CERTIFICATE

This is to certify that project report entitled "Jigyasa" which is submitted by Gaurav Kumar, Anil Kumar Saroj and Ayush Aditya in partial fulfilment of the requirement for the award of degree Bachelor of Technology in Department of Computer Science & Engineering of Dr. A. P. J. Abdul Kalam Technical University, Lucknow is a record of the candidates own work carried out by them under my/our supervision. The matter embodied in this project is original and has not been submitted for the award of any other degree.

Project Guide

Sunil Verma

(Sr. Assistant Professor)

Computer Science & Engineering

DECLARATION

This is to certify that Report entitled "Jigyasa" which is submitted by us in partial fulfilment of the requirement for the award of degree B.Tech. in Computer Science & Engineering to Feroze Gandhi Institute of Engineering and Technology , Raebareli, Dr. A. P. J. Abdul Kalam Technical University , Lucknow Uttar Pradesh comprises only our own work and due acknowledgement has been made in the text to all other material used.

Date:

Signature:

Name: Gaurav Kumar

Roll No. : 1518710034

Signature:

Name: Anil Kumar Saroj

Roll No. : 1518710021

Signature:

Name: Ayush Aditya

Roll No. : 1518710026

ACKNOWLEDGEMENT

It gives us a great sense of pleasure to present the report of the B. Tech project undertaken during Bachelor of Technology Final Year. We take this opportunity to express our profound gratitude and deepest regard to our guide Mr Sunil Verma, Assistant Professor, Department of Computer Science & Engineering, Feroze Gandhi Institute of Engineering and Technology, Raebareli for his constant support and guidance through out the course of our work. The blessing, help and guidance given by his time to time shall carry us a long way in the journey of life on which we about to embark. His sincerity, thoroughness and perseverance has been a constant source of inspiration for us. It is only his cognizant efforts that our endeavour have seen light of the day.

We also take this opportunity to express a deep sense of gratitude to Mr. Nupa Ram Chauhan, Associate Professor & Head, Department of Computer Science & Engineering, F.G.I.E.T. Rae Bareli for their cordial support, valuable information and guidance, which helped us in completing this task through various stages.

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.

Gaurav Kumar (1518710034)

Anil Kumar Saroj (1518710021)

Ayush Aditya (1518710026)

ABSTRACT

Jigyasa is an online tutorial and exam portal for the students preparing for different competitive examinations. This online portal is first of its kind providing both tutorials and mock exam under one website. It provides students learning materials in the form of video lectures in a website for hassle free and optimised learning. It also provides them online testing facility to improve and assess their preparation in a convenient way.

It provides doubt solving facility for students to have their problems solved and test review facility so that students can assess their preparation.The tutorials and tests can be scheduled as per student's convenience i.e. according to their timing.

It provides simple and attractive interface for the users with different filtering options that lead to user friendly front-end.

TABLE OF CONTENT

CONTENT	Page NO.
DECLARATION	
ACKNOWLEDGEMENT	
ABSTRACT	
CHAPTER 1 INTRODUCTION	
1.1 About Project	1
1.2 JAVA Platform	2
1.2.1 Introduction to Java	2
1.2.2 Java SE Version Library	2
1.2.3 Features of Java	2
1.3 Problem Definition	3
CHAPTER 2 LITERATURE	
2.1 Client Side Interface	4
2.2 J2EE	4
2.2.1Introduction to J2EE	4
2.2.2J2EE Architecture	5
2.2.3J2EE Applications	6
2.2.4J2EE Technologies	7
2.2.5J2EE SDK Tools	9
2.2.6J2EE Security	9
2.3 JDBC	10
2.4 MySQL	12
2.4.1 Why are we using MySQL	12

2.4.2What is a Database 13

2.4.3About MySQL 5.5.8 13

2.4.4New Features of MySQL 15

2.5 What is Middleware 16

CHAPTER 3 PROPOSED SYSTEM

3.1 Introduction 17

3.2 Feasibility Study 17

3.2.1 Economical feasibility 18

3.2.2 Technical feasibility 18

3.2.3 Operational feasibility 20

3.3 Software Engineering Paradigm 20

CHAPTER 4 SOFTWARE REQUIREMENT SPECIFICATION

4.1 Requirement Analysis 22

4.2 Requirements 22

4.2.1 Hardware Requirements 22

4.2.1 Software Requirements 22

4.2.3 Functional Requirements 23

4.2.4 Non-Functional requirements 23

4.3 Advantages of SRS 24

4.4 Characteristics of SRS 24

4.5 System Quality Attributes 25

4.6 System Interfaces 25

4.6.1 User Interface

4.6.2 Hardware Interface

4.6.3 Software Interface

4.6.4 Communication Interface

CHAPTER 5 DESIGN DOCUMENTS 27

5.1 Introduction

5.2 Context Diagram

5.3 Models 29

5.3.1 Interaction Model 31

5.3.1.1 Activity Diagram 28

5.3.1.2 Sequence Diagram 29

5.4 System Architecture 31

5.5 Level-0 DFD 31

5.6 Level-1 DFD 32

5.7 Level 2 DFD 33

CHAPTER 6 IMPLEMENTATION

6.1 Introduction 34

6.2 Aspects of Implementation 34

6.3 Implementation Tools 36

6.4 Coding 36

6.5 Database table 37

6.5.1 Admin ID Table 37

6.5.2 Doubt Table 37

6.5.3 Feedback Table 38

6.5.4 User-Profile Table 38

6.5.5 Results Table 39

6.5.6 Replies Table 39

6.5.7 Quiz Table 40

7.1 Definition of Testing 41

7.1.1 Functional testing 42

7.1.2 Non-functional testing 42

7.2 Level of testing 42

7.2.1 Unit Testing 42

7.2.2 Integration testing 43

7.2.2.1 Bottom-up testing 43
7.2.2.2 Top-down integration 43

7.2.3

7.2.4

7.3.5

CHAPTER 8

CHAPTER 9

Acceptance Testing 43

System Testing 43

Regression Testing 44

SNAPSHOTS 45

CONCLUSION 56

REFERENCES 58

LIST OF FIGURES

Fig No.	Title	Page. No.
1.1	Java SE Version History	2
2.1	Process of creating J2EE application	7
2.2	Working of JDBC	11
3.1	Time Duration for project	19
4.1	Hardware Requirements	22
4.2	Software Requirements	22
5.2	Context Diagram	27
5.3.1.1	Activity Diagram	28
5.3.1.2	Sequence Diagram	29
5.3	System Architecture	31
5.5	Level-0 DFD	31
5.6	Level-1 DFD	32
5.7	Level-2 DFD	33
6.5.1	Admin ID table	37
6.5.2	Doubt table	37
6.5.3	Feedback table	38
6.5.4	User-Profile table	38
6.5.5	Results table	39
6.5.6	Replies table	39
6.5.7	Quiz table	40
8.1	Home Screen Page	45
8.2	Exam Navigation	46
8.3	User Login and Signup Pages	47
8.4	User Profile Page	48
8.5	Exam Preparation Pages	48

8.6	**Test Series and Examination Pages**	**50**
8.7	**Doubt Pages**	**51**
8.8	**Contact Pages**	**51**
8.9	**User Dashboard Page**	**53**
8.10	**Admin Pages**	**54**

CHAPTER 1
INTRODUCTION

1.1 ABOUT PROJECT

The Jigyasa is an online tutorial and exam portal for the students preparing for different competitive examinations. Through a Web browser, a student can browse the preparation material and basic information for different competitive exams in the form of video lectures, study them online and also assess their preparation by giving model tests, both subject wise and exam wise. The tutorials and tests can be scheduled as per student's convenience i.e. according to their timing.

By integrating tutorials and exam processes, Jigyasa will help improve subject-wise and exam-wise preparation of the student. Its other important features include:

Doubt solving facility for students to have their problems solved by experts of the subject.

Test review facility so that students can assess their problem solving abilities.

Web-based and more user friendly interfaces to students to provide them hassle free learning experience.

Our Objective

Our objective was to look at online exam preparation from a student's point-of-view and determine which of the biggest exam preparation sites was providing the best customer experience.

A secondary aim was to zero in on key trends and identify opportunities for high-impact students experience improvements.

Our Approach

We examined the entire experience. Unlike some websites that focus only on study based on subjects, we looked at the entire experience of learning from the first moment on the site based on exam for which the student has to appear.

Summing this up Jigyasa's ability to suggestively prepare student for different competitive exams, we will hope it will have an extensive response from the students and is likely to have an upper edge over the present website having either tutorial or exam facility.

.

1.2 JAVA PLATFORM

1.2.1 Introduction to Java

Java is a high-level, third-generation programming language like C, FORTRAN, Perl and many others. It is a platform for distributed computing – a development and run-time environment that contains built-in support for the World Wide Web.

1.2.2 Java SE Version History

From the first version released in 1996 to the latest version 8.0 released in 2014, the Java platform has been actively being developed for about nearly 20 years. Many changes and improvements have been made to the technology over the years. The following table summarizes all versions of Java SE from its early days to the latest.

Version Name	Code Name	Release Date
JDK 1.0	Oak	January 1996
JDK 1.1	(none)	February 1997
J2SE 1.2	Playground	December 1998
J2SE 1.3	Kestrel	May 2000
J2SE 1.4	Merlin	February 2002
J2SE 5.0	Tiger	September 2004
Java SE 6	Mustang	December 2006
Java SE 7	Dolphin	July 2011
Java SE 8		March 2014
Java SE 9		September, 21st 2017
Java SE 10		March, 20th 2018

1.2.3 Features of JAVA

Some of the important features of Java are as follows:

Simplicity

Orientation

Platform Independence

Security

High Performance

Multi Threading

Dynamic linking.

Garbage Collection.

1.3 Problem Definition

The existing system work individually i.e. the websites providing assistance for preparation for different competitive exams have either tutorial or exam facility. Also, the websites are based on subject specific preparation and not exam specific which makes it hard for a student to cover specific topics for a particular exam.

Some of the negative aspects of the existing system are as follows:

1) **Course of action is time consuming. i.e. a student searching for a particular topic for a particular exam has to spend a lot of time searching it in present websites.**
2) **Readability of study materials is constrained. Most of the present websites have material in form of text which is getting irrelevant these days due to advent of video lecturers.**
3) **The existing websites contains paid materials. Students have to pay for accessing these materials.**
4) **Test series are also paid. Students have to give money to practise for exam.**
5) **Most of the existing websites does not contain doubt solving facility. Students having problems find no resource to discuss it.**

To overcome these, the proposed system has been suggested.

CHAPTER 2

LITERATURE

2.1 Client Side Interface:

In client side interface we are using:-

Servlet / JSP – for Internet Based Application.

Servlet / JSP are middle-ware technologies which are used in web based projects because they use:-

HTTP Protocol to handle Request and Response.

They are invoked through Browser.

They give output in HTML format.

They need Browser Support.

2.2 J2EE

2.2.1 Intoduction to J2EE

In a multi-tier architecture, a client does not interact directly with the server. Instead, it first contacts another layer called Middleware. The middleware instantiates the server applications and messages the server object. It returns results to the clients. The presence of a middleware layer allows programmers to concentrate on business logic of application. The middleware handles low-lever services, such as thread handling, security, and transactions management.

It provides certain specifications that can be used to implement enterprise solutions for certain all types of business requirements. J2EE also offers cost effective solution for business solution.

J2EE is used for developing, deploying and executing applications in a distributed environment. The J2EE applications server acts as a platform for implementing various server side technologies Servlets, Java Server Pages

(JSP). J2EE allows you to focus on your business logic program. The business logic is coded in java program, which are reusable component that can be accessed client program EJB runs on J2EE server.

2.2.2 J2EE Architecture

The J2EE SDK architecture consists of the following components:

The J2EE server

The EJB Container

The Web Container

The J2EE server provides the EJB and web containers. The J2EE server enforces authenticating users. The either service provided by the J2EE server are listed here below.

It allows client to interact with Enterprise Bean.

It enables a web browser to access servlets and JSP files

It provides naming and directory services to enable users and various services to locate and search for services and components.

The EJB container manages the execution of Enterprise Bean for J2EE server. EJB is a specification for making server side component that enable and simplifies the task of creating distributed objects. EJB component provide services such as transaction and security management and can be customized during deployment.

The web container manages the executing of JSP and servlets for J2EE applications web components and their container run on the J2EE server. Servlets of the java program that can be deployed on a java enable web server to enhances and extend the functionality of the web server for example you can write a servlets to add a manager service to a website.

Servlet can also be used to add dynamic content to web pages. Java Server Page (JSP) adds server side programming functionality to java. JSP consists of regular Html tags representing the static content and code enclosed within

special tags representing the dynamic content. After compilation, a JSP generates a servlets and therefore incorporates all the servlets functionalities.

2.2.3 J2EE Applications

J2EE applications are complex access data from a variety of source and cater to a variety of client. To manage these applications the business function conducted in the middle tier. The J2EE platform acts as a middle tier and provides the necessary environment needed by the application. The J2EE platform provides" write once, run anywhere", portability and scalability for multi-tier application. It also minimizes complexity for building multi-tier application.

