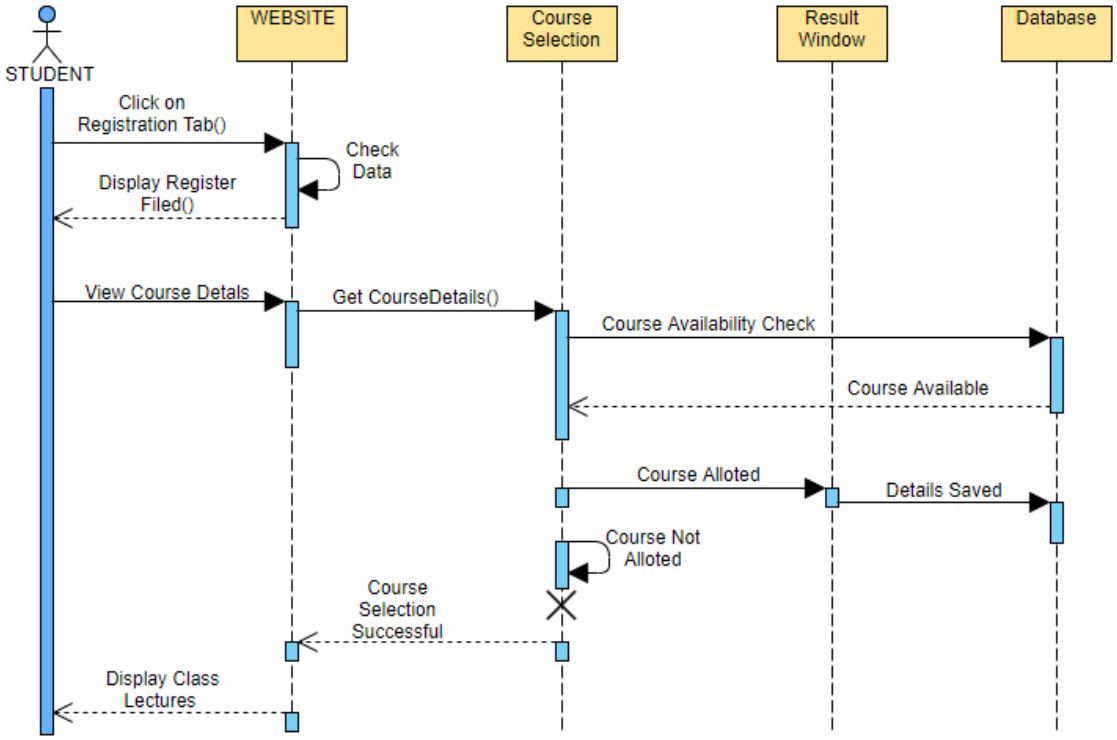


Fig.1.6 Sequence Diagram

4.2.5 CLASS DIAGRAM

Class diagram is an illustration of the relationships and source code dependencies among classes in the Unified Modeling Language (UML). In this e post , a class defines the methods and variables in an object that are being involve din this logistics system , which is a specific entity in a program or the unit of code representing that entity. This Class diagrams is useful in all forms of object-oriented programming (OOP). The concept is defining overall classes with its attributes and its functions and services that are being processed .Class diagrams arethe main building blocks of every object oriented methods. The class diagram can be used to show the classes, relationships, interface, association, and collaboration. UML is standardized in class

diagrams. Since classes are the building block of an application that is based on OOPs, so as the class diagram has appropriate structure to represent the classes, inheritance, relationships, and everything that OOPs have in its context. It describes various kinds of objects and the static relationship in between them.

The main purpose to use to use class diagrams are : -

• This is the only UML which can appropriately depict various aspects of OOPs concept.

• Proper design and analysis of application can be faster and efficient.

• It is base for deployment and component diagram.

There are several software available which can be used online and offline to draw these diagrams Like E-draw max, lucid chart etc. There are several points to be kept in focus while drawing the class diagram.

These can be said as its syntax:

• Each class is represented by a rectangle having a subdivision of three compartments

name, attributes and operation.

• There are three types of modifiers which are used to decide the visibility of attributes and operations.

• + is used for public visibility(for everyone)

• # is used for protected visibility (for friend and derived)

• – is used for private visibility (for only me)

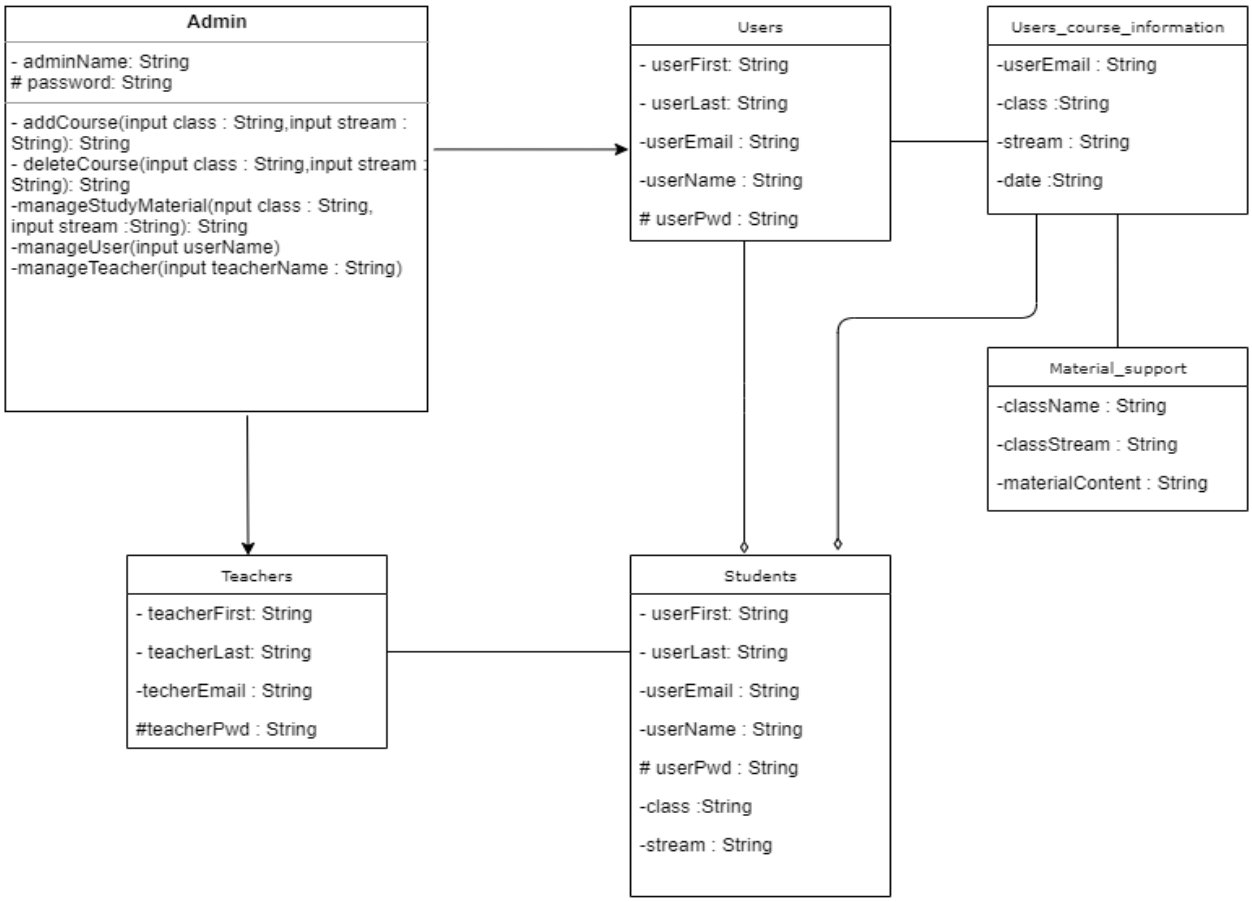


Fig.1.7 CLASS Diagram

4.2.6 Activity Diagram

Activity diagram will describe the dynamic aspects of the system.Activity diagram is basically a flowchart to represent the flow from one activity to another activity. The activity can be described as an operation of the system.First, the user will select the entity of the system whether he wants to send any document or any item for which he will search the modules for the desired entity and confirms it if he wishes to send it.Then the system will check whether that item is delieverable to that specified address or not by using the pincodes.

The control flow is drawn from one operation to another because once the operation is being started the user need to confirms it by paying through either of the options available from wallet ,Paytm or directly from bank.