To create a J2EE application we need to create following three components:

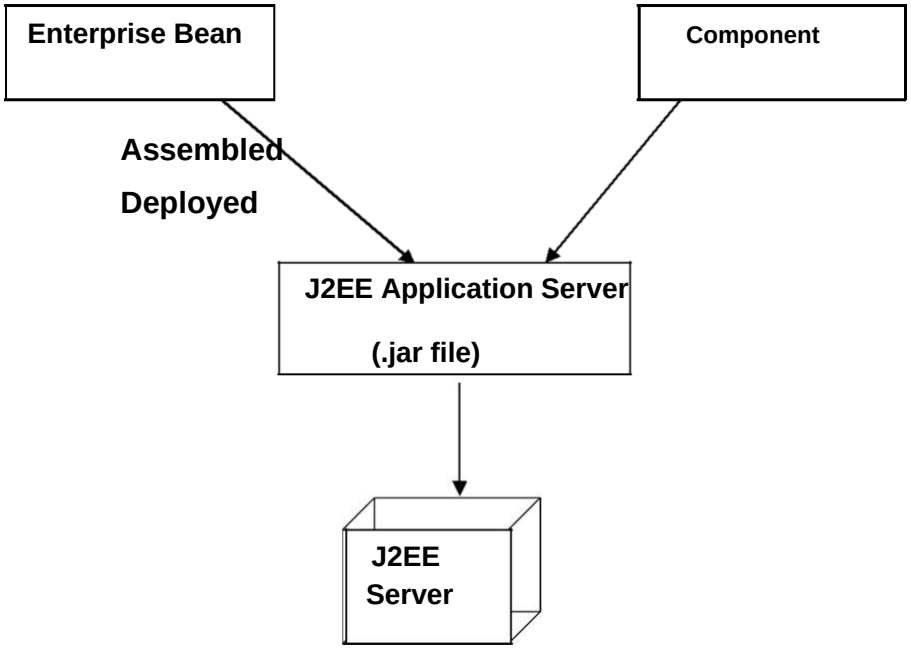
(1) J2EE application client
(2) Enterprise Bean
(3) Web component

Each of these components is packaged into a file with a specified file format. A J2EE application client is a Java application that run in a environment that enable it to access to the J2EE services. A J2EE application client is packaged into a .jar (Java archive) file. The web components are packaged into a .war (Web archive) file.

An Enterprise Bean consists of three files: the EJB class, Home and Remote Interfaces. The Enterprise Beans are bundled into an EJB.jar file. The .jar, .war and EJB.jar are assembled into a J2EE application, which is an .ear file.

The .ear file is then deployed to the J2EE server.

Process of creating a J2EE application:



2.2.4 J2EE Technologies

The J2EE includes many technologies such as:

Enterprise Java Beans (EJB)

Remote Method Invocation (RMI)

Java Naming and Directory Interface (JNDI)

Java Database Connectivity (JDBC)

Java Transaction API (JTA)

Java Transaction Services (JTS)

Java Messaging Services (JMS)

Java Servlet & Java Server Pages (JSP)

Extensible Markup Language (XML)

EJB:

Enterprise Java Beans (EJB) is "write once, run anywhere" middle tier component consisting of method that implements the business rule. Enterprise

Bean encapsulates the business logic. There are two types of Enterprise Bean:

Entity Bean and Session Bean.

RMI:

Remote Method Invocation is defined for the communication of remote objects in the middle tier of the distribute application. It enables a Java object to communicate remotely with other Java object.

JNDI:

Java Naming and Directory Interface is an extension to Java platform and provide multiple Naming and Directory services. A Naming services provide a mechanism for locating distributed object. A Directory services organize the distributed object and other resources such as file in hierarchical structure. Directory services allow resources to be linked virtually so as located in to directory services hierarchy. There are different types of Directory services.

JDBC:

Java Database Connectivity provides a Database programming API for Java program. A JDBC API contains a set of classes and Interfaces that are used to connect a database build using any DBMS or RDBMS. It also submit SQL query to a database and retrieve its and processes the result of SQL query.

JTA & JTS:

Java Transaction API (JTA) and Java Transaction Service (JTS) are transaction API. One can use these API to democrat whether the transaction starts or ends.

JMS:

Java Messaging Service is an API that J2EE platform include to send mail via Internet.

Servlet:

Servlets are used to develop a variety of web-based application. They make use of the extensive power of the Java API such as networking and URL

access, multithreading, database connectivity, internationalization, RMI and object serialization. Java Server Pages (JSP) adds server side programming functionality to Java. Both Servlet and JSP allow the creation of database driven web application and have server side programming capability.

XML:

J2EE uses Extensible Markup Language as a Markup language to describe the contents. The described file created when deploying the J2EE application is an XML file.

2.2.5 J2EE SDK TOOLS:

J2EE SDK includes following tools:

1. **The Deployment Tool.**
2. **The J2EE Server.**
3. **The Cloud Scale Server.**
4. **The Clean-up Script.**
5. **The Packager Tool.**
6. **The Realm Tool.**
7. **The Run Client Script.**
8. **The Verifier Tool.**

2.2.6 The J2EE Security:

The architecture of the J2EE is such that it enforces security in the application. In order to access the J2EE services, a user need to prove his/her identity. Such users are called J2EE users and process is called authentication. The J2EE authentication services are different from security of the operating system. The users of the operating system and the users of the J2EE belong to a different realm. A realm is a group of users that have the same authentication policy. The users of J2EE belong to a two different realms that

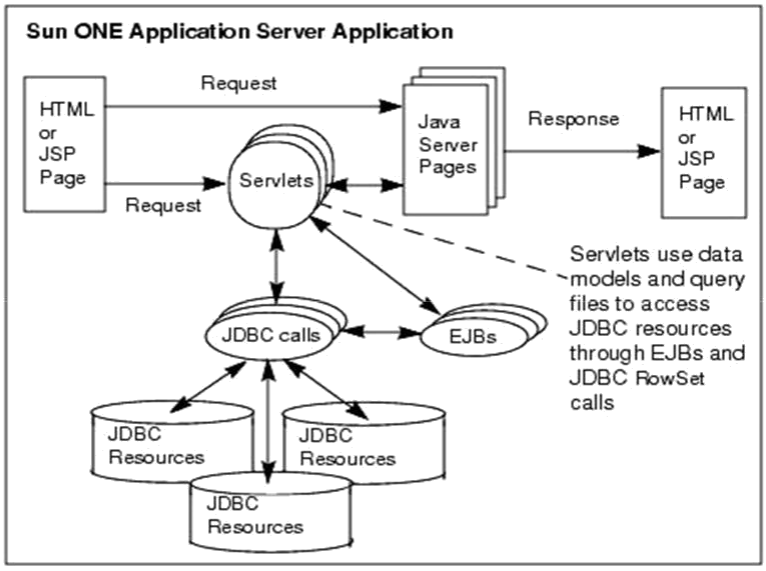
are respectively authentication by certificates and defaults. J2EE certificate to authenticate a web browser client. In most cases, the J2EE services use the default realm to authenticate a user. J2EE users may also belong to a group. A group is a collection of users who have common feature for eg. The user belonging to a group may all belonging to a group coding same module. Similarly project managers might belong to a different group.

When J2EE application client execute its request that you enter login id and password. If the combination of both username and password correct the J2EE allow you to access the services.The J2EE server also enforces security by process known as authentication. Authorization is a process by which the permissions are assigned by server to invoke the method of Enterprise Bean.

2.3 JDBC

There are many classifications of databases available as Hierarchical database, Network database, Relational database, Object databases and soon. Due their flexibility Relational database management systems are most successful bread of databases in the history of computing. Ex: - Oracle, IBMdb2, and Microsoft SQL Server.

A technology that enables JSP base applications to interact directly with database engines is called Java Database Connectivity and is an integral part of Java platform. JDBC/JSP based web application access the database connections. These connections must be managed carefully by the application especially if a large number of concurrent users may be accessing them. To make this performance optimization JDBC uses a mechanism called connection pooling. The evaluation of this open database access technology has led to a mirade of driver architecture.



Here the browser using the web application is not required to support java at all. The JSP has full control over how many JDBC connections are made to the server. The client never makes direct JDBC connection to the server. This solution can work readily through a firewall, only standard HTTP is used between the web server and the client.

As a bonus this solution sends itself to easily secured information simply by adding secured socket layer support to the web server. Because of this separation of the presentation from the business logic, which is separated from the database logic, this sort of system is often called three tiers of the system. Although the application server and database server can also running on the same server machine.

There is still one minor problem with this scenario. Project personal accessing the JSP page containing the embedded JDBC code can easily and inadvertently modify the database access code and this may result in an erroneous application or even corrupted database. There are 2 solutions for this:

1. **Create java beans or java classes that encapsulate all the JDBC operations. This is significantly better solution. But instantiation, initialization and parameterization of the java class or the beans can still represent a significant amount of embedded java code with in the JSP.**

2. **Create a tag extension set to 'pushdown' all the database access logic. The data access logic programmers write the set of custom tags. The JSP application logic designers will then use the set of custom tag to create their application.**

2.4 MYSQL

2.4.1 Why we are using MySQL (RDBMS)?

Some of the merits of using MySQL (RDBMS) are as under:

Centralization of database.

Client Server Technology.

Security.

Normalization of Data Base.

Transaction Processor.

It gives some internet related features.

Hence because of these features we are using MySQL as a back-end technology.

Whether you are working on LAN projects or Distributed projects, there are two sides of it:-

Front End

Back End

Front End remains on client side. Front end is made for end user who uses our application. Basically in front end, our input-output forms reside which takes the input from the client and gives output back to client.

Backend remains on server side and has two components viz.

Server side programs

Data Base

Database is the most important thing in this universe as database gives identity to a thing. It provides us with a repository where we can store ample

amount of data, at one place. Without a database, existence of a thing is impossible.

While working on a project first step is to design a database.

2.4.2 What is a database?

Data Base is a collection of tables and table is a collection of records in a tabular form i.e. in row and columns format.

Data Base can be divided into two parts:-

RDBMS

DBMS

We will be using RDBMS (Relational Database Management System) in our project i.e. MySQL 5.5.8 Edition.

2.4.3 ABOUT MySQL 5.5.8

MySQL 5.5.8 contains all the features of previous version. It also supports some new features & enhancement to some existing features.

Large Database & Space Management Control

MySQL supports the largest database potential of hundreds of Giga Bytes in size. To make efficient use of expensive devices, it allows full control of space usage.

Many Concurrent Database Performances

It supports large no of concurrent users executing a variety of database applications operation on the same data. It minimizes data connection & guarantees data concurrency.

High Transaction Processing Performance

MySQL maintains the processing features with a high degree of overall system performance. Database users don't suffer from slow processing performance.

High Availability

MySQL works 24 hours a day with no downtime or limited database throughput. Normal system operation such as database backup & partial system failure doesn't interrupt database use

Controlled Availbility

MySQL can selectively control the availability of data at the database level & sub database level. E.g. an administrator can disallow use of a specific application .Data can be reloaded without affecting other application.

Industry Accepted Standards

MySQL adheres to industry accepted standards for the data access language operating system, user interface & network communication protocols.

Manageable Security

To protect against unauthorized database aspects & users, MySQL provides failsafe security features to limit & monitor the data area. The system makes it easy to manage even the most completed designs for data assets.

Database Enforced Integrity

MySQL enforces data integrity "Business rules", that dictate the standards for applicable data. As a result, the cost of coding & managing checks in many database applications is eliminated.

Distributed Database System

For community environment that are connected via networks, MySQL combines the data physically located on different computers in one logical database that can be accessed by all the network users.

Portability

MySQL software is compatible to work under different operating system & same on all system. Applications developed on MySQL can be used on virtually any system with little or no more modification.

Compatibility

MySQL software is compatible with industry standards, including most industry standard operating systems. Applications developed on MySQL can be used on virtually any system with little or no modification.

Connectivity

MySQL software allows different types of computers & operating system to share information in networks.

2.4.4 New Features of MySQL

Improved Scalability

The maximum size of a MySQL database has been increased to support hundreds of terabytes depending on the operating system on which it resides.

Improved Security

MySQL 5.5.8 server now includes password management so that a password has a limited lifetime & must meet certain complexity such as minimum length. An account can be locked after a specified number of failed login attempts.

Improved Performance via Partition

A table of index can be divided into smaller pieces called partitions, based on the value of one or more columns. A table partitions can be individually managed so that operation in one partition does not affect the availability of data on other partitions. Also insert, update, delete operations against a partitioned table can be processed partially.

Enhanced Support for Database Replication

The performance & manageability of database replication has been significantly improved.

Capability to handle a much larger number of concurrent users

By pooling database connection, the MySQL 5.5.8 server is able to service a much larger number of concurrent users, up to 3000, depending on the server's operating system & server hardware resources.

New & Improved Data Types

Some existing data types have been enhanced & new data types have been introduced.

Improved Select Statement

A new feature of the select statement allows a sub query to be used in place of a table in a 'from' clause.

2.7 What is Middle-Ware?

Middle-ware is a concept. Middle-ware provides centralization of business logic i.e. instead of putting logic on each and every client machine we put logic on a centralized server. Hence middle ware is nothing but a server side program where all your business logic and business methods reside. It remains on server side and it has all the logical building. Middle ware provides: -

Multiple Client access.