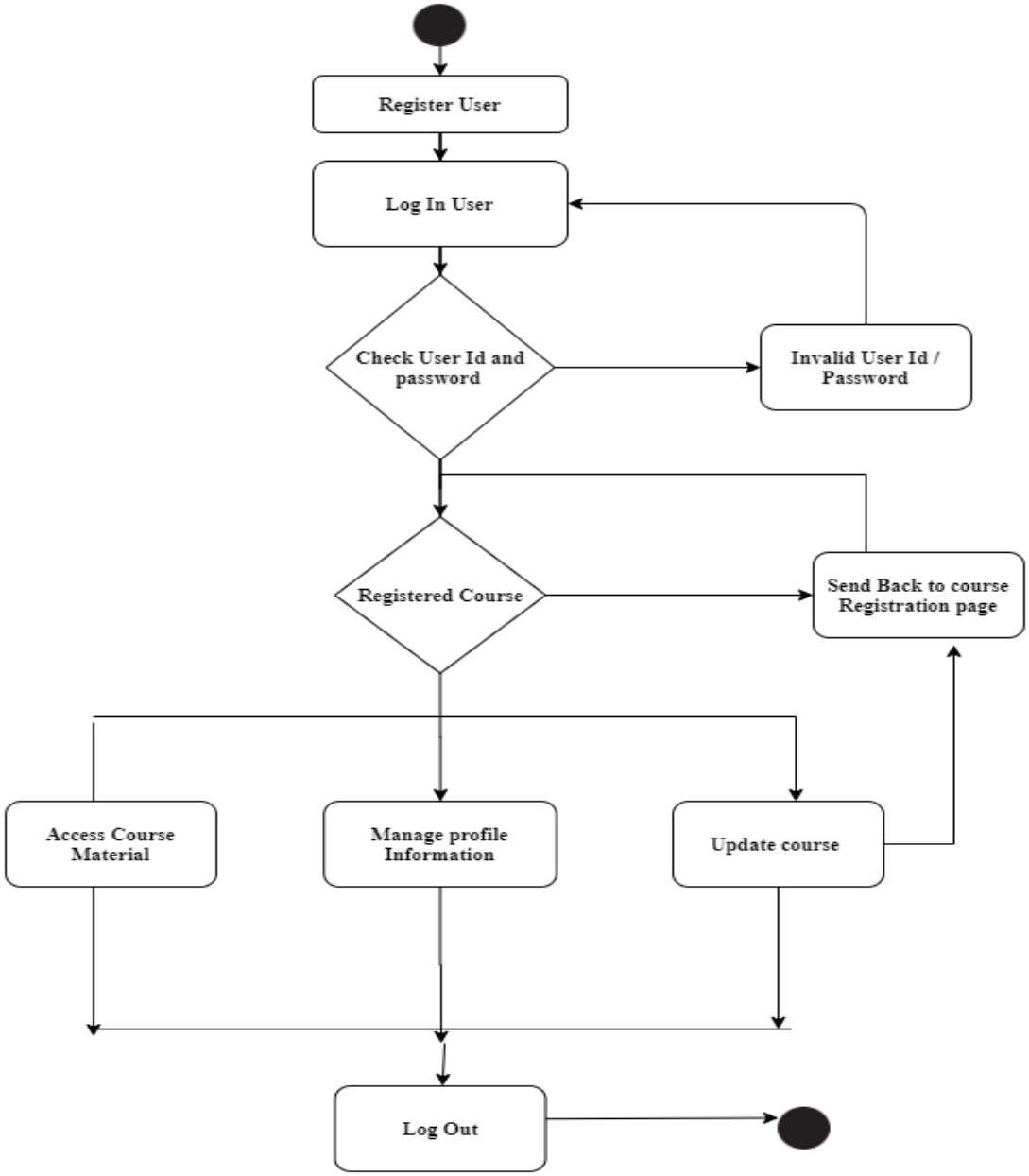


Fig.1.8 Activity Diagram

2.6 Modules – (Future Minds) -:

- Assignment Management Module: Used for managing the assignment details.
- QUESTION Module: Used for managing the details of question
- CLASS Module: Used for managing the details of class
- Student Management Module: Used for managing the information and details of the student.
- TEACHER Module: Used for managing the TEACHER details
- QUIZ Module: Used for managing the QUIZ information's
- Login Module: Used for managing the login details
- Users Module: Used for managing the users of the system
- Teacher Management Module: Used for managing the information and details of the teacher.

Introduction

Focused Modules:

o **2.6.1 Registration: -**

In this, first the interested students get registered by selecting their desired username and password and by providing the necessary details.

Then each user profile will be maintained which can be edited by the user when desired. Each person will register only one time. Details of each person along with their username and password is saved permanently in the database.

o 2.6.2 Login: -

After providing the correct username and password, the user log's in to the e-Learning system's homepage. There the user can select the available subjects to further learn about them. If user enter wrong username or password then they block their account temporary and after some security verification they will able to access their account.

o **2.6.3 Homepage: -**

After providing the correct username and password, the user log's in to the Future Minds system's homepage. Here at the homepage there are many choice for user to learn different subjects and learn programming languages etc.

User can take following helps: -

1. Tutorials about the course.

2. View content of the subject.

3. Attempt quiz after learning.

4. Download notes and key contents.

o **2.6.4 Quiz: -**

User play the quiz on appropriate language and immediately take the result. On each question user get the marks, there is no negative marking in quiz.

Chapter - 3

Testing & Implementation

Front End User Interface

Front End is designed to make the Website more attractive with complete color management and different optimization techniques. The main reason behind designing an easy and simple UI is to run the website on a low internet connection area with no delay in loading the content. Instead of providing a video at the backend we have provided with a URL mapping technique to redirect the user to another portal but within the website using IFRAME.

Frond End Design Techniques Used: -

1. Use of SASS instead of using CSS
2. Use of Bootstrap to load the content easily and firstly
3. URL Mapping

Fig.3.1 User Interface of Website

Front End of Login/Register UI

The LOGIN/REGISTRATION UI is designed with complete SASS and HTML5 for making it simplified and precised in its area. User interaction is created to make it more interactive in terms of user feedback.

The LOGIN/REGISTRATION UI is connected with the PHP backend to send the data in the particular format as the user enters the detail.

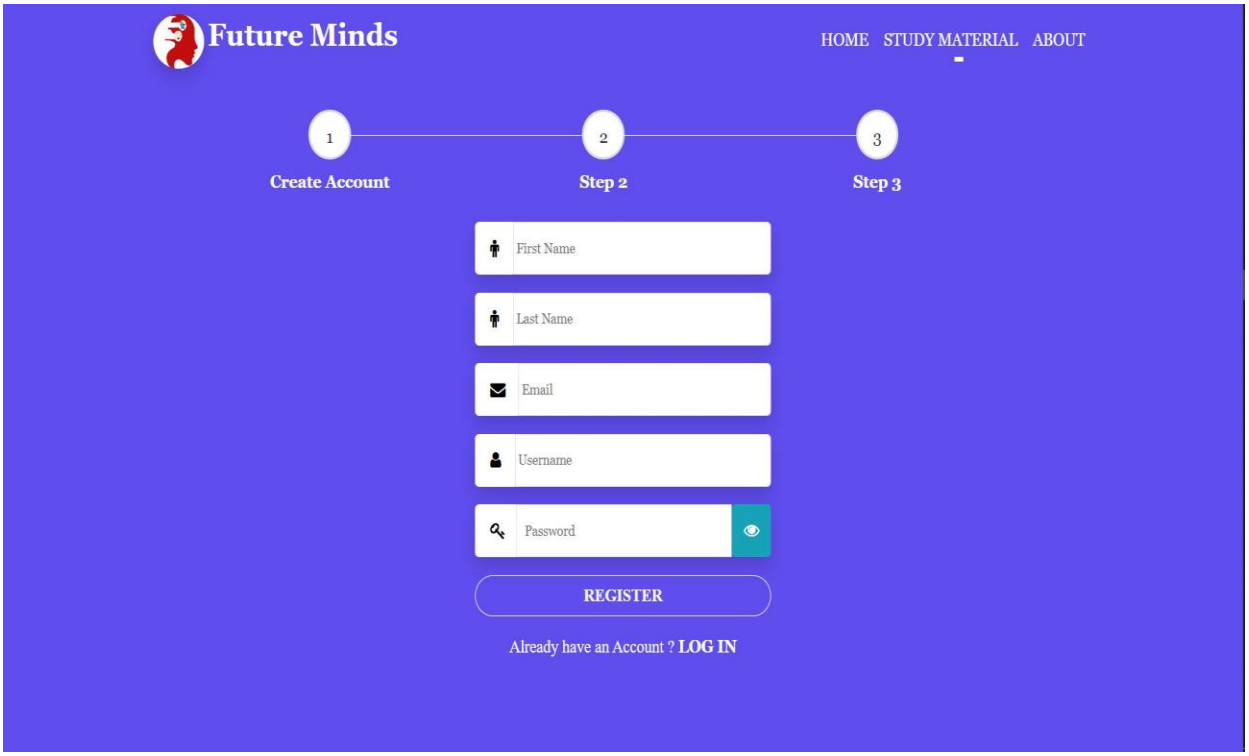


Fig 3.2 LOGIN/REGISTRATION UI

Profile Update Interface

Profile Update which is made to be the important element in the website design, the use of profile management via front end makes the work of the customer easier to change their credentials easily on its own.

The Technology used for implementing the profile update page here is:

1. PHP
2. MYSQL

PHP is used as a mediator that maintains the change of the profile picture and other important credentials from the user and store it into the database.

MySQL here is used to save the complete login data and other secured information of the user at the server end, the data is saved in the form of table entries.

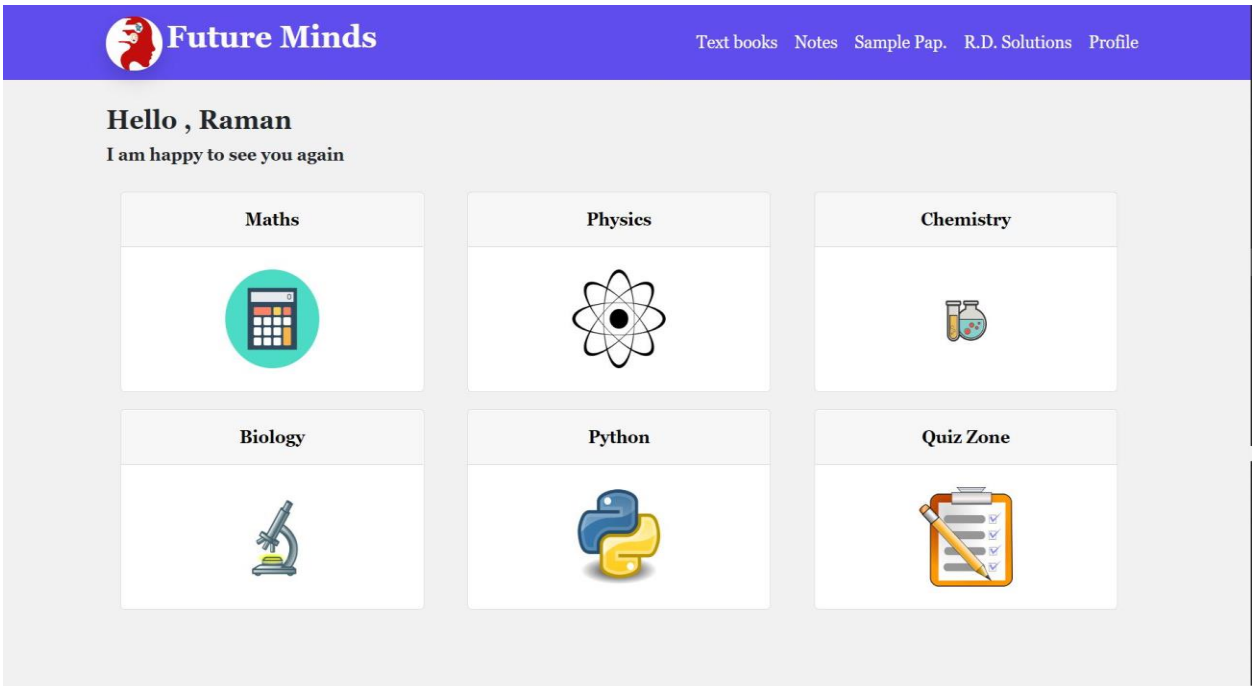


Fig. 3.3 User Profile Interface

Backend Implementation

The Backend system provides the user functionality to take the input from the user and provide the appropriate output to the user on its request. The backend is compatible for storing the user credentials that the submitted using the form or other feedback taking option.

It performs all application operations between users and an organization's **backend** business applications or databases. It should exhibit security, ability to handle transactions and connect to web services and other network services so that applications can communicate with the web and other systems.

Backend System is provided with a security for encoding the password from the intruders. Encryption is used to hash the password.

Backend Connection: -

Connection is established with PHP as this is the reknown mediator language between the user and the database.

User Data Management

User data is managed with MYSQL and is secured with the help of hashing the password so that unauthorized person will not be able to read the data.

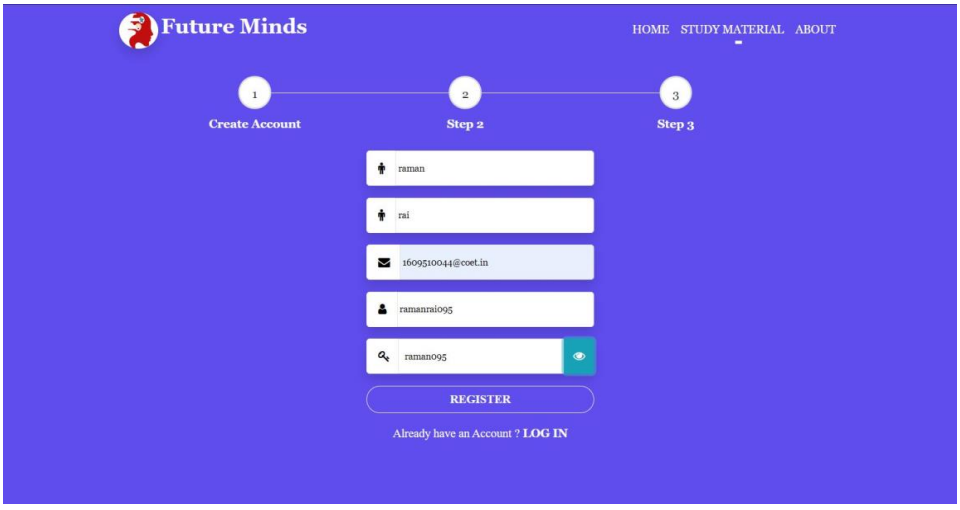


Fig 3.4 User Input Data

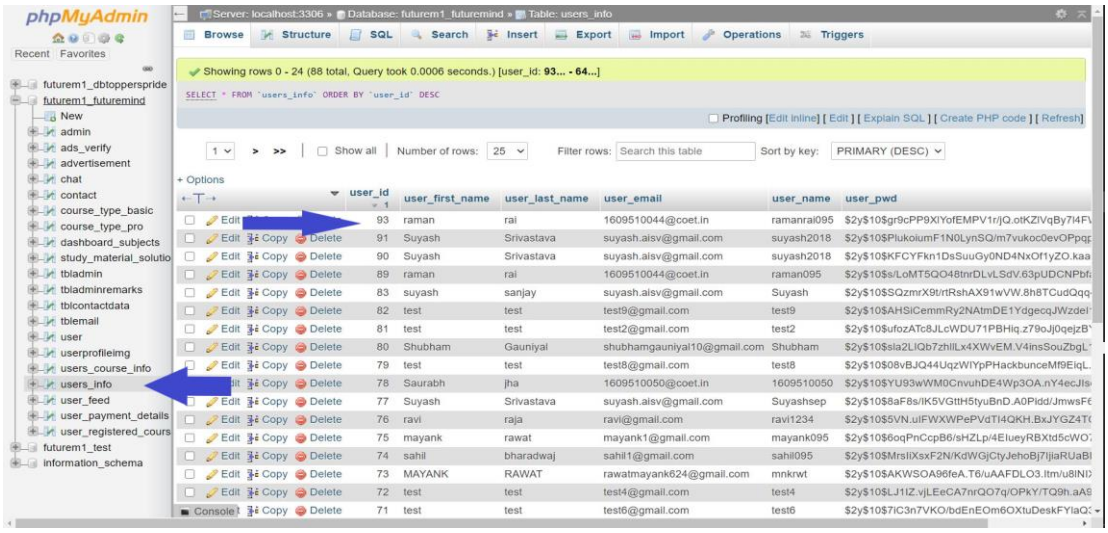
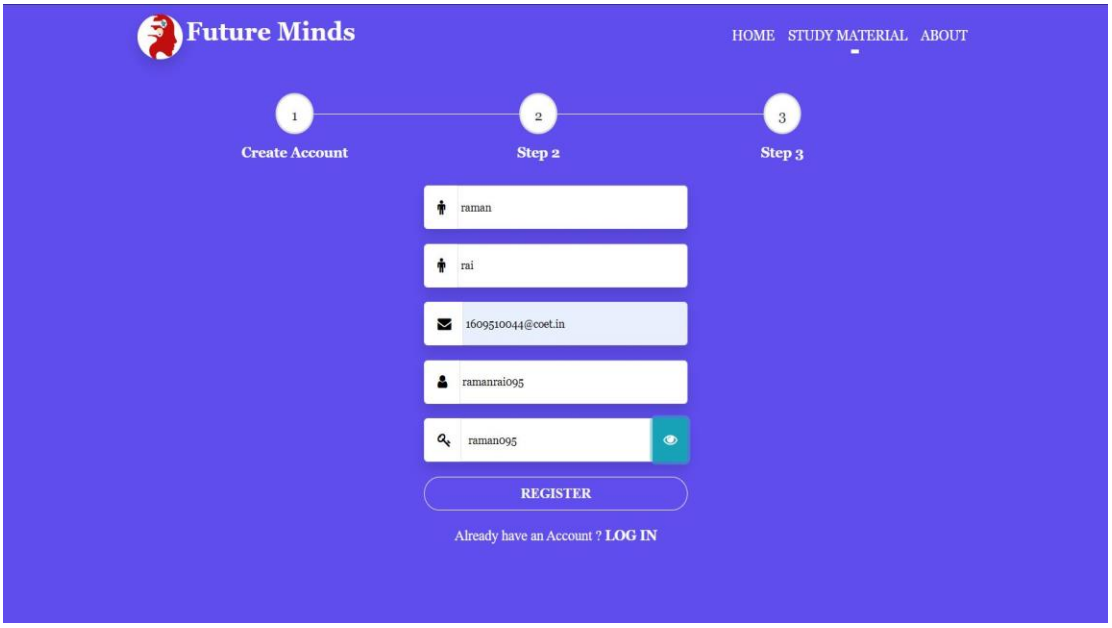


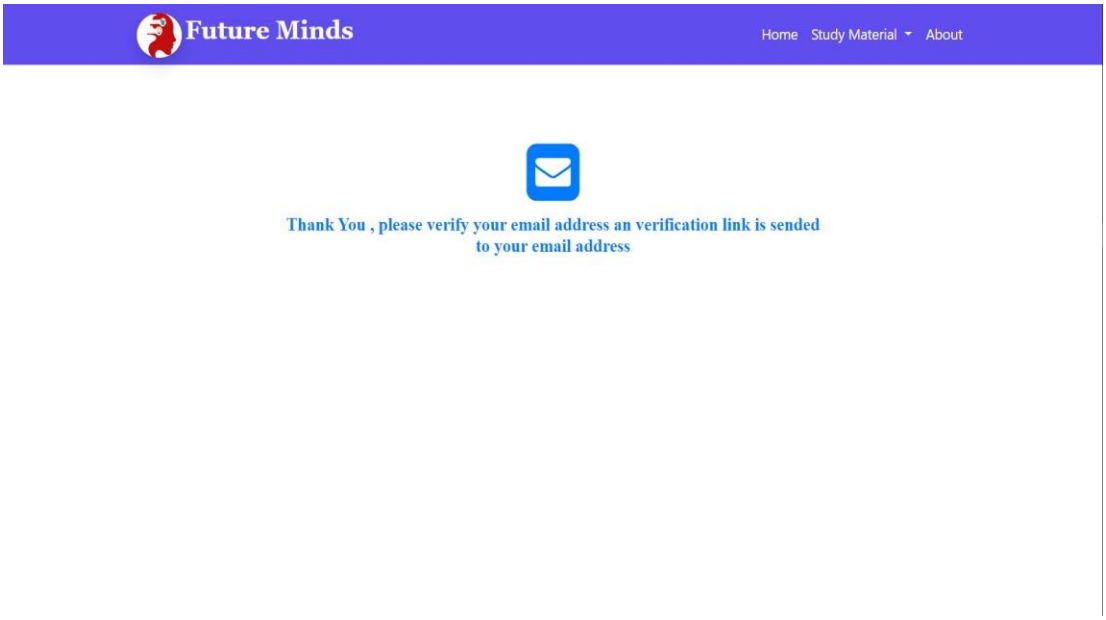
Fig. 3.5 User Information Submitted at Back-End