Centralized business logic in case of distributed application.

Because we are working on Distributed Application Based Project we need platform independent Language like Java

CHAPTER 3

PROPOSED SYSTEM

3.1 INTRODUCTION:-

The proposed system is an online website. This has greater accuracy and efficiency. This takes only limited time for processing requests.

The proposed system can be used to maintain efficiently the tutorial and exam portal for different competitive examinations. In most of the existing websites the learning platforms are not efficient and contain only either of study and exam facility. So, at this time the proposed system is useful and helpful. This web portal is not only become a desire of the students but it become the need of the students.

The system includes two users.

1) **Administrator**
2) **General User**

The user gets into the system using user name and a unique password. Each user has his own accessibility permission to accomplish his task flawlessly.

Advantages of the proposed system are

1) **Easy access to the study material.**
2) **The new system is more user friendly, reliable and flexible.**
3) **Pop-up menus to carry out operations for a new user, and for other features.**
4) **Timely Result generation.**

3.2 FEASIBILITY STUDY

Since the website is first of its kind, we hope it will have an extensive response from the students and is likely to have an upper edge over the present websites having either tutorial or exam facility.

The system required performance is defined by a statement of constraints, the identification of specific system objective and a description of outputs.

The key consideration in feasibility analysis are :

1. **Economic Feasibility**
2. **Technical Feasibility**
3. **Operational Feasibility**

3.2.1 Economical Feasibility

It looks at the financial aspects of the project. The team has enough resources and budget to invest in the proposed system and the estimated time for the recovery of cost incurred. It is worthwhile to invest the money in the proposed project because it is first of its kind and far more efficient then existing portals. The proposed system is economically feasible because the cost involved in purchasing the hardware and the software are within approachable.

The backend required for storing other details is also the same database that is Sql. The computers in the team are highly sophisticated and don't needs extra components to load the software. Hence the team can implement the new system without any additional expenditure. Hence, it is economically feasible.

3.2.2 Technical Feasibility

It is a measure of the practically of a specific technical solution and the availability of technical resources and expertise

The proposed system uses HTML, CSS and Bootstrap as front-end and Java SE and MySQL 5.5.8 as back-end tool.

MySQL is a popular tool used to design and develop database objects such as table views, indexes.

The above tools are readily available, easy to work with and widely used for developing commercial application.

Hardware used in this project are- intel i3 processor 2.0 GHz, 4 GB RAM, 1 TB hard disk, floppy drive. These hardware were already available on the existing computer system. The software like MySQL 5.5.8, Apache Tomcat Server, Thin Driver, JDK, JSDK, J2EE and operating system WINDOWS-10' used were already installed On the existing computer system. So no additional hardware and software were required to purchase and it is technically feasible. The technical feasibility is in employing computers to the organization. The organization is equipped with enough computers so that it is easier for updating. Hence the organization has not technical difficulty in adding this system.

Tools Used :

1) **J2EE Library**
2) **JDK 1.8**
3) **Apache Tomcat 7.0**
4) **MySQL 5.5.8.**

Duration of Project:-

Time Duration	
For study	15 days
Designing	20 days
For development	90 days
Testing	15 days

3.2.3 Operational Feasibility

The system will be used if it is developed well then be resistance for users that undetermined

No major training and new skills are required as it is based on DBMS model.

It will help in the time saving and fast processing and dispersal of user request and applications.

New product will provide all the benefits of present system with better performance.

Improved information, better management and collection of the results.

User support.

User involvement in the building of present system is sought to keep in mind the user specific requirement and needs.

User will have control over their own information. Important information such as profile can be generated at the click of a button.

3.3 Software Engineering Paradigm Applied

The development strategy that encompasses the process, methods, and tools and the generic phases is called Software Engineering Paradigm. The s/w paradigm for software is chosen based on the nature of the project and application, the method and tools to be used, and the controls and deliverables that are required.

Problem definition identifies the specific problem to be solved, technical development solves the problem through the application of some technology, and solution integration delivers the results to those who requested the solution in the first place. There are various software paradigms, but we used Waterfall model (the linear sequential model), which states that the phases are organized in a linear order. The Waterfall model suggests a systematic, sequential approach to s/w development that begins at the system level and progresses through analysis, design, coding, testing, and maintenance. The

sequence of activities performed in a software development project with the Waterfall model is: system analysis, system design, coding, testing & integration, installation, and maintenance. For a successful project resulting in a successful product, all phases listed in the waterfall model must be performed. Any different ordering of the phases will result in a less successful software product.

There are a number of project outputs in waterfall model that is produced to produce a successful product:

- **Requirement documents and project plan**
- **System and detailed design**
- **Programs (code)**
- **Test plan, test reports and manuals**
- **Installation reports**

CHAPTER 4
SOFTWARE REQUIREMENT ANALYSIS AND SPECIFICATION(SRS)

4.1 Requirement Analysis

The user requirement for this system is to make the system fast, flexible, less prone to error, reduce expenses and save the time.

Time can be saved by scheduling the exams, if it is available a question bank to store questions for different subjects.

A system can be given a mark by checking the students answers, and give the result as soon as students finish his exam.

A facility to generate a result chart as pre required without manual interface.

The system should have records of students and faculty that can be access to the system which can be used only for the authorized person.

The system should be more secure for management user records and more reliable to work at any conditions.

4.2 Requirements

4.2.1 Hardware Requirements : -

Processor	**intel 2 GHz**
RAM	**4 GB**
Disk space (minimum)	
32-bit	**10 GB**
64-bit	**20 GB**

Table 1: Hardware requirements

4.2.2 Software requirements

Operating System	**Window 8 or above**
Backend Tools	**MySQL 5.5.8**
Platform	**Eclipse Platform**

4.2.3 FUNCTIONAL REQUIREMENTS

This section gives a functional requirement that applicable to the On-Line Exam system.

There are three sub modules in this phase.

Candidate module.

Administrator module.

The functionality of each module is as follows:

Candidate module: The candidate will logon to the software and take his examination. He can also check his previous examinations marks and his details. The candidate will get result immediately after the completion of the examination.

Administrator module: The administrator collects all the results after successful completion of the examination and displays it.

The features that are available to the Administrator are:

The administrator has the full-fledged rights over the portal. Can create/delete an account.

Can view the accounts.

Can change the password.

Can hide any kind of features from the both of users.

Insert/delete/edit the information of available on portal.

Can access all the accounts of the students.

The features available to the Students are:

Can view the different categories of Test available in their account. Can change password.

Can view their marks.

Can view the various reading material.

Can view and modify its profile but can modify it to some limited range.

4.2.4 NON - FUNCTIONAL REQUIREMENTS

Performance Requirements

Some Performance requirements identified is listed below:

The database shall be able to accommodate a minimum of 10,000 records of students.

The software shall support use of multiple users at a time.

There are no other specific performance requirements that will affect development.

Safety Requirements

The database may get crashed at any certain time due to virus or operating system failure. Therefore, it is required to take the database backup.

Security Requirements

Some of the factors that are identified to protect the software from accidental or malicious access, use, modification, destruction, or disclosure are described below. Keep specific log or history data sets

Assign certain functions to different modules

Restrict communications between some areas of the program Check data integrity for critical variables

Later version of the software will incorporate encryption techniques in the user/license authentication process.

Communication needs to be restricted when the application is validating the user or license. (i.e., using https).

4.3 Advantages of SRS

Software SRS establishes the basic for agreement between the client and the supplier on what the software product will do.

A SRS provides a reference for validation of the final product.
A high-quality SRS is a prerequisite to high-quality software. A high-quality SRS reduces the development cost.

4.4 Characteristics of SRS

Accuracy

This is the first and foremost requirement. The development team will get nowhere if the SRS which will be the basis of the process of software development, is not accurate.

Completeness

The software requirement specification should not be missing any of the requirements stated in the business requirements documentation that the user specified.

Consistency

The document should be consistent from beginning till the end. It helps the readers understand the requirements well.

Prioritisation of Requirements

Software Requirement Specification should not simply be a wish list. The requirements should follow the order of priority and preference.

Verifiability

At the end of the project, the user should be able to verify that all that all the agreed deliverables have in fact been produced and meet the project management requirements specified.

Modifiability

The SRS should be written in such a way that it can be modified when the development team and user feel the need.

Traceability

Each requirement stated in the SRS should be uniquely associated to a source such as a use case or interaction document etc.

4.5 System Quality Attributes

The Quality of the System is maintained in such a way so that it can be very user friendly to all the users.

The software quality attributes are assumed as under:

Accurate and hence

reliable. Secured.

Fast speed.

Compatibility.

4.6 System Interfaces:

This section describes how the software interfaces with other software products or users for input or output.

4.6.1) User Interface

Application will be accessed through a Browser Interface. The interface would be viewed best using 1024 x 768 and 800 x 600 pixels resolution setting. The software would be fully compatible with Microsoft Internet Explorer for version 6 and above. No user would be able to access any part of the application without logging on to the system.

4.6.2) Hardware Interfaces

Server Side:

Operating System: Windows 8/10

Processor: intel i3 2.0 GHz or higher

RAM: 4 GB or more

Hard Drive: 10 GB or more

Client side:

Operating System: Windows 8 or above, MAC or UNIX.

Processor: intel i3 2.0 GHz or higher.

RAM: 4 GB or more

4.6.3) Software Interfaces

Client Side: .HTML, Web Browser, Windows 8/10

Web Server: .HTML, Windows 8/10

4.6.4) Communications Interfaces

The Customer must connect to the Internet to access the Website:

Dialup Modem of 52 kbps

Broadband Internet

Dialup or Broadband Connection with a Internet Provider.

CHAPTER 5

DESIGN DOCUMENTS

5.1) Introduction:

Design is the abstraction of a solution; it is a general description of the solution to a problem without the details. Design is view patterns seen in the analysis phase to be a pattern in a design phase. After design phase we can reduce the time required to create the implementation.

In this chapter we are introduce context diagram, models, system architecture, principal system object, design model and object interface.

5.2) Context Diagram:

This diagram represents what are the bounders and scope of On-Line Tutorial and Examination System project. It describes the main objective of the system and its entities involved.

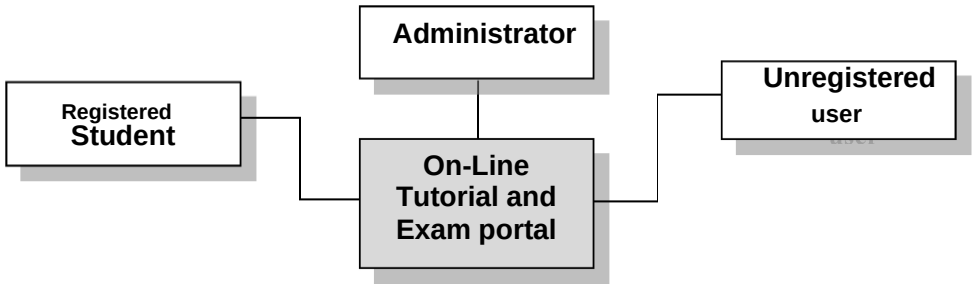


Figure (3.2.1): the context diagram of On-line Exam System

The Administrator can do the following:

Create/delete accounts (add a list of faculty names and list of his student) Change password for Student

Create/ delete/update courses (subject). Insert questions.

Specify the answers.

Update mark of questions and answers.

The Student can be done the following:

Change password.

Choose exam.

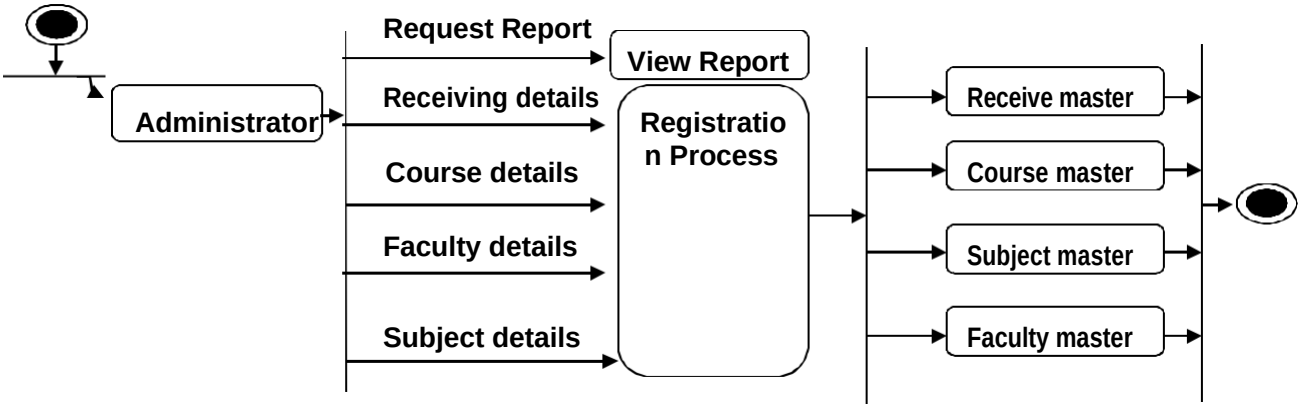
Review answers. See his exam mark. View other material.