Testing of the modules

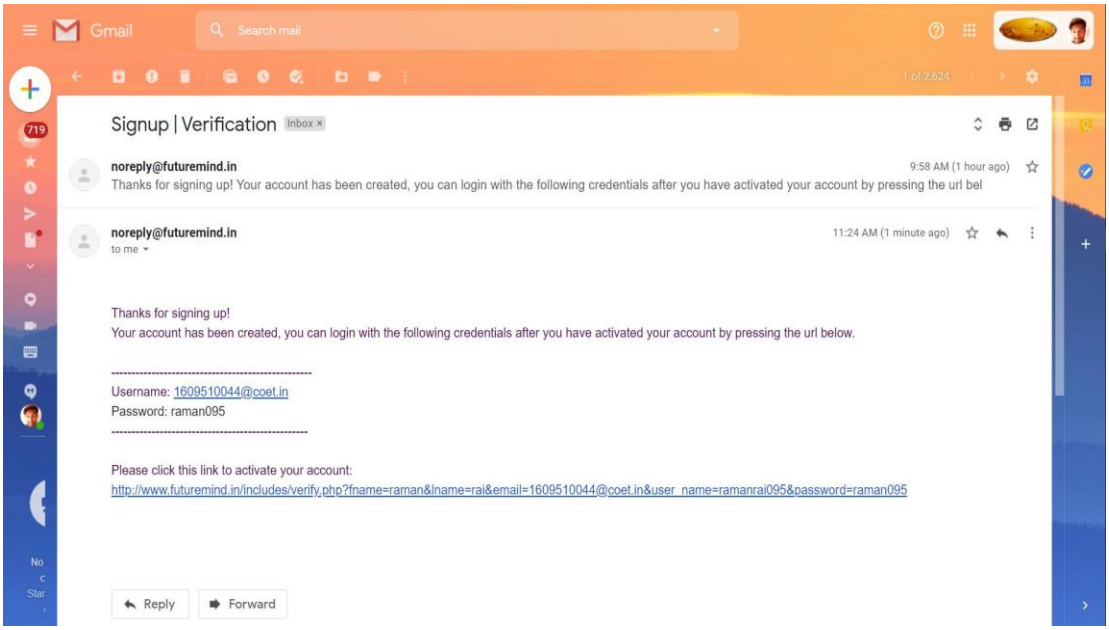
Step 1: - User Creates Account



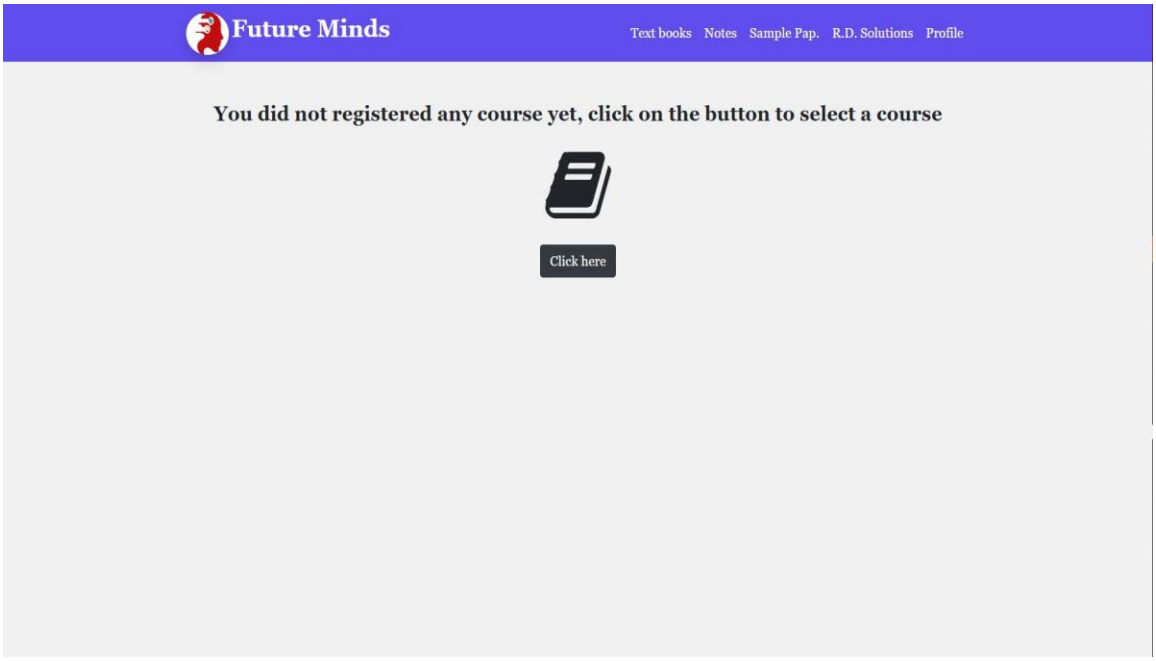
Step 2: - user email verification



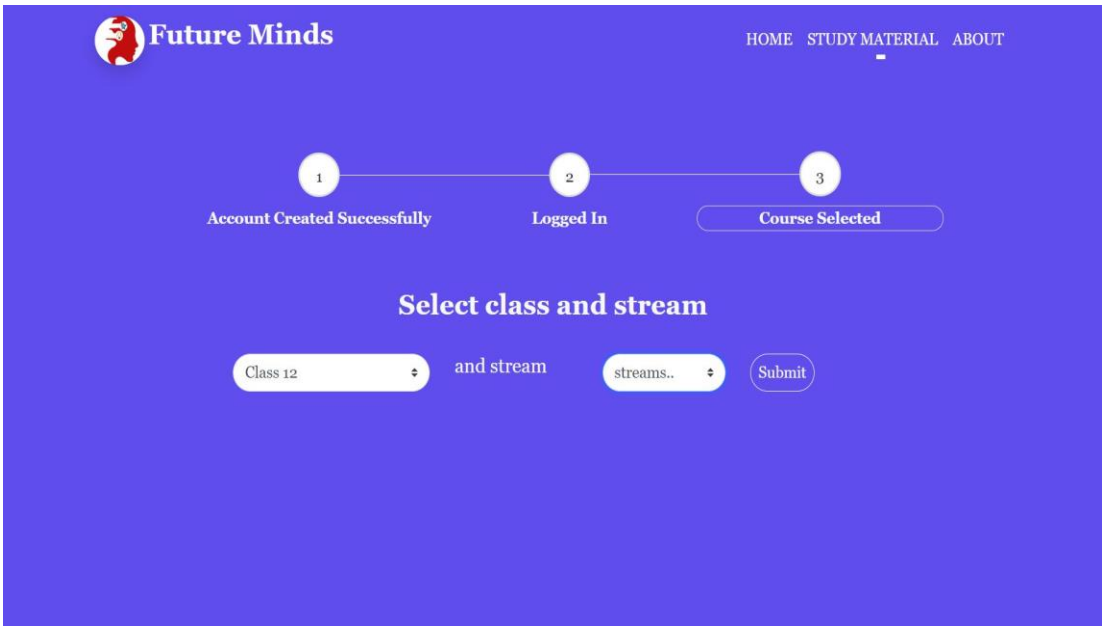
Confirmation Check



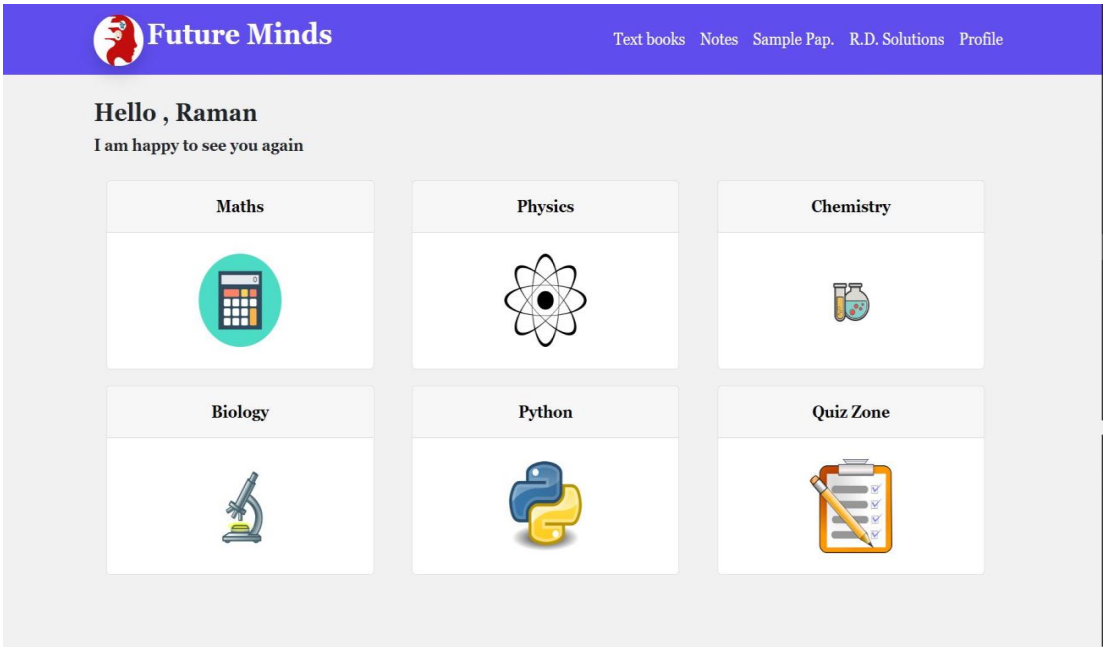
Step 3: - User Redirected to Course page



Step 4: - User Selects the course

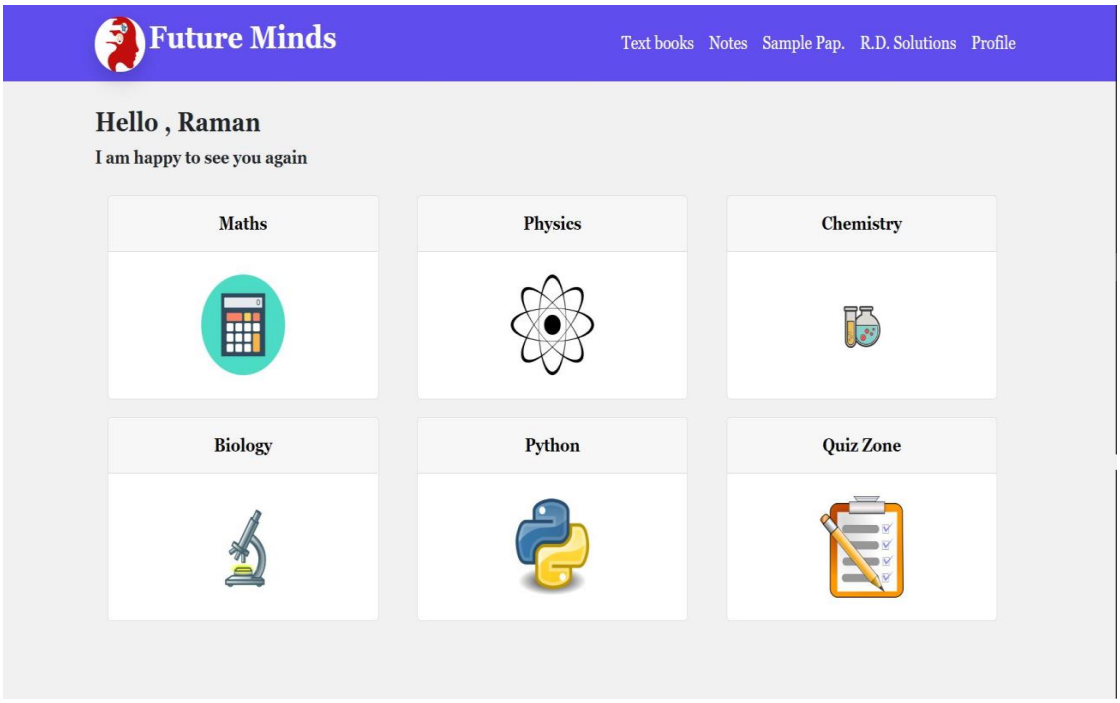


Step 5: - User redirected to the profile page after registration



Step 6: - Access of any course subject by clicking on subject

Result



Conclusion

The result after doing the integration testing, we get, the website is optimized on the given parameters and the bandwidth of fetching the video needs to be optimized for this purpose the video is to be stored in database not redirected via YouTube.