5.3) Models:

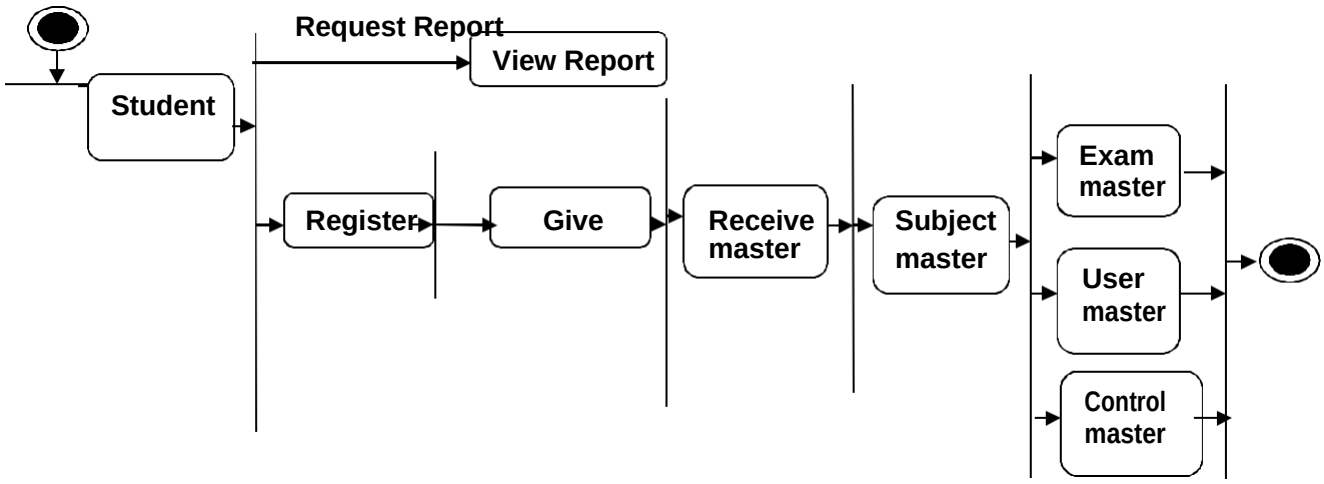
5.3.1) Interaction model:

Is a dynamic model that shows how the system interacts with its environment. We use a data flow diagram.

5.3.1.1) activity diagram:



(a)



(b)

Figure: the activity diagram for basic operation in portal. (a) For administrator and (b) for student.

5.3.1.2) Sequence diagram:

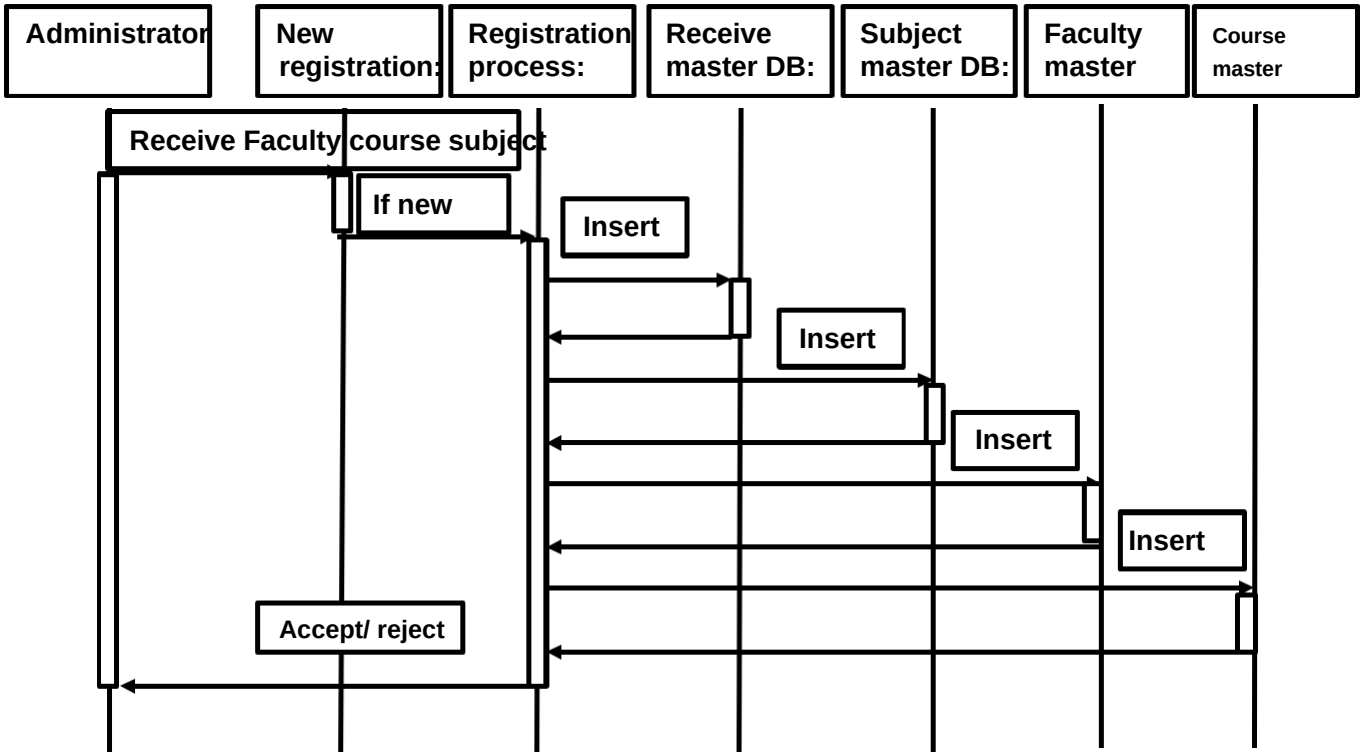


Figure : the insert operation done by administrator. The update operation is similar to this sequence diagram but rather than Registration process put Update process.

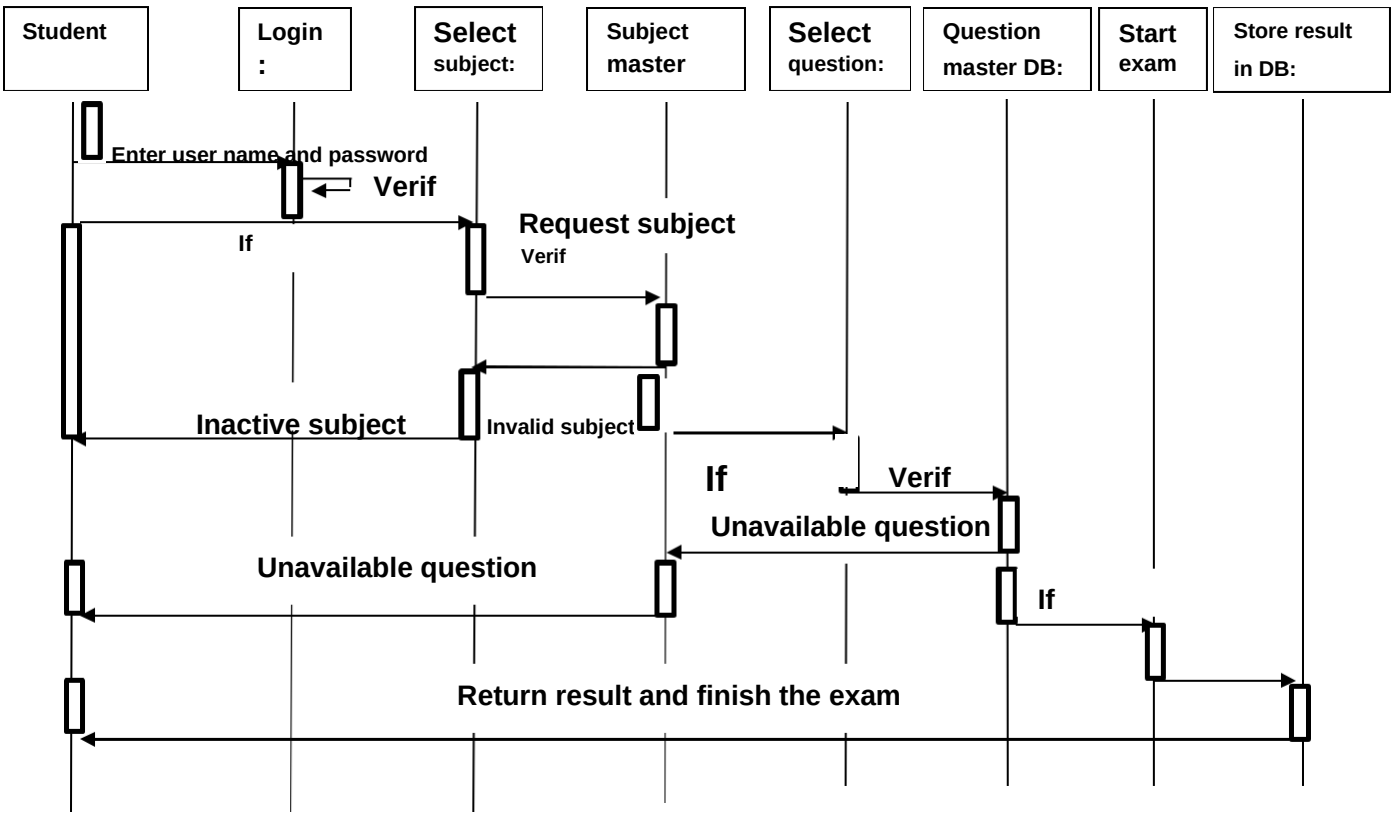
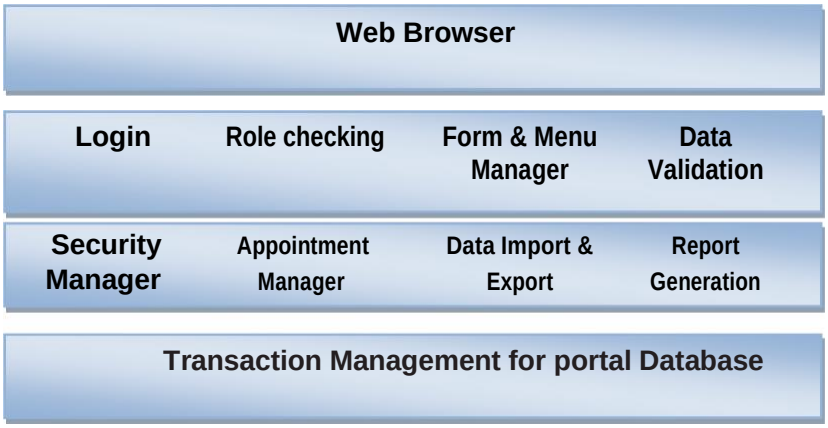
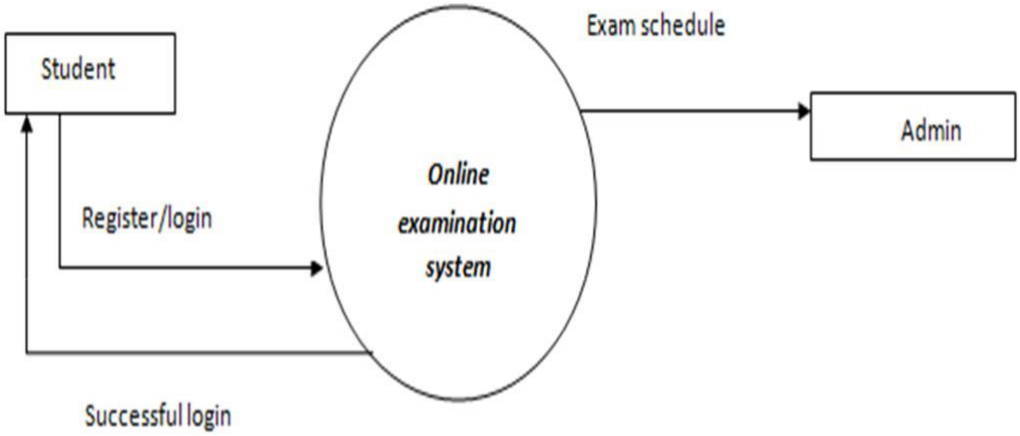


Figure: present how student take an exam and give the result.

5.4) System Architecture:

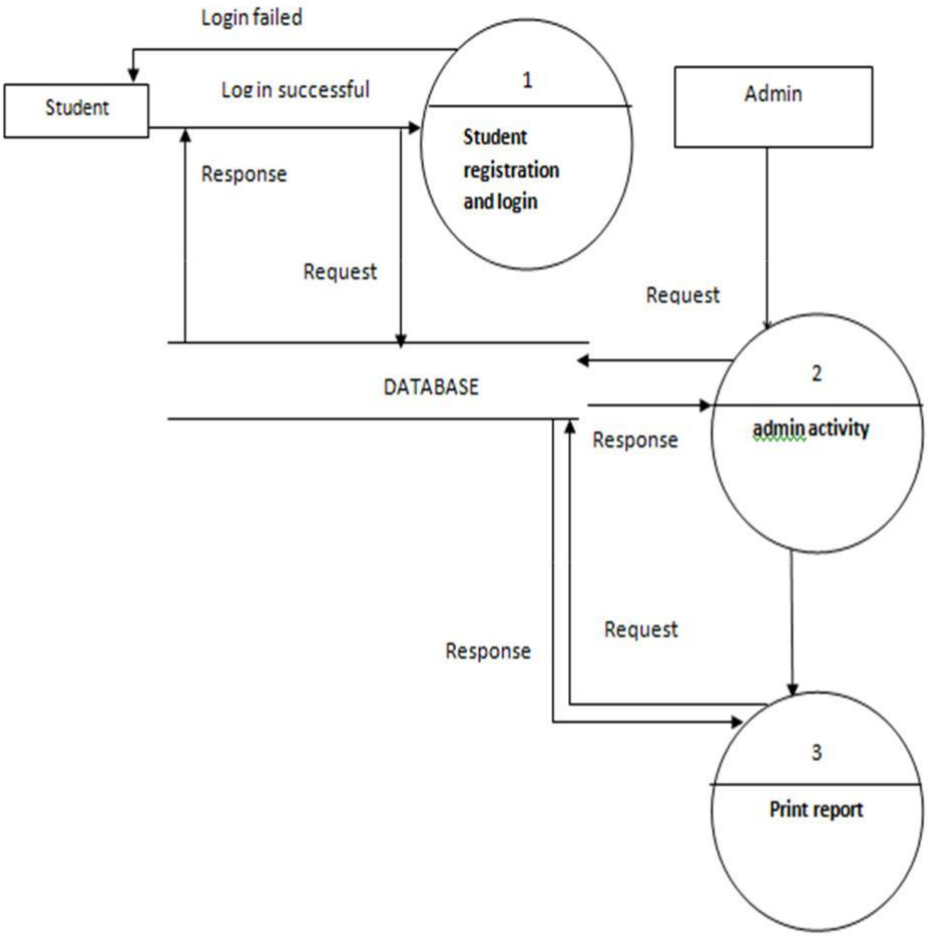


5.5) Level 0 DFD



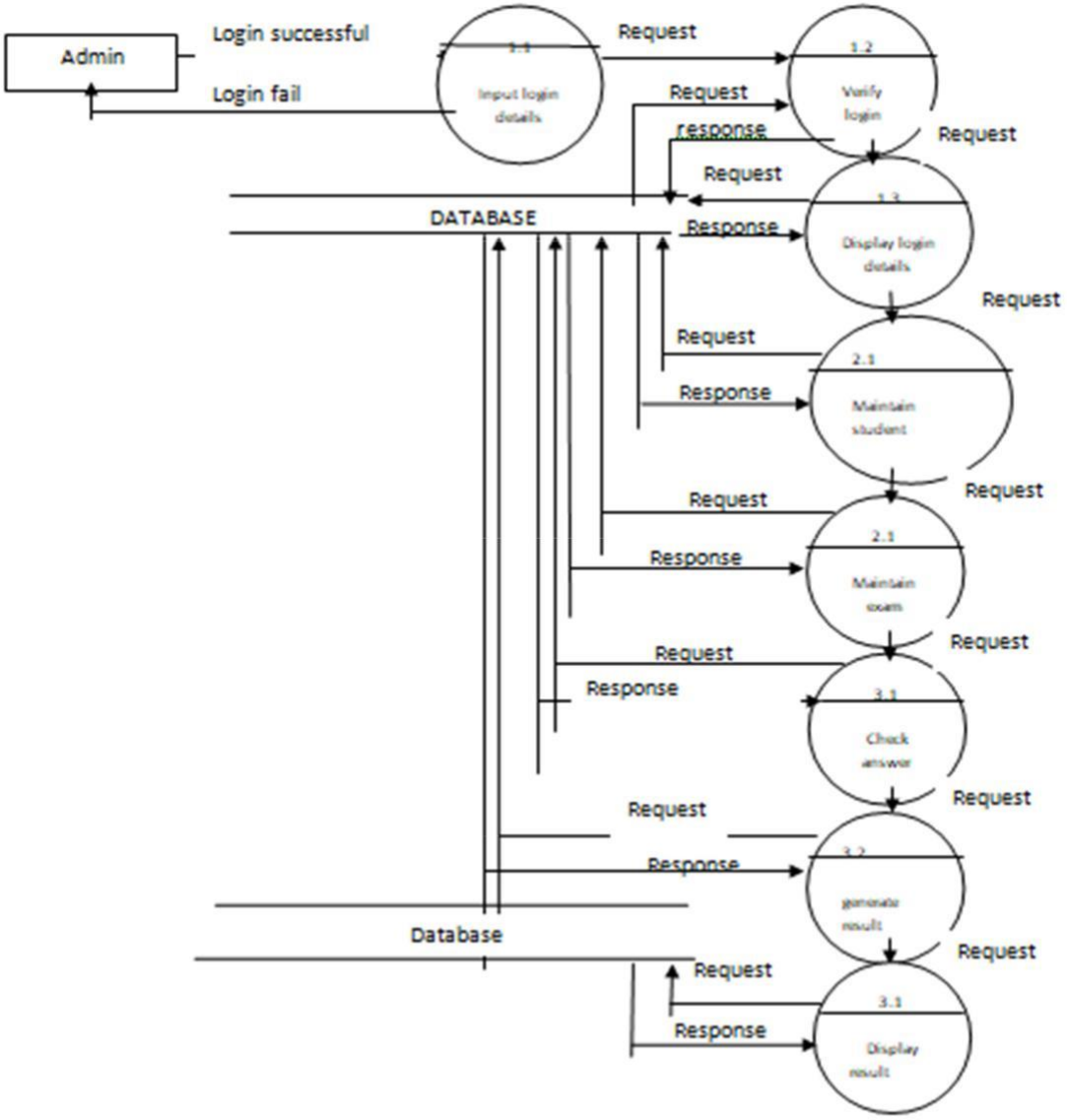
LEVEL-0 DFD

5.6 Level 1 DFD



Level 1 dfd

5.7 Level 2 DFD (Admin Module)



Level 2 dfd

CHAPTER 6

IMPLEMENTATION

6.1 Introduction

System implementation is the stage when the user has thoroughly tested the system and approves all the features provided by the system. The various tests are performed and the system is approved only after all the requirements are met and the user is satisfied.

The new system may be totally new, replacing an existing manual or automated system, or it may be a major modification to an existing system. In either case, proper implementation is essential to provide a reliable system to meet organizational requirements. Successful implementation may not guarantee improvement in the organization using the new system (that is a design question), but improper will prevent it.

Implementation is the process of having systems personnel check out and put new equipment into use, train users, install the new application and construct any files of data needed to use it. This phase is less creative than system design. Depending on the size of the organization that will be involved in using the application and the risk involved in its use, systems developers may choose to test the operation in only one area of the firm with only one or two persons. Sometimes, they will run both old and new system in parallel way to com-pare the results. In still other situations, system developers stop using the old system one day and start using the new one the next.

The implementation of the web based or lan based networked project has some extra steps at the time of implementation. We need to configure the system according the requirement of the software.

For the project we need to install and configure Apache Tomcat server 7.0, database server, and the deployment directory for the project.

6.2 Aspects of Implementation

The two aspects of implementation are:

Training Personnel

Conversion Procedures

TRAINING

Even well designed and technically elegant systems can succeed or fail because of the way they are used. Therefore the quality of the training received by the personnel involved with the system in various ways helps or hinders, and may even prevent, the successful implementation of an information system.

Since, Human Resource Recruitment Process is web-based and user friendly, not much effort was required in training process.

CONVERSION:

Conversion is the process of changing from the old system to the new system. There are two methods of handling systems conversion:

Parallel Run

Immediate cut-off

Parallel Run

In this approach, the old system and the new system are used simultaneously for some period of time so that the performance of the new system can be monitored and compared with that of the old system. Also in case of failure of the new system, the user can fall back on the old system. The risk of this approach is that the user may never want to shift to new system.

Immediate cut-off

In this method, the use of the old system ceases as soon as the new system is implemented and bought in to palace. The old system becomes redundant from the day of implementation of the new system. There is the high risk involved in this approach if the new system is not tested rigorously. This is because of the fact that if the new system fails, then there will not be anything to fall back upon.

6.3 Implementation Tools

The project was implemented using HTML, CSS, Bootstrap, Servlets, Java Server Pages(JSP), Java beans. The implementation work was carried out in Windows 10 server platform.

1) **J2EE**
2) **Apache Tomcat 7.0**
3) **MySQL 5.5.8**

6.4 Coding

This means program construction with procedural specifications has finished and the coding for the program begins:

Once the design phase was over, coding commenced

Coding is natural consequence of design.

Coding step translate a detailed design representation of software into a programming language realization.

Main emphasis while coding was on style so that the end result was an optimized code.

The following points were kept into consideration while coding:

Coding Style

The structured programming method was used in all the modules the project.

It incorporated the following features

The code has been written so that the definition and implementation of each function is contained in one file.

A group of related function was clubbed together in one file to include it when needed and save us from the labour of writing it again and again.

Naming Convention:-

As the project size grows, so does the complexity of recognizing the purpose of the variables. Thus the variables were given meaningful names, which would help in understanding the context and the purpose of the variable.

The function names are also given meaningful names that can be easily understood by the user.

Indentation

Judicious use of indentation can make the task of reading and understanding a program, much simple indentation is an essential part of a good program. If code is intended without thought it will seriously affect the readability of the program.

The higher-level statements like he definition of the variables, constants and the function are intended, with each nested block intended, stating their purpose in the code.

Blank line is also left between each function definition to make the code look neat.

Indentation for each source file stating he purpose of the file is also done.

6.5 Database Table

6.5.1 Admin ID Table

←T→	username	name	email	password
	ayush	Ayush Aditya	ayushaditya101@gmail.com	ayush
	gaurav	Gaurav Kumar	gauravchaudhary216@gmail.com	12345

6.5.2 Doubt Table

←T→	doubt_id	name	doubt
	130	Alok mishra	;jsdnjosdnjosnojsdgn
	131	Rishabh Mishra	sdndfmdgmkcgk
	132	DKT	avsadnhsnjfxmjj
	133	Negi	jengsengiosnes
	134	Arun	kmfoskdmgkosm
	135	Joker	mawfkamfamfoafm
	136	Batman	i am batman
	137	Thanos	I will do it myselfll
	138	Nupa	lkasfmdskofmio
	139	Suraj	;ksamc;ams
	140	Saja	ljnlknklnk
	142	null	null
	143	fgdsgfdsff	ddddddddddddddddddd
	144	retetete	tetetetetetete
	145	asdfgh	asdfghjkl
	146	asdasbgdfh	sasd
	147	asfasfas	ss
	148	Jon	jnfjknfanfanf
	149	Ayush	This is my doubt....

6.5.3 Feedback Table

email	name	subject	message
kjbh@gmail.com	gvsdfsadfd	sfsfsfasfaf	hgvghvgvsdfsvzvvsdfsdf
dfgdfh@gmail.com	grthrhrthr	dfcsdfdsfa	dsafsdfsdfaf
ayush@gmail.com	ayush	asdacaa	dsafsdfsdfaf;kck;lcj
ayush@gmail.com	ayush	asdacaa	dsafsdfsdfaf;kck;lcj
aecfqedfqe@gmail.com	adxqwd	hhjhjvhjhmb	hbhjbkjjjvh
ayushaditya101@gmail.com	Ayush Aditya	DSFDSDF	JHKJBLBLIBIL
gdfgg@gmail.com	asfasfafs	vhvhvjhvh	hmvhvhvhv
sasa@gmail.com	auyiuaysiu	hvhmvhvh	jkbljbljbhl
ayush@gmail.com	ryrtirtiiyju	dfsdgsdgsg	ascasfvasfasf
ayush@gmail.com	ryrtirtiiyju	dfsdgsdgsg	ascasfvasfasf
ayush@gmail.com	ryrtirtiiyju	dfsdgsdgsg	ascasfvasfasf
alok@gmail.com	alok mishra	asdsdfdf	dsvsdfsdfdf
alok@gmail.com	alok mishra	asdsdfdf	dsvsdfsdfdf
alok@gmail.com	alok mishra	asdsdfdf	dsvsdfsdfdf
alok@gmail.com	alok mishra	asdsdfdf	dsvsdfsdfdf
alok@gmail.com	alok mishra	asdsdfdf	dsvsdfsdfdf
alok@gmail.com	alok mishra	asdsdfdf	dsvsdfsdfdf
alok@gmail.com	alok mishra	asdsdfdf	dsvsdfsdfdf
alok@gmail.com	alok mishra	asdsdfdf	dsvsdfsdfdf
rtetrt@gmail.com	yuiyuoyuoiup	34324r23	wegsegsgsgsg
auyiuy@gmail.com	Ayush	afdefwegf	efwwergergherh
[illegible]	[illegible]	[illegible]	[illegible]