Code Optimization Technology

1. SASS
2. Bootstrap

SASS

Sass is the most mature, stable, and powerful professional grade CSS extension language in the world.

Features of SASS: -

1. CSS Compatible

   Sass is completely compatible with all versions of CSS. We take this compatibility seriously, so that you can seamlessly use any available CSS libraries.

2. Feature Rich

   Sass boasts more features and abilities than any other CSS extension language out there. The Sass Core Team has worked endlessly to not only keep up, but stay ahead.

3. Frameworks

   There are an endless number of frameworks built with Sass. Compass, Bourbon, and Susy.

BOOTSTRAP

Bootstrap is a free and open-source CSS framework directed at responsive, mobile-first front-end web development. It contains CSS- and JavaScript-based design templates for typography, forms, buttons, navigation and other interface components.

Important Globals in Bootstrap

Bootstrap employs a handful of important global styles and settings that you'll need to be aware of when using it, all of which are almost exclusively geared towards the *normalization* of cross browser styles. Let's dive in.

CHAPTER 4

SOFTWARE ENGINEERING PARADIGM & SYSTEM DESIGN

4.1 UML DIAGRAMS OF THE PROJECT

An online learning system is a new generation of learning that is not dependent on someone physical presence and the structure of the learning system can better understand by making some kind of diagrams or pictures. These diagrams have a better impact on our understanding. If we look around, we will realize that the diagrams are not a new concept but it is used widely in different forms in different portals like this.

We prepare UML (unified modelling language) diagrams to understand the system in a better and simple way. A single diagram is not enough to cover all the aspects of the system. UML defines various kinds of diagrams to cover most of the aspects of a system.

Creation of your own set of diagrams to meet your requirements. Diagrams are generally made in an incremental and iterative way as they are into sate of either active or dynamic.

There are two broad categories of diagrams and they are again divided into subcategories: −

- Structural Diagrams (ER Diagrams & DFD {Data Flow Diagram})
- Behavioural Diagrams (Class, Sequence, Activity Diagram)

The Unified Modelling Language (UML) for this project is created to forge a common, semantically and syntactically rich visual modelling language for the architecture, design, and implementation of complex software systems which is the only second phase of the project, both structurally and behaviourally. UML has applications beyond software development, such as process flow in manufacturing. It is analogous to the blueprints used in other fields, and consists of different types of diagrams. In the aggregate, UML diagrams describe the boundary, structure, and the behaviour of the system and the objects within it. Also, UML is not a programming language but there are

tools that can be used to generate code in various languages using UML diagrams. UML has a direct relation with object-oriented analysis and design.

4.2 Designing part of project

4.2.1 Class Diagram

Class diagrams are usually reffered to as behavior diagrams used to describe a set of actions that some system can perform in collaboration with one or more external users of the system. in class diagram users are known as actors. In our class diagram we have five class they are new user, registered_user,admin, user,course_information,teacher. Actions performed by these actors are shown in our use case diagram.

4.2.2 ER DIAGRAM (Entity Relationship Diagram)

ER diagram is a visual representation of data that describes how data is related to each other. In our ER Model, we have disintegrated data into entities, attributes and setup relationships between entities, all this is represented visually using the ER diagram. Various entities like admin is related to student and teacher with manage relationship, student is related to course lectures and teacher related to course manage video lecture. This diagram will be used for defining tables in database, data entered by the user and all of its details will be stored at back end only with help of ER diagram.

4.2.3 DFD (DATA FLOW DIAGRAM)

Flow of the data from initial phase to the last stage data is being processed and changed its various forms. Since the data is same but the forms of processing are being different. It can be split into various forms of levels where level 0 is the basic flow of the data and various levels that are being defined can proceed up to various levels of 0,1,2,3 etc, it depends on the complexity of the form being processed an data being used .

A data flow diagram (DFD) maps out the flow of information for any process or system. It uses defined symbols like rectangles, circles and arrows, plus short text labels, to show data inputs, outputs, storage points and the routes between each destination. Data flowcharts can range from simple, even hand-drawn process overviews, to in-depth, multi-level DFDs that dig progressively deeper into how the data is handled. They can be used to analyse an existing system or model a new one. Like all the best diagrams and charts, a DFD can often visually "say" things that would be hard to explain in words, and they work for both technical and nontechnical audiences, from developer to CEO. That's why DFDs remain so popular after all these years. While they work well for data flow software and systems, they are less applicable nowadays to visualizing interactive, real-time or database-oriented software or systems. Data flow diagrams were popularized in the late 1970s, arising from the book *Structured Design*, by computing pioneers Ed Yourdon and Larry Constantine. They based it on the "data flow graph" computation models by David Martin and Gerald Estrin. The structured design concept took off in the software engineering field, and the DFD method took off with it. It became more popular in business circles, as it was applied to business analysis, than in academic circles.

Also contributing were two related concepts:

• Object Oriented Analysis and Design (OOAD), put forth by Yourdon and Peter Coad to analyse and design an application or system.

• Structured Systems Analysis and Design Method (SSADM), a waterfall method to analyse and design information systems. This rigorous documentation approach contrasts with modern agile approaches such as Scrum and Dynamic Systems Development Method (DSDM.)

4.2.4 SEQUENCE DIAGRAM

This diagram tells the sequences of the overall operations which are being performed during the whole process right from the login of the customer or the end use which request for the delivery form and where admin provides that form back to customer. All the roe rations are performed by the branch manager and order is being processed and the person who is assigned the delivery will be from the post office that is nearest to the delivering address. So, that the delivery is being confirmed within a day or within few hours both for any entity or product or any document which are scanned and uploaded.

4.2.5 CLASS DIAGRAM

Class diagram is an illustration of the relationships and source code dependencies among classes in the Unified Modeling Language (UML). In this e post , a class defines the methods and variables in an object that are being involve din this logistics system , which is a specific entity in a program or the unit of code representing that entity. This Class diagrams is useful in all forms of object-oriented programming (OOP). The concept is defining overall classes with its attributes and its functions and services that are being processed .Class diagrams arethe main building blocks of every object oriented methods. The class diagram can be used to show the classes, relationships, interface, association, and collaboration. UML is standardized in class diagrams. Since classes are the building block of an application that is based on OOPs, so as the class diagram has appropriate structure to represent the classes, inheritance, relationships, and everything that OOPs have in its context. It describes various kinds of objects and the static relationship in between them.

The main purpose to use to use class diagrams are : -

• This is the only UML which can appropriately depict various aspects of OOPs concept.

• Proper design and analysis of application can be faster and efficient.

• It is base for deployment and component diagram.

There are several software available which can be used online and offline to draw these diagrams Like E-draw max, lucid chart etc. There are several points to be kept in focus while drawing the class diagram.

These can be said as its syntax:

• Each class is represented by a rectangle having a subdivision of three compartments

name, attributes and operation.

• There are three types of modifiers which are used to decide the visibility of attributes and operations.

• + is used for public visibility(for everyone)

• # is used for protected visibility (for friend and derived)

• – is used for private visibility (for only me)

4.2.6 Waterfall Model

System analysis first stage according to System Development Life Cycle model. This System Analysis is a process that starts with the analyst[1]. Analysis is a detailed study of the various operations performed by a system and their relationships within and outside the system. One aspect of analysis is defining the boundaries of the system and determining whether or not a candidate should consider other related systems. During analysis, data is collected from the available files, decision points, and transactions handled by the present system.

The waterfall model maintains that one should move to a phase only when its preceding phase is completed and perfected. Phases of development in the waterfall model are thus discrete, and there is no jumping back and forth or overlap between them. Logical system models and tools are used in analysis. Training, experience, and common sense are required for collection of the information needed to do the analysis[2].

Advantages of using Waterfall Model

The waterfall model, as described above, offers numerous advantages for software developers.

First, the staged development cycle enforces discipline: every phase has a defined start and end point, and progress can be conclusively identified (through the use of milestones) by both vendor and client.

The emphasis on requirements and design before writing a single line of code ensures minimal wastage of time and effort and reduces the risk of schedule slippage, or of customer expectations not being met.

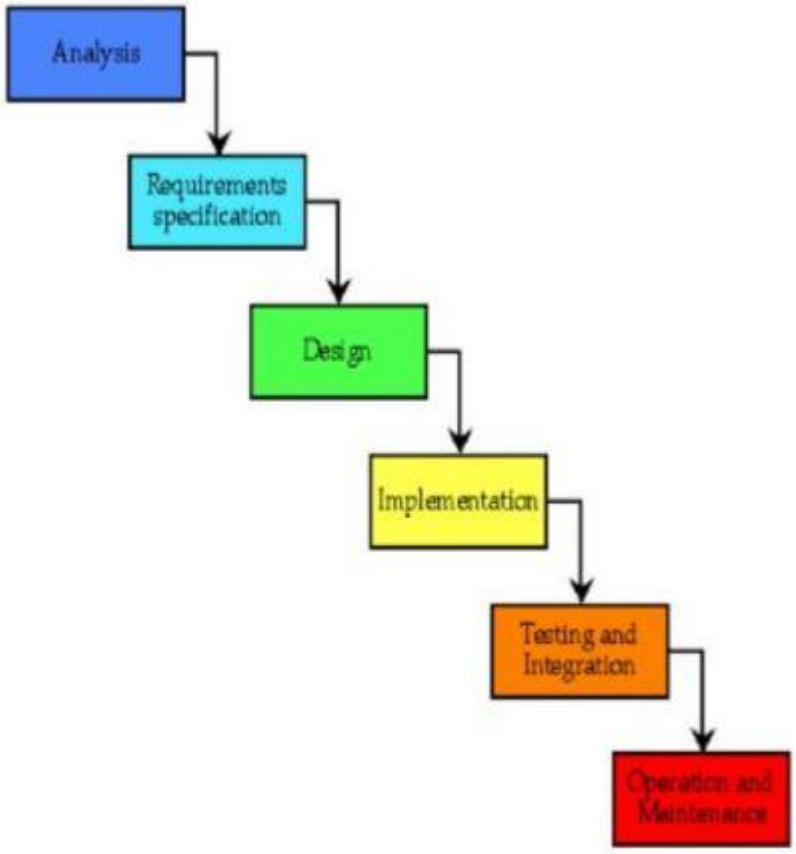


Figure 5.1: Water fall cycle model

Getting the requirements and design out of the way first also improves quality; it's much easier to catch and correct possible flaws at the design stage than at the testing stage, after all the components have been integrated and tracking down specific errors is more complex.

Finally, because the first two phases end in the production of a formal specification, the waterfall model can aid efficient knowledge transfer when team members are dispersed in different locations

CHAPTER 5

REQUIREMENT ENGINEERING

5.2.1 HARDWARE REQUIREMENT

- RAM 2GB OR ABOVE
- HDD 20GB HARD DISK OR ABOVE
- PIV 1.5 GHZ Processor OR ABOVE
- INTEL HD GRAPHICS CARD / NVIDIA 1050 OR ABOVE

5.2.2 SOFTWARE REQUIREMENT

- WINDOWS OS (7,8,8.1,10)
- XAMPP SERVER
- ANDROID STUDIO
- ANY VIDEO EDITING SOFTWARE like ADOBE PREMIERE OR FILMORA 9
- PHOTOSHOP/ILLUSTRATOR/INDESIGN

5.2.3 ONLINE HOSTING REQUIREMENT

- MULTIPLE WEBSITE HOSTING
- UNLIMITED EMAIL ACCESS
- 1-CORE OR ABOVE ON SERVER

Chapter - 6

Cost Estimation

Project cost Estimation was done under Function Point Analysis (FPA)

6.1 Function Point Analysis (FPA)

FPA was originally developed by Allan Albrecht in the late 1970s at IBM, and has been further developed by the International Function Point Users Group (IFPUG). FPA provides a set of rules to functionally size the software work product. This work product is the output of software new development and enhancement projects for subsequent releases. It is the software which is migrated to the production application at project implementation. Function Point Analysis (FPA) is a method of Functional Size Measurement. It assesses the functionality delivered to its users, based on the user's external view of the functional requirements. It measures the logical view of an application as compared to measuring the physically implemented view or the internal technical view. FPA measures these functional requirements in terms of the: • Business transactions (Processes) (e.g. Enquire on Customer Record) that the user can perform using the software • Business data (Data Groups) (e.g. Customer File) that the software can store and access.

The activity of performing Function Point Analysis is frequently referred to as a Function Point Count and it involves the identification, classification and weighting of each of these Process and Data Group components. The weightings are combined to give the Functional Size as an Unadjusted Function Point Count (UFP). This is the Functional Size as defined by the ISO/IEC standard 20926, the IFPUG CPM 4.3 and ISO/IEC 14143-1 Before IFPUG 4.3 FPA included an additional optional step that involves assessing the technical and quality features embedded in the software product and adjusting the Functional Size accordingly. The result is referred to as the Adjusted Function Point Count (AFP) or the Product Size. IFPUG no longer recommends this adjustment to measure functional size. The Function Point Analysis technique is used to assess the functionality delivered by software and an unadjusted function point (UFP) is the unit of measurement

Chapter – 7

SOFTWARE SPECIFICATION TESTING

7.1 Implementation and Software Specification Testing

Detailed Design of Implementation: This phase of the systems development life cycle refines hardware and software specifications, establishes programming plans, trains users and implements extensive testing procedures, to evaluate design and operating specifications and/or provide the basis for further modification.

• **Technical Design:** This activity builds upon specifications produced during new system design, adding detailed technical specifications and documentation.

• **Test Specifications and Planning:** This activity prepares detailed test specifications for individual modules and programs, job streams, subsystems, and for the system as a whole.

4.2 Programming And Testing

This activity encompasses actual development, writing, and testing of program units or modules.

- **User Training**

This activity encompasses writing user procedure manuals, materials, conducting training programs, and testing procedures.

➢ Acceptance Test

A final procedural review to demonstrate a system and secure user approval before a system becomes operational.

➢ Installation phase

In this phase the new Computerized system is installed, the conversion to new procedures is fully implemented, and the potential of the new system is explored.

➢ System Installation

The process of starting the actual use of a system and training user personnel in its operation.

➢ Review Phase

This phase evaluates the successes and failures during a systems development project, and to measure the results of a new Computerized Transystem in terms of benefits and savings projected at the start of the project.

➢ Development Recap

A review of a project immediately after completion to find successes and potential problems in future work.

Post-Implementation Review

A review, conducted after a new system has been in operation for some time, to evaluate actual system performance against original expectations and projections for cost-benefit improvements. Also identifies maintenance projects to enhance or improve the system.

4.3 THE STEPS IN THE SOFTWARE TESTING

The steps involved during Unit testing are as follows:

a) Preparation of the test cases.

b) Preparation of the possible test data with all the validation checks.

c) Complete code review of the module.

d) Actual testing done manually.

e) Modifications done for the errors found during testing.

f) Prepared the test result scripts.

- **The unit testing done included the testing of the following items:**

1. Functionality of the entire module/forms.

2. Validations for user input.

3. Checking of the Coding standards to be maintained during coding.

4. Testing the module with all the possible test data.

5. Testing of the functionality involving all type of calculations etc.

6. Commenting standard in the source files.

After completing the Unit testing of all the modules, the whole system is integrated with all its dependencies in that module. While System Integration, We integrated the modules one by one and tested the system at each step. This helped in reduction of errors at the time of the system testing.

- **The steps involved during System testing are as follows:**

- Integration of all the modules/forms in the system.
- Preparation of the test cases.
- Preparation of the possible test data with all the validation checks.
- Actual testing done manually.
- Recording of all the reproduced errors.
- Modifications done for the errors found during testing.
- Prepared the test result scripts after rectification of the errors.

4.4 The System Testing done included the testing of the following items:

- Functionality of the entire system as a whole.
- User Interface of the system.
- Testing the dependent modules together with all the possible test data scripts.
- Verification and Validation testing.
- Testing the reports with all its functionality.

4.5 Existing System of E-learning Management System:

In the existing system the exams are done only manually but in proposed system we have to computerize the exams using this application.

- Lack of security of data.
- More man power.
- Time consuming.

- Consumes large volume of pare work.
- Needs manual calculations.

4.6 Proposed System of E-learning Management System:

The aim of proposed system is to develop a system of improved facilities. The proposed system can overcome all the limitations of the existing system. The system provides proper security and reduces the manual work.

- Security of data.
- Ensure data accuracies.
- Proper control of the higher officials.
- Minimize manual data entry.
- Minimum time needed for the various processing.

4.7 Description of Technology Used: -

1) Hypertext Processor(PHP) - Change to 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.

2) Eclipse

Eclipse is an integrated development environment (IDE) used in computer programming and it is the most widely used Java IDE.

It contains a base workspace and an extensible plug-in system for customizing environment. Eclipse is written mostly in Java and its primary use is for developing Java applications.

2) Apache-Server

Apache supports a variety of features, many implemented as compiled modules which extend the core functionality. These can range from authentication schemes to supporting server-side programming languages such as Perl, Python, Tcl and PHP. Popular authentication modules include mod_access, mod_auth, mod_digest, and mod_auth_digest, the successor to mod_digest. A sample of other features include Secure Sockets Layer and Transport Layer Security support (mod_ssl), a proxy module (mod_proxy), a URL rewriting module (mod_rewrite), custom log files (mod_log_config), and filtering support (mod_include and mod_ext_filter).

3) HTML

HTML is the standard markup language for creating Web pages. HTML stands for Hyper Text Markup Language. HTML describes the structure of Web pages using markup. HTML elements are the building blocks of HTML pages. HTML elements are represented by tags.

4) CSS

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language.

5) JAVA-SCRIPT

JavaScript is a lightweight, interpreted programming language. It is designed for creating network-centric applications. It is complimentary to and integrated with Java. JavaScript is very easy to implement because it is integrated with HTML. It is open and cross-platform.

6) Connector and Driver

There is need to load the driver class of the database management system(dbms) in the java. Every database management system has its own separate driver class which was developed so the DBMS can be able to connect with the java. If the driver class can not be loaded due to some reason then the program will not be able to communicate with database. After load the driver successfully we use the MySQL connector to connect with the database.

7) Nginx

It can handle a high volume of connections, NGINX is commonly used as a reverse proxy and load balancer to manage incoming traffic and distribute it to slower upstream servers – anything from legacy database servers to microservices.

Chapter – 8

FUTURE SCOPE

Online Examination System

Abstract

The online examination system introduced is completely secured and different programming languages are in support to build this examination system. Through this student can self-assess their progress and can work on their weakness by continuous being in touch with the teacher, teacher column is also present in this to continuously check the progress of individual student. Marks are saved in the database and compared with previous marks so that actuality will be present in the performance regarding future performance.