6.5.4 User-Profile Table

username	name	email	password
aaa	abc	a@gmail.com	123
asdaioip	hkghjgj	fxd@gmail.com	fhfhfhf
atio	daassass	dad@gmail.com	asdafaf
ayush	aayush	ayushaditya101@gmail.com	ayush
ayushadity	fs	afrefae@gmail.com	yty
ayushaditya	asdasbgdfhj	fe@gmail.com	123
dfgdhfd	dfbfgmfm	sadas@gmail.com	sdgsdfh
eqwe	gdfgdf	afafas@gmail.com	4354
EWFRWERW	WEEWE	asdf@gmail.com	GFGSGSG
gaurav	Gaurav Kumar	gaurav@gmail.com	12345
gdgnjfj	ghbfjfh	kjhfskjh@gmail.com	trhyrthr

6.5.5 Results Table

←T→	username	subject	marks
	ayush	maths	2
	ayush	maths	3
	ayush	maths	6
	ayush	maths	2
	ayush	maths	3
	ayush	maths	3
	ayush	maths	3
	ayush	maths	0
	ayush	maths	2
	ayush	maths	3
	null	maths	3
	ayush	reasoning	3
	ayush	maths	5
	ayush	maths	4
	ayush	maths	4
	ayush	maths	2
	ayush	maths	2
	ayush	maths	1
	ayush	gatecse	1
	ayush	english	1
	ayush	gensc	2

6.5.6 Replies Table

←T→	reply_id	doubt_id	name	reply
	1	139	gmkjfkfk	gkfykfykfy
	2	139	gmkjfkfk	gkfykfykfy
	3	134	Ayush Aditya	avgsgsgsdgasg
	4	134	Ayush Aditya	avgsgsgsdgasg
	5	140	lj;j;j;ji;pjiophu	gyoigigyogo
	6	144	Ayush	eptetretet
	7	144	Ayush	petetetete
	8	143	Ayush Aditya	eeeeeeeee
	9	144	fdfdfdcss	sdsdsd
	10	144	asdf	aass
	11	140	dd	ssss
	12	144	Ayush Aditya	bnhjgkl
	13	143	fghj	xgjkl
	14	145	asdfg	asdfg
	15	146	null	null
	16	147	null	null
	17	147	null	null
	18	144	null	null
	19	143	kljlkjlkjl	mnbmnbmn
	20	147	bvcbvcbvc	mnbmnbmnbmn
	21	149	Gaurav Kumar	What is you doubt???

6.5.7 Quiz Table

←T→	qid	question	opa	opb	opc	opd	correct	admin_emailid
	17	Bolt from the blue	Thundering	A complete surprise	Inform something bad	No idea	b	ayushaditya101@gmail.com
	18	Blue blood	Belonging to low class society	Give complain in written	Member of high class society	Complain given verbally	c	ayushaditya101@gmail.com
	19	At Loggerheads	To differ strongly	To divide a job	To try hard	To get going	a	ayushaditya101@gmail.com
	20	Keep your eyes peeled	To watch carefully	Searching someone	Looking forward	Running away	a	ayushaditya101@gmail.com
	21	Head Over Heels	Study hard	Living in luxury	Very excited	Conflict	c	ayushaditya101@gmail.com
	22	When the Principal entered the class, a student.....	wrote	was writing	writes	is writing	b	ayushaditya101@gmail.com
	23	She...TV when her husband came.	watch	was watching	is watching	watched	b	ayushaditya101@gmail.com
	24	He always...to prove that the earth revolves roun...	tried	tries	was trying	is trying	a	ayushaditya101@gmail.com
	25	He saw me by chance and....the car.	stop	stopped	stops	was stopping	b	ayushaditya101@gmail.com
	26	How many pegs of wine??yesterday?	you have drank	were you drinking	did you drink	do you drink	c	ayushaditya101@gmail.com
	27	Select the appropriate synonym: Voracious	tenacious	truthful	spacious	ravenous	d	ayushaditya101@gmail.com
	28	Select the appropriate synonym: Abortive	fruitful	familiar	unsuccessful	consuming	c	ayushaditya101@gmail.com
	29	Select the appropriate synonym: Tenacious	holding fast	collecting	fast running	intentional	a	ayushaditya101@gmail.com
	30	Select the appropriate synonym: Terse	brief in speech	beyond fear	without honor	under strain	a	ayushaditya101@gmail.com
	31	Select the appropriate synonym: Tentative	mocking	wry	experimental	prevalent	c	ayushaditya101@gmail.com
	32	Select Correct Word	Aceleration	Aceeleration	Accelaration	Acceleration	d	ayushaditya101@gmail.com
	33	Select Correct Word	Agressive	Agrressive	Aggressive	Aggresive	c	ayushaditya101@gmail.com

CHAPTER 7

TESTING

7.1 Definition of Testing

Testing is the process of evaluating a system or its component with the intent to find whether it satisfies the specified requirements or not. In simple words, testing is executing a system in order to identify any gaps, errors, or missing requirements in contrary to the actual requirements. According to ANSI/IEEE 1059 standard, Testing can be defined as - A process of analysing a software item to detect the differences between existing and required conditions (that is defects/errors/bugs) and to evaluate the features of the software item.

Who does Testing?

It depends on the process and the associated stakeholders of the project(s). In the IT industry, large companies have a team with responsibilities to evaluate the developed software in context of the given requirements. Moreover, developers also conduct testing which is called Unit Testing. In most cases, the following professionals are involved in testing a system within their respective capacities:

Software Tester

Software Developer

Project Lead/Manager

End User

Different companies have different designations for people who test the software on the basis of their experience and knowledge such as Software Tester, Software Quality Assurance Engineer, QA Analyst, etc. It is not possible to test the software at any time during its cycle. The next two sections state when testing should be started and when to end it during the SDLC.

7.1.1 Functional Testing

This is a type of black-box testing that is based on the specifications of the software that is to be tested.The application is tested by providing input and then the results are examined that need to conform to the functionality it was intended for. Functional testing of a software is conducted on a complete, integrated system to evaluate the system's compliance with its specified requirements.

The determination of the functionality that the intended application is meant to perform.

The creation of test data based on the specifications of the application.

The output based on the test data and the specifications of the application.

The writing of test scenarios and the execution of test cases.

The comparison of actual and expected results based on the executed test cases.

7.1.2 Non-Functional Testing

This section is based upon testing an application from its non-functional attributes. Non-functional testing involves testing a software from the requirements which are non-functional in nature but important such as performance, security, user interface, etc. Some of the important and commonly used non-functional testing types are discussed below.

7.2 Level of Testing

7.2.1 Unit Testing

This type of testing is performed by developers before the setup is handed over to the testing team to formally execute the test cases. Unit testing is performed by the respective developers on the individual units of source code assigned areas. The developers use test data that is different from the test data of the quality assurance team. The goal of unit testing is to isolate each part of the program and show that individual parts are correct in terms of requirements and functionality. Limitations of Unit Testing

Testing cannot catch each and every bug in an application. It is impossible to evaluate every execution path in every software application. The same is the case with unit testing. There is a limit to the number of scenarios and test data that a developer can use to verify a source code.

7.2.2 Integration Testing

Integration testing is defined as the testing of combined parts of an application to determine if they function correctly. Integration testing can be done in two ways: Bottom-up integration testing and Top-down integration testing.

7.2.2.1 Bottom-up integration

This testing begins with unit testing, followed by tests of progressively higher level combinations of units called modules or builds.

7.2.2.2 Top-down integration

In this testing, the highest-level modules are tested first and progressively, lower-level modules are tested thereafter.

7.2.3 Acceptance Testing

This is arguably the most important type of testing, as it is conducted by the Quality Assurance Team who will gauge whether the application meets the intended specifications and satisfies the client's requirement. The QA team will have a set of prewritten scenarios and test cases that will be used to test the application. More ideas will be shared about the application and more tests can be performed on it to gauge its accuracy and the reasons why the project was initiated. Acceptance tests are not only intended to point out simple spelling mistakes, cosmetic errors, or interface gaps, but also to point out any bugs in the application that will result in system crashes or major errors in the application. By performing acceptance tests on an application, the testing team will deduce how the application will perform in production. There are also legal and contractual requirements for acceptance of the system.

7.2.4 System Testing

System testing tests the system as a whole. Once all the components are integrated, the application as a whole is tested rigorously to see that it meets the specified Quality Standards. This type of testing is performed by a specialized testing team. System testing is important because of the following reasons:

System testing is the first step in the Software Development Life Cycle, where the application is tested as a whole.

The application is tested thoroughly to verify that it meets the functional and technical specifications.

7.2.5 Regression Testing

Whenever a change in a software application is made, it is quite possible that other areas within the application have been affected by this change. Regression testing is performed to verify that a fixed bug hasn't resulted in another functionality or business rule violation. The intent of regression testing is to ensure that a change, such as a bug fix should not result in another fault being uncovered in the application.