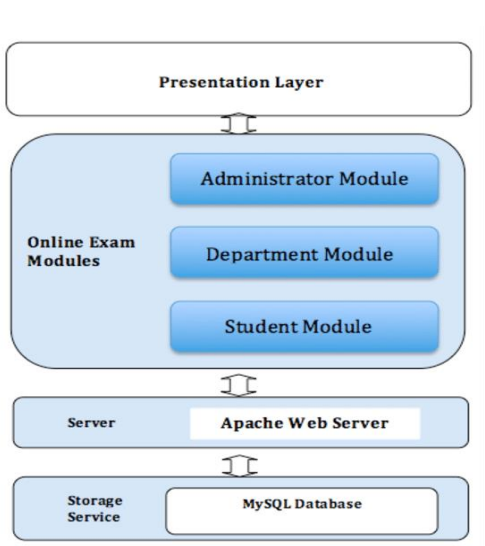
Keywords: PHP, AJAX, Bootstrap, HTML, CSS, JavaScript, SASS

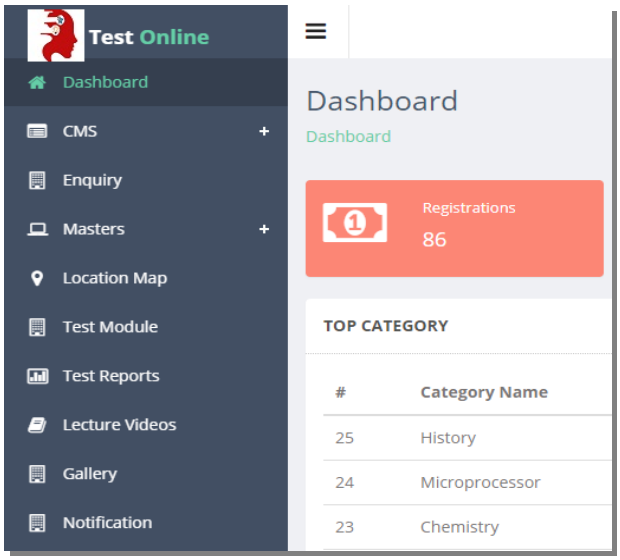
Introduction

Today, Online Examination system is considered a fast-developing examination method because of its accuracy and speed. It is also needing less manpower to handle the examination. Almost all organizations today, are managing their exams by online examination system, since it reduces students time in examinations. Organizations can also easily monitor the progress of the student that they give through an examination. As a result of this, the result is calculated in less time. It also helps diminishing the need for paper. Online examination system is significantly important to the educational institution to prepare for the exams, saving the time and effort that is required to check the exam papers and to prepare their results reports. Online examination system helps in managing the exams and get the results in easy and an efficient manner. Until today the preparing for exams and preparing the results was performed manually, this requires more time to calculate.

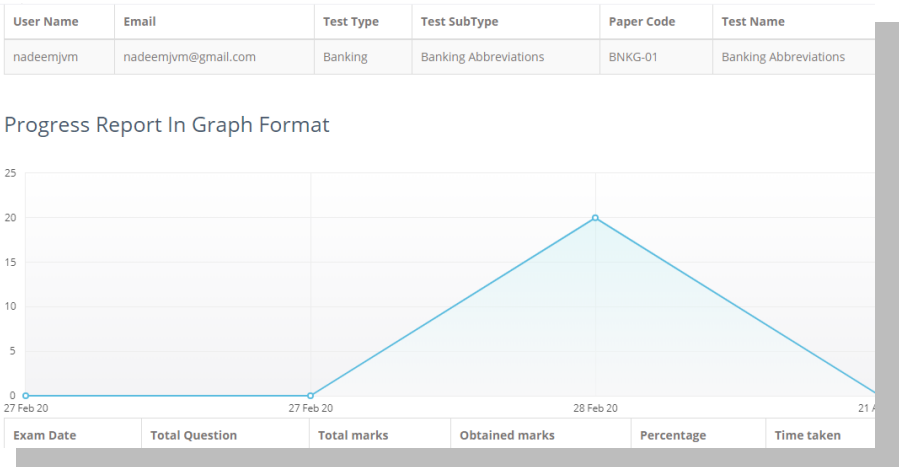
The platform provides flexibility to define online assessment with various attributes like negative marking, random questions, variable marking, etc.

Block Diagram





Testing



Conclusion

The conclusion after testing the examination system is that all the phases are working properly, needs to work on automatic marks submission at the ending of the exam and to work on equal time sharing using global clock.

Chapter - 9

Code & Snapshot

Dbconnection.php

```php
<?php
$dbServername="localhost";
$dbUsername="futurem1_futurem1";
$dbPwd="QLj3gFDhmdrMfE9";
$dbName="futurem1_futuremind";
$conn=mysqli_connect($dbServername,$dbUsername,$dbPwd,$dbName);
if(!$conn)
{
  die("<big>Connection failed </big>".mysqli_connect_error());
}
?>
```

Signup_validate.php

```php
<?php
 session_start();
if(isset($_POST['submit']))
{
 include_once 'dbconnection.php';
 $fname=$_POST['fname'];
 $lname=$_POST['lname'];
 $email=$_POST['email'];
 $user_name=$_POST['user_name'];
 $user_pwd=$_POST['user_pwd'];
 $userType="new";
 if(empty($fname) || empty($lname)|| empty($email)||empty($user_name) ||empty($user_pwd))
{
  header("Location:signupform.php?signup=emptyerror");
  exit();
}
 else
{
    if(!preg_match("/^[a-zA-Z]*$/",$fname) || !preg_match ("/^[a-zA-Z]*$/",$lname))
   {
     header("Location:../register.php?signup=charactereroor");
     exit();
   }
  else
 {
       if(!filter_var($email,FILTER_VALIDATE_EMAIL))
      {
          header("Location:../register.php?
signup=invalidemail&fname=".$fname."&lname=".$lname."&user_name=".$user_name."");
          exit();
      }
```

```php
else
      {
          $sql="SELECT * FROM users_info WHERE user_name='$user_name' or user_name='$email'";
        $result=mysqli_query($conn,$sql);
        $resultCheck=mysqli_num_rows($result);
        if($resultCheck>0)
        {
          header("Location:../register.php?signup=UsernameAlreadyTaken&fname=".$fname."&lname=".$lname."&email=".$email."");
        }
        else
        {

$to = $email; // Send email to our user
$subject = 'Signup | Verification'; // Give the email a subject
$message = '

Thanks for signing up!
Your account has been created, you can login with the following credentials after you have activated your account by pressing the url below.

------------------------------------------------
Username: '.$email.'
Password: '.$user_pwd.'
------------------------------------------------

Please click this link to activate your account:
http://www.futuremind.in/includes/verify.php?fname='.$fname.'&lname='.$lname.'&email='.$email.'&user_name='.$user_name.'&password='.$user_pwd.'

'; // Our message above including the link

$headers = 'From:noreply@futuremind.in' . "\r\n"; // Set from headers
mail($to, $subject, $message, $headers); // Send our email
  header("Location:../verify-email-message.php?signup=new-user-request&signup='.new.'");
        }
      }
  }
 }
}
 else
  {
   header("Location:../register.php?signup=error");
   exit();
  }
?>
```

Registercourse_request.php

```php
<?php
session_start();
include_once 'dbconnection.php';
 if (isset($_SESSION['user_id']))
    {
      if(isset($_POST['search-course']))
      {
          $email = $_SESSION['user_email'];
          $class=$_POST['class'];
          $stream=$_POST['stream'];
          $userid=$_SESSION['user_id'];
          echo $userid;
          echo $email;
        $sql="INSERT INTO `user_registered_course`(`id`, `email`, `class`, `stream`, `date`) VALUES ('','$email','$class','$stream',CURRENT_DATE)";
        $result=mysqli_query($conn,$sql);
         header("Location:../profile.php");
      }
    }
  ?>
```

Login_validate.php

```php
<?php
session_start();
if(isset($_POST['submit']))
{
  include_once 'dbconnection.php';
  $user_name=$_POST['user_name'];
  $user_pwd=$_POST['user_pwd'];
  if(empty($user_name) || empty($user_pwd))
  {
    header("Location:../loginform.php?login=emptyfield");//checking for empty fields
    exit();
  }
  else
  {
     //validating the user email
     $sql="SELECT * FROM users_info WHERE user_name=? OR user_email=?";
     $stmt=mysqli_stmt_init($conn);
     if(!mysqli_stmt_prepare($stmt,$sql))
     {
      header("Location:../loginform.php?login=sqlerror");
      exit();
     }
```

```php
  else
     {
       mysqli_stmt_bind_param($stmt,"ss",$user_name,$user_name);
       mysqli_stmt_execute($stmt);
       $result=mysqli_stmt_get_result($stmt);
       if($row=mysqli_fetch_assoc($result))
       {
         $pwdCheck=password_verify($user_pwd,$row['user_pwd']);
         if($pwdCheck == false)
         {
           header("Location:../loginform.php?login=mismatchpassword");
           exit();
         }
         else if($pwdCheck == true)
          {
           header("Location:../index.php");
           $_SESSION['user_id']=$row['user_id'];
           $_SESSION['user_first']=$row['user_first_name'];
           $_SESSION['user_last']=$row['user_last_name'];
           $_SESSION['user_email']=$row['user_email'];
           $_SESSION['user_name']=$row['user_name'];
           $user_id=$_SESSION['user_id'];
           $sql="select * from users_course_info where user_id='$user_id'";
           $result=mysqli_query($conn,$sql);
           $resultCheck=mysqli_num_rows($result);
                      header("Location:../index.php");


          }
         else
         {
          header("Location:../loginform.php?login=loginerror");
          exit();
         }
       }
       else {
          header("Location:../loginform.php?login=norecordfound");
          exit();

     }
    }
  }
}
else
{
  header("Location:../loginform.php?login=pageerror");
}
```

Profile.php

```php
<?php
session_start();
include_once 'includes/dbconnection.php';
?>



<!DOCTYPE html>
<html lang="en">
<head>
<!-- Required meta tags -->
<meta charset="utf-8">
<meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
<!-- Bootstrap CSS -->
<link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css"
integrity="sha384-ggOyR0iXCbMQv3Xipma34MD+dH/1fQ784/j6cY/iJTQUOhcWr7x9JvoRxT2MZw1T"
crossorigin="anonymous">
<link href="https://stackpath.bootstrapcdn.com/font-awesome/4.7.0/css/font-awesome.min.css",
rel="stylesheet", integrity="sha384-wvfXpqpZZVQGK6TAh5PVlGOfQNHSoD2xbE+QkPxCAFlNEevoEH3Sl0sibVcOQVnN",
crossorigin="anonymous" >
<link href="https://fonts.googleapis.com/css?family=Play" rel="stylesheet">
<link rel="stylesheet" href="https://unpkg.com/aos@next/dist/aos.css"/>
    <link rel="shortcut icon" type="image/png" href="site.png" >

<title>Profile</title>
<style>

body
{
  background-color:  #f1f1f1;
  background-attachment: fixed;
  background-size: cover;
  font-family: Georgia;
}
h1
{
  color: #5f4dee;
  font-weight: bolder;
}

.card
{
  text-align: center;
  color:black;
}

.card-header
{
  font-weight: bolder;
}
.card:hover
{
border : 2px solid blue;


}
.rotate
{
animation: rotation 8s infinite linear;
}

@keyframes rotation {
from {
transform: rotate(0deg);
}
to {
transform: rotate(359deg);
}
}
```

```
#loader {
 position: absolute;
  left: 50%;
  top: 50%;
  z-index: 1;
  width: 150px;
  height: 150px;
  margin: -75px 0 0 -75px;
  border: 16px solid #f3f3f3;
  border-radius: 50%;
  border-top: 16px solid #3498db;
  width: 120px;
  height: 120px;
  -webkit-animation: spin 2s linear infinite;
  animation: spin 2s linear infinite;
}



@-webkit-keyframes spin {
  0% { -webkit-transform: rotate(0deg); }
  100% { -webkit-transform: rotate(360deg); }
}

@keyframes spin {
  0% { transform: rotate(0deg); }
  100% { transform: rotate(360deg); }
}

/* Add animation to "page content" */
.animate-bottom {
  position: relative;
  -webkit-animation-name: animatebottom;
  -webkit-animation-duration: 1s;
  animation-name: animatebottom;
  animation-duration: 1s
}

@-webkit-keyframes animatebottom {
  from { bottom:-100px; opacity:0 }
  to { bottom:0px; opacity:1 }
}

@keyframes animatebottom {
  from{ bottom:-100px; opacity:0 }
  to{ bottom:0; opacity:1 }
}

#myDiv {
  display: none;
}




</style>
```

```
</style>
</head>

<body onload="myFunction()" style="margin:0;">
<div id="loader"></div>


<div style="display:none;" id="myDiv" class="animate-bottom">
  <nav class="navbar navbar-expand-lg navbar-dark fixed-top " style="background-color:#5f4dee" >
      <div class="site-logo d-block d-sm-none">
      <a href="index.php" class=""style="font-family:Georgia">
        <img src="logo.jpg" alt="Image" class="rounded-circle shadow" style="width:60px;height:55px">
        <span class="d-none d-lg-inline " style="color:white">Future Minds </span>
      </a>
    </div>
     <button class="navbar-toggler btn btn-outline-info" type="button" data-toggle="collapse" data-
target="#navbarNavAltMarkup" aria-controls="navbarNavAltMarkup" aria-expanded="false" aria-label="Toggle
navigation">
    <span class="navbar-toggler-icon"></span>
  </button>
    <div class="container justify-content-center ">
    <div class="site-logo d-none d-sm-none d-md-block">
      <a href="index.php" class=""style="font-family:Georgia">
        <img src="logo.jpg" alt="Image" class="rounded-circle shadow" style="width:60px;height:55px">
        <span class="d-none d-lg-inline "style="color:white;font-size:32px;font-weight:bolder">Future Minds
</span>
      </a>
    </div>
    <div class="collapse navbar-collapse" id="navbarNavAltMarkup">
      <div class="navbar-nav ml-auto">

                                        <a class="nav-item nav-link active" href="ncertbooks.html">Text
books</a>


                                        <a class="nav-item nav-link active"href="cbse-notes/notes-
home.html"> Notes</a>

                                        <a class="nav-item nav-link active" href="sample-paper.html">Sample
Pap.</a>



                                        <a class="nav-item nav-link active" href="RDSHARMA/rd-sharma-
```

```
                                    <a class="nav-item nav-link active" href="RDSHARMA/rd-sharma-
solutions-home.html">R.D. Solutions</a>


        <a class="nav-item nav-link active" href="user-info-private.php">Profile <span class="sr-only">
(current)</span></a>

              <?php
            if (isset($_SESSION['user_id']))
            {
              $userid=$_SESSION['user_id'];

              $result=mysqli_query($conn,"SELECT * FROM userprofileimg WHERE userid='$userid' ;");
              $resultCheck=mysqli_num_rows($result);
              if($resultCheck>0)
              {
                while ($row=mysqli_fetch_assoc($result))
                 {
                   if($row['STATUS'] == 0)
                   {
              echo'
           <form class="form-inline" action="includes/logout.php" method="POST" style="font-family:serif">
          <button type="submit" class="btn btn-outline-light rounded-pill font-weight-bolde text-
uppercase" name="logout" >Log Out</button>
           </form>
          ';
          }
          else
          {  echo'
            <form class="form-inline" action="includes/logout.php" method="POST" style="font-family:serif">
             <button type="submit" class="btn btn-outline-light rounded-pill font-weight-bolde text-
uppercase" name="logout" >Log Out</button>
           </form>
          ';
          }
        }
      }
    }
          else {
              echo'
     <form class="form-inline" action="loginform.php" method="POST" style="font-family:serif">
           <button type="submit" class="btn btn-outline-light rounded-pill font-weight-bolde text-
uppercase" name="logout" >Log In</button>
           </form>
```

```
          }
          ?>
      </div>
    </div>
    </div>
  </nav>


<div class="container" style="margin-top:100px">
<?php
    if (isset($_SESSION['user_id']))
    {
    $email = $_SESSION['user_email'];
    $name=$_SESSION['user_first'];
    $dbsql="SELECT * FROM user_registered_course where email='$email';";
    $result=mysqli_query($conn,$dbsql);
    $resultCheck=mysqli_num_rows($result);
    if($resultCheck>0)
    {
    echo'
    <h4 style="font-weight:bolder;font-family:Georgia">Hello , '.ucwords($name).'</h4>
    <h6 style="font-weight:bolder">I am happy to see you again</h6>

    ';
    $row=mysqli_fetch_assoc($result);
    $className = $row['class'];
    $streamName = $row['stream'];
    $query = $dbsql="SELECT * FROM dashboard_subjects where stream='$streamName' and class='$className'";
    $queryResult = mysqli_query($conn,$query);
    echo '<div class="container">
    <div class="row  mt-4 justify-content-center">';
    while($row1 = mysqli_fetch_assoc($queryResult))
    {
      echo'
    <div class="col-6 col-md-4">
      <a
href="MAIN_COURSE/'.$row1['class'].'/'.$row1['stream'].'/'.$row1['subject'].'/'.$row1['subject'].'/index.ht
ml">
      <div class="card mb-3" style="max-width: 18rem;" data-aos="fade-up"  data-aos-duration="3000">
        <div class="card-header">'.ucwords($row1['subject']).'</div>
        <div class="card-body">
          <image src="assets/class-12-subject-icons/'.$row1['subject'].'-logo.png"
style="width:100px;height:100px;" >
        </div>
      </div>
    </a>
```

```
          <image src="assets/class-12-subject-icons/'.$row1['subject'].'-logo.png"
style="width:100px;height:100px;" >
        </div>
      </div>
    </a>
    </div>
   ';
    }
    echo '  <div class="col-6 col-md-4">
      <a href="test-online/index.php">
      <div class="card mb-3" style="max-width: 18rem;" data-aos="fade-up"  data-aos-duration="3000">
        <div class="card-header">Quiz Zone</div>
        <div class="card-body">
          <image src="assets/class-12-subject-icons/practice-logo.png" style="width:100px;height:100px">
        </div>
      </div>
    </a>
    </div>

 ';
    }
    else
    {
    echo'
    <div class="container text-center mt-4 mb-4 p-4">
    <h4 style="font-weight:bolder" class="text-secondry mb-4">You did not registered any  course yet, click
on the button to select a course</h4>
    <i class="fa fa-book text-secondry" style="font-size:100px;" ></i>
    <br>
    <br>
    <a href="course.php" class="btn btn-dark btn-md">Click here</a>
    </div>';
    }

    }


            else
            {
                 echo' <div class="container text-center mt-4 mb-4 p-4">
       <i class="fa fa-lock fa-5x p-3"></i><br>
       <span><strong>Click here to log in <a href="loginform.php">Log In<strong></span></a>
       </div>';
            }
            ?>
```

```
    }


            else
            {
                 echo' <div class="container text-center mt-4 mb-4 p-4">
        <i class="fa fa-lock fa-5x p-3"></i><br>
        <span><strong>Click here to log in <a href="loginform.php">Log In<strong></span></a>
        </div>';
            }
            ?>
</div>
</div>
</div>
</div>
    <!-- Optional JavaScript -->
    <!-- jQuery first, then Popper.js, then Bootstrap JS -->
<script src="https://code.jquery.com/jquery-3.3.1.slim.min.js" integrity="sha384-
q8i/X+965DzO0rT7abK41JStQIAqVgRVzpbzo5smXKp4YfRvH+8abtTE1Pi6jizo" crossorigin="anonymous"></script>
<script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.14.7/umd/popper.min.js" integrity="sha384-
UO2eT0CpHqdSJQ6hJty5KVphtPhzWj9WO1clHTMGa3JDZwrnQq4sF86dIHNDz0W1" crossorigin="anonymous"></script>
<script src="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/js/bootstrap.min.js" integrity="sha384-
JjSmVgyd0p3pXB1rRibZUAYoIIy6OrQ6VrjIEaFf/nJGzIxFDsf4x0xIM+B07jRM" crossorigin="anonymous"></script>
<script src="https://unpkg.com/aos@next/dist/aos.js"></script>
<script>
 AOS.init();
</script>

<script>
var myVar;

function myFunction() {
  myVar = setTimeout(showPage, 3000);
}

function showPage() {
  document.getElementById("loader").style.display = "none";
  document.getElementById("myDiv").style.display = "block";
}
</script>
</body>
</html>
```

Cousreupdate.php

```php
<?php
session_start();
include_once 'dbconnection.php';
 if (isset($_SESSION['user_id']))
     {
       if(isset($_POST['search-course']))
       {
           $email = $_SESSION['user_email'];
           $class=$_POST['class'];
           $stream=$_POST['stream'];
           $userid=$_SESSION['user_id'];
           echo $userid;
           echo $email;
        /* $sql="UPDATE  `user_registered_course`(`id`, `email`, `class`, `stream`, `date`) VALUES ('','$email','$class','$stream',CURRENT_DATE)"; */

        $sql = "UPDATE user_registered_course SET class='$class',stream='$stream',date=CURRENT_DATE where email='$email' ";
        $result=mysqli_query($conn,$sql);
         header("Location:../profile.php");
       }
     }
   ?>
```

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Updated work

Nadeem Akhtar

In Humanities Section

Class 12 History (Self-Made Video)

Class 6th History (Self-Made Video)

Class 7 History (Self-Made Video)

In quiz section

Teachers Section added to allow registered teachers to get access to the admin portal.

Raman Rai

In Science Section

Class 12 Physics

Class 11 Physics

Sahil Bhardwaj

Class 12 Chemistry

Class 11 Chemistry

Mayank Rawat

Class 12 Mathematics

Class 11 Mathematics