CHAPTER 8
SNAPSHOTS

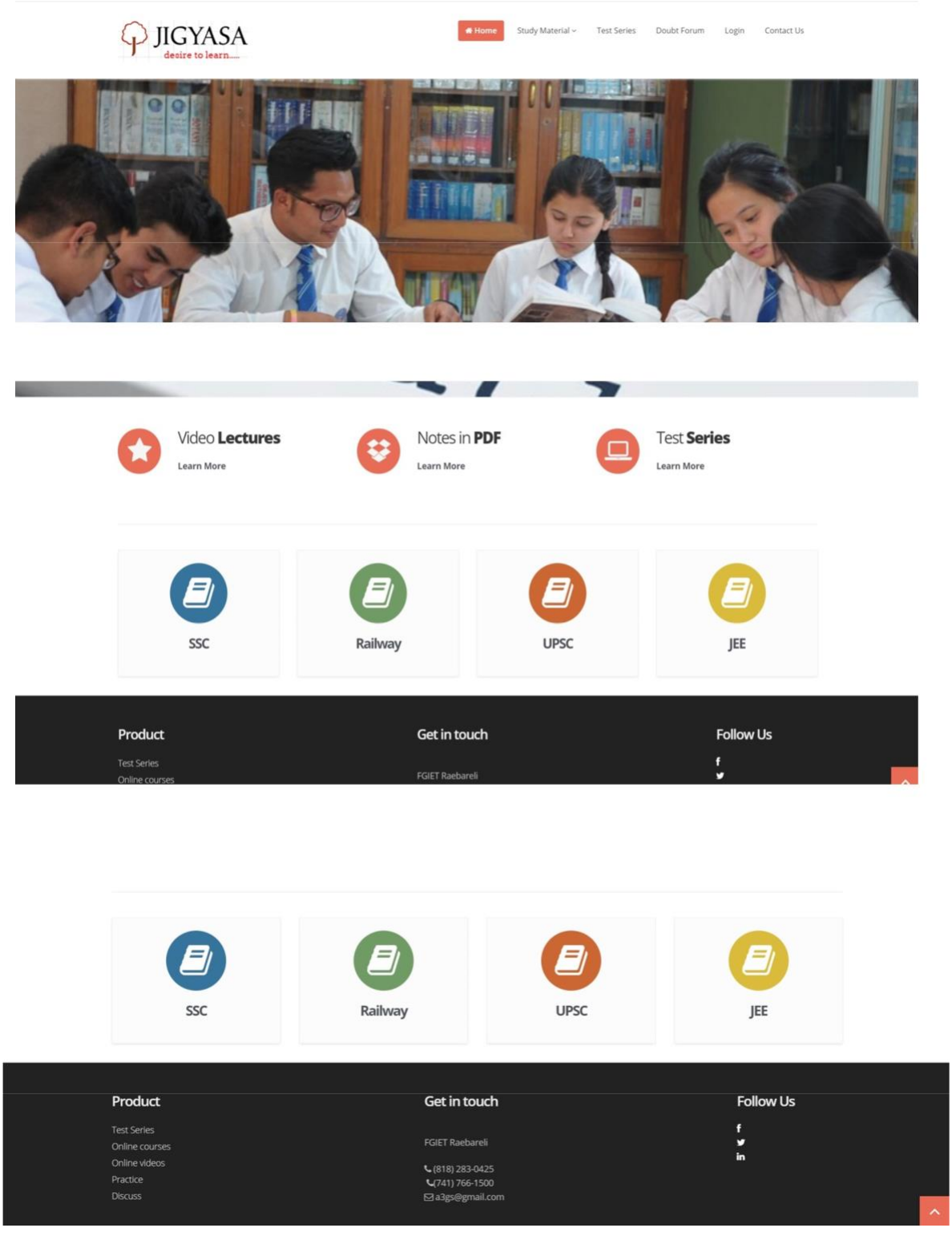


Figure 8.1 Home Screen Page

Figure 8.2 Exam Navigation

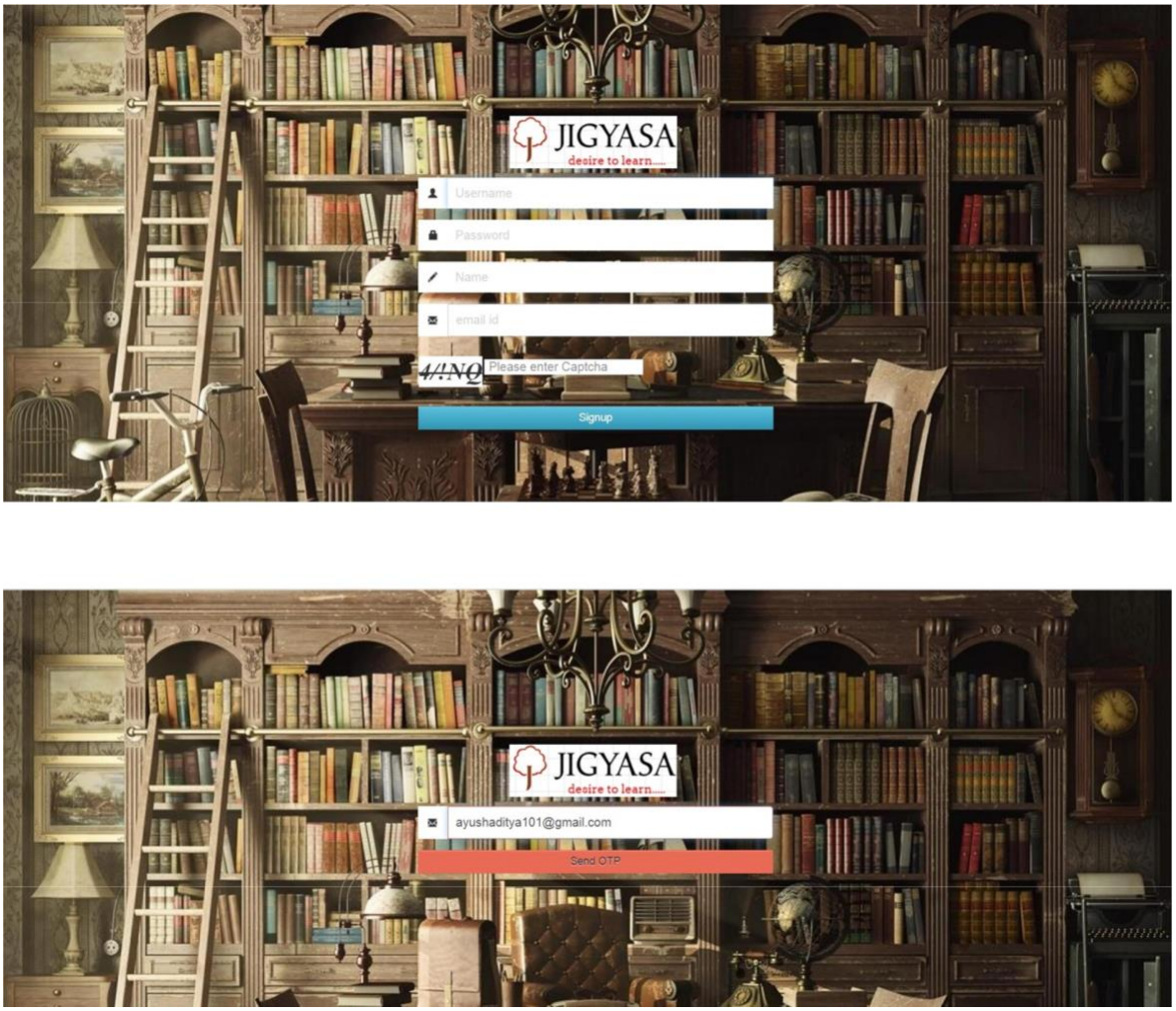


Figure 8.3 User Login and Signup Pages

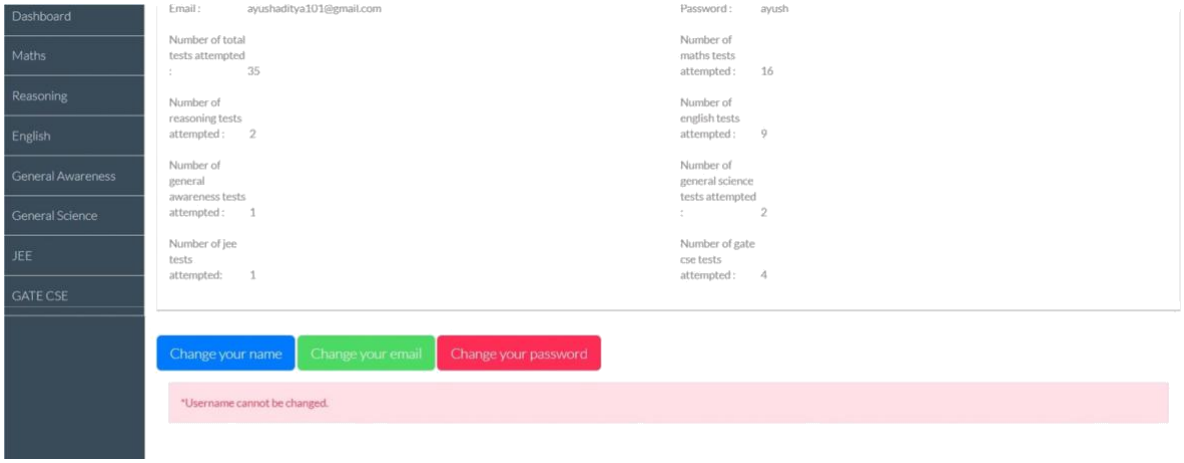
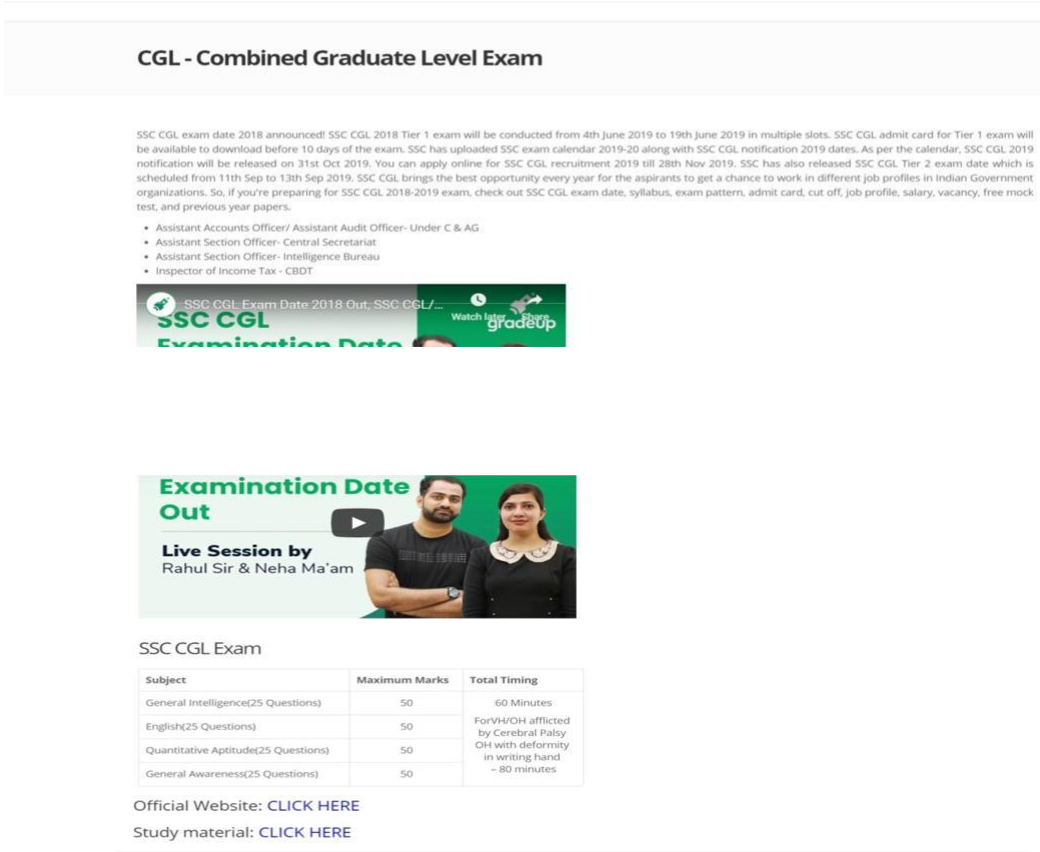
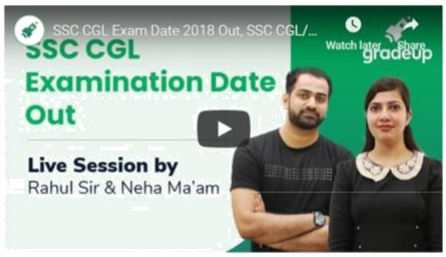


Figure 8.4 User Profile Pages



CGL Study Plan



Study Material

- English

Verb
Noun

Study Material

- English

Verb
Noun
Pronoun
Preposition
Adjective

+ Reasoning

+ Maths

+ GK

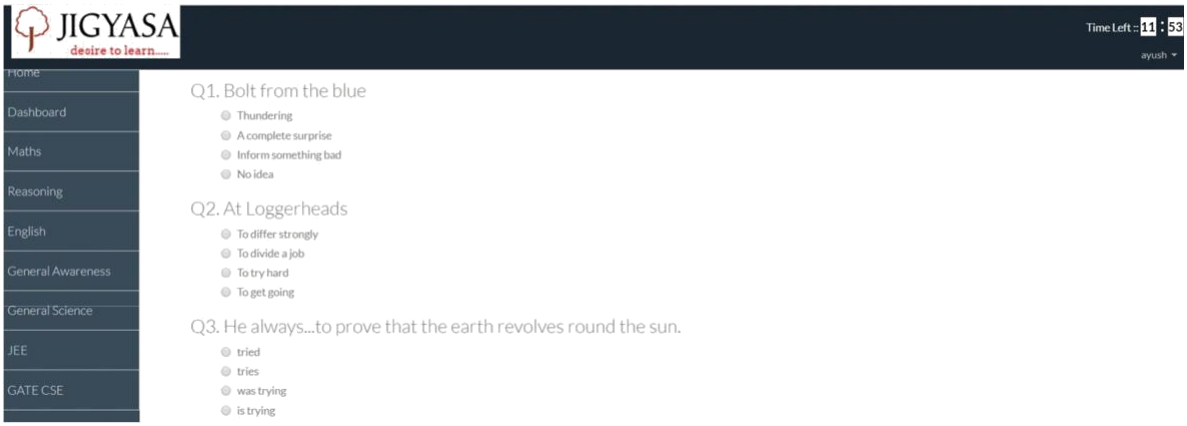
Pronouns

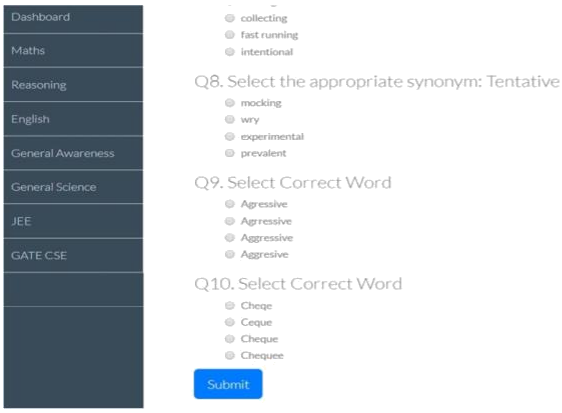
What Are Pronouns?

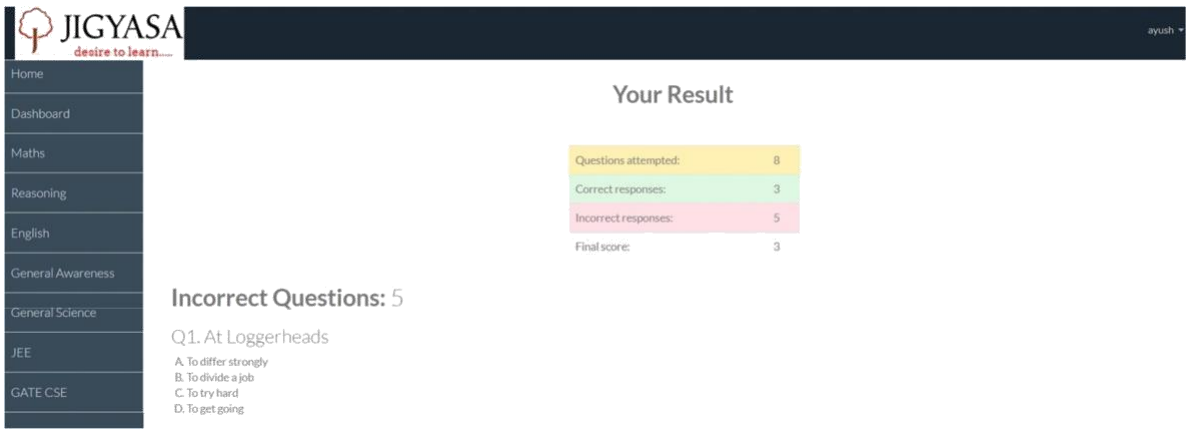
Most of the time, a pronoun is used to replace a noun. The following are all pronouns: he, she, they, none, and which. There are lots more. As you can see, pronouns are usually short words. They are used to make sentences less cumbersome and less repetitive. Examples:

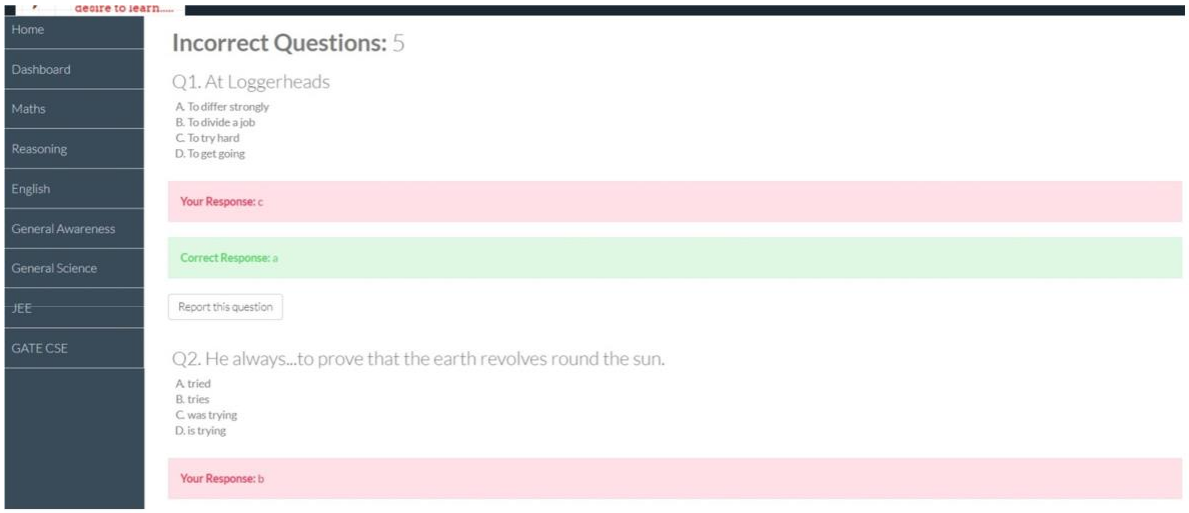
- Clutching the coin, Maria ran to the shops. She went straight to the counter and bought the sweets.
  (She is a pronoun. In this example, it replaces the noun Maria. Pronouns are used for brevity.
- Imagine how wearisome a long prose would be if the writer used the full noun

Figure 8.5 Exam Preparation Pages


JIGYASA
desire to learn.....
Time Left : 11 : 53
ayush
Home
Dashboard
Maths
Reasoning
English
General Awareness
General Science
JEE
GATE CSE
Q1. Bolt from the blue
Thundering
A complete surprise
Inform something bad
No idea
Q2. At Loggerheads
To differ strongly
To divide a job
To try hard
To get going
Q3. He always...to prove that the earth revolves round the sun.
tried
tries
was trying
is trying


Dashboard
Maths
Reasoning
English
General Awareness
General Science
JEE
GATE CSE
collecting
fast running
intentional
Q8. Select the appropriate synonym: Tentative
mocking
wry
experimental
prevalent
Q9. Select Correct Word
Agressive
Agrressive
Aggressive
Aggresive
Q10. Select Correct Word
Cheqe
Ceque
Cheque
Chequee
Submit


JIGYASA
desire to learn.....
ayush
Home
Dashboard
Maths
Reasoning
English
General Awareness
General Science
JEE
GATE CSE
Your Result
Questions attempted: 8
Correct responses: 3
Incorrect responses: 5
Final score: 3
Incorrect Questions: 5
Q1. At Loggerheads
A. To differ strongly
B. To divide a job
C. To try hard
D. To get going



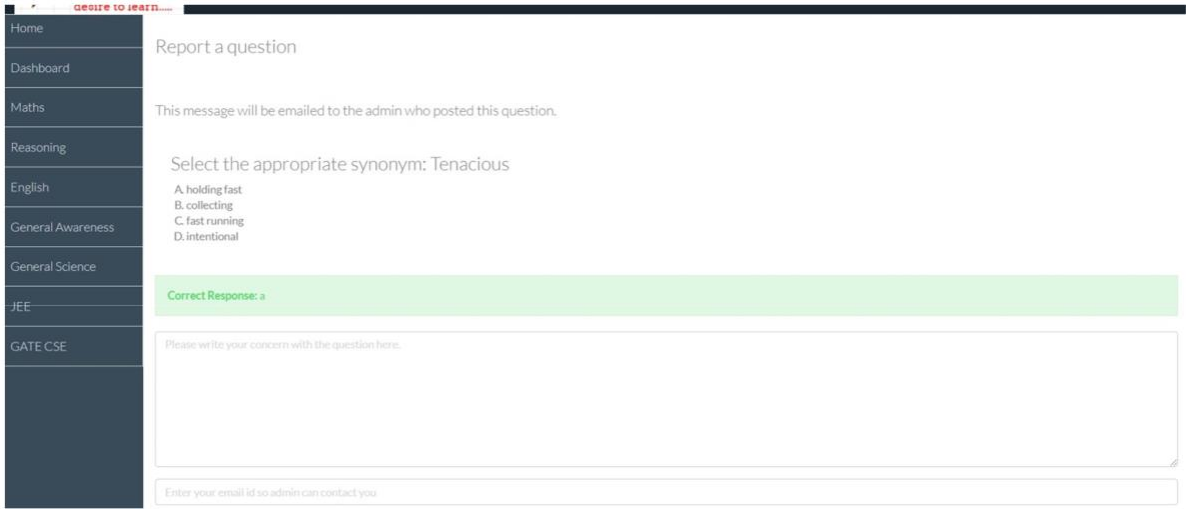
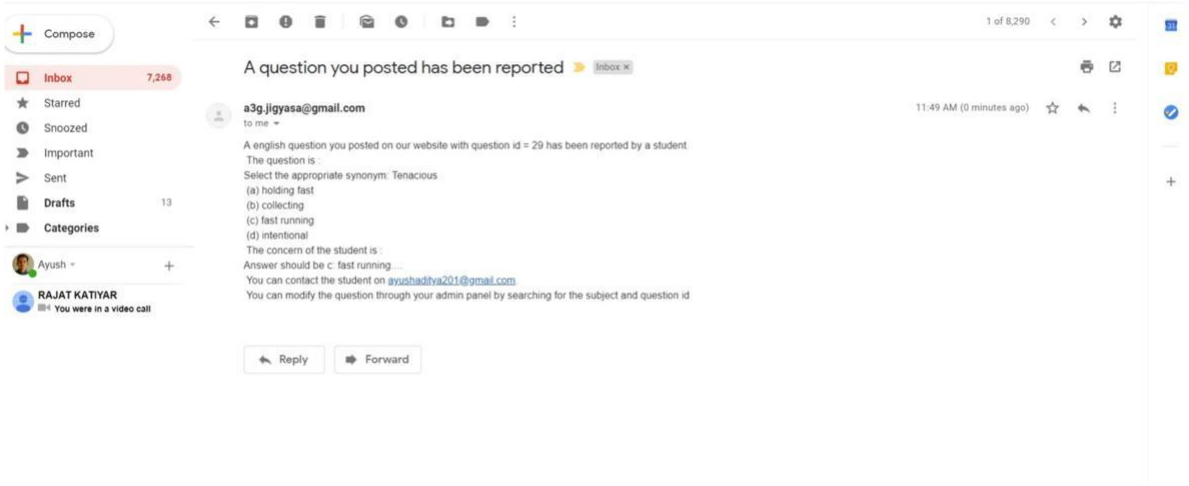
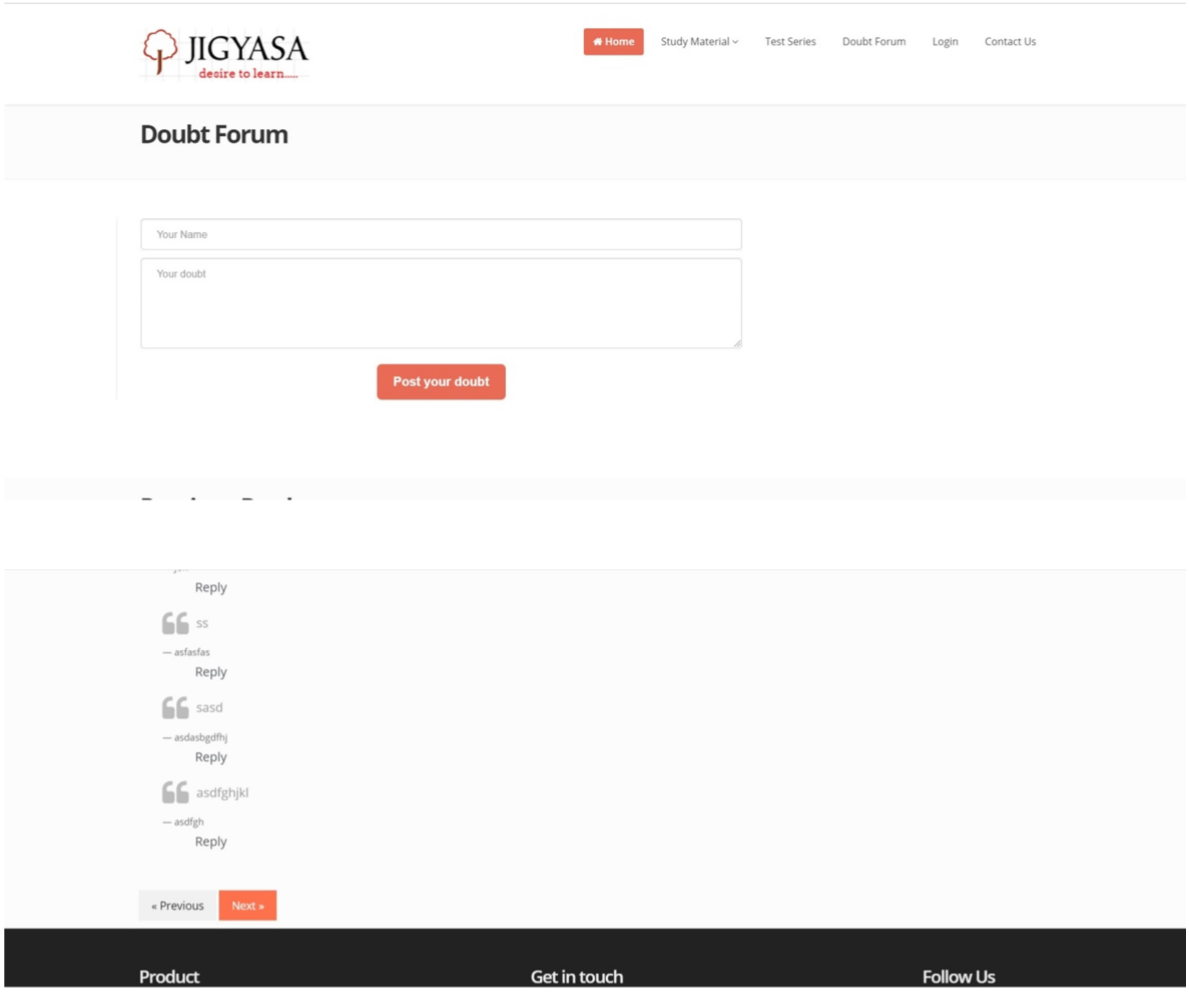


Figure 8.6 Test Series and Examination Pages





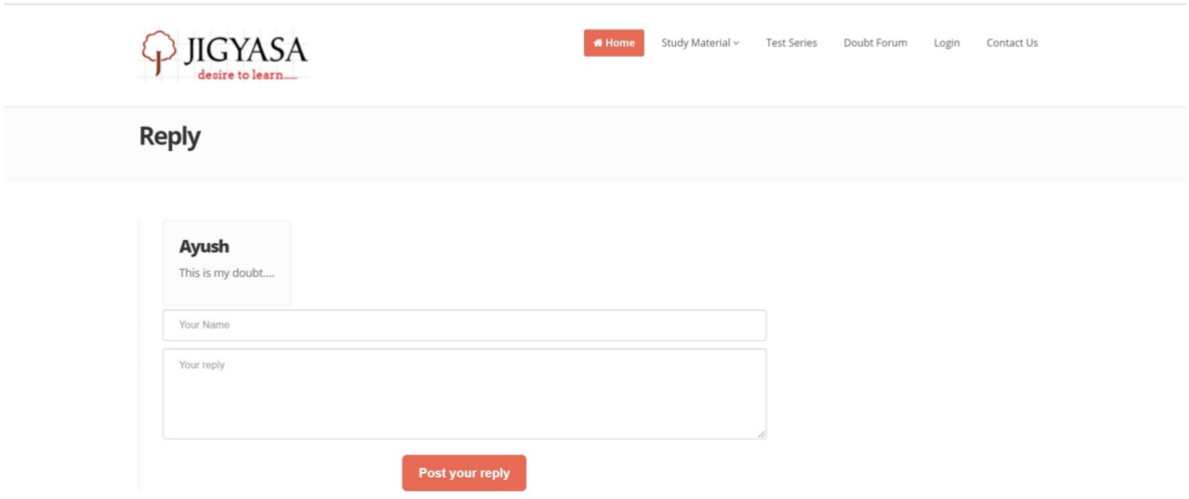


Figure 8.7 Doubt Pages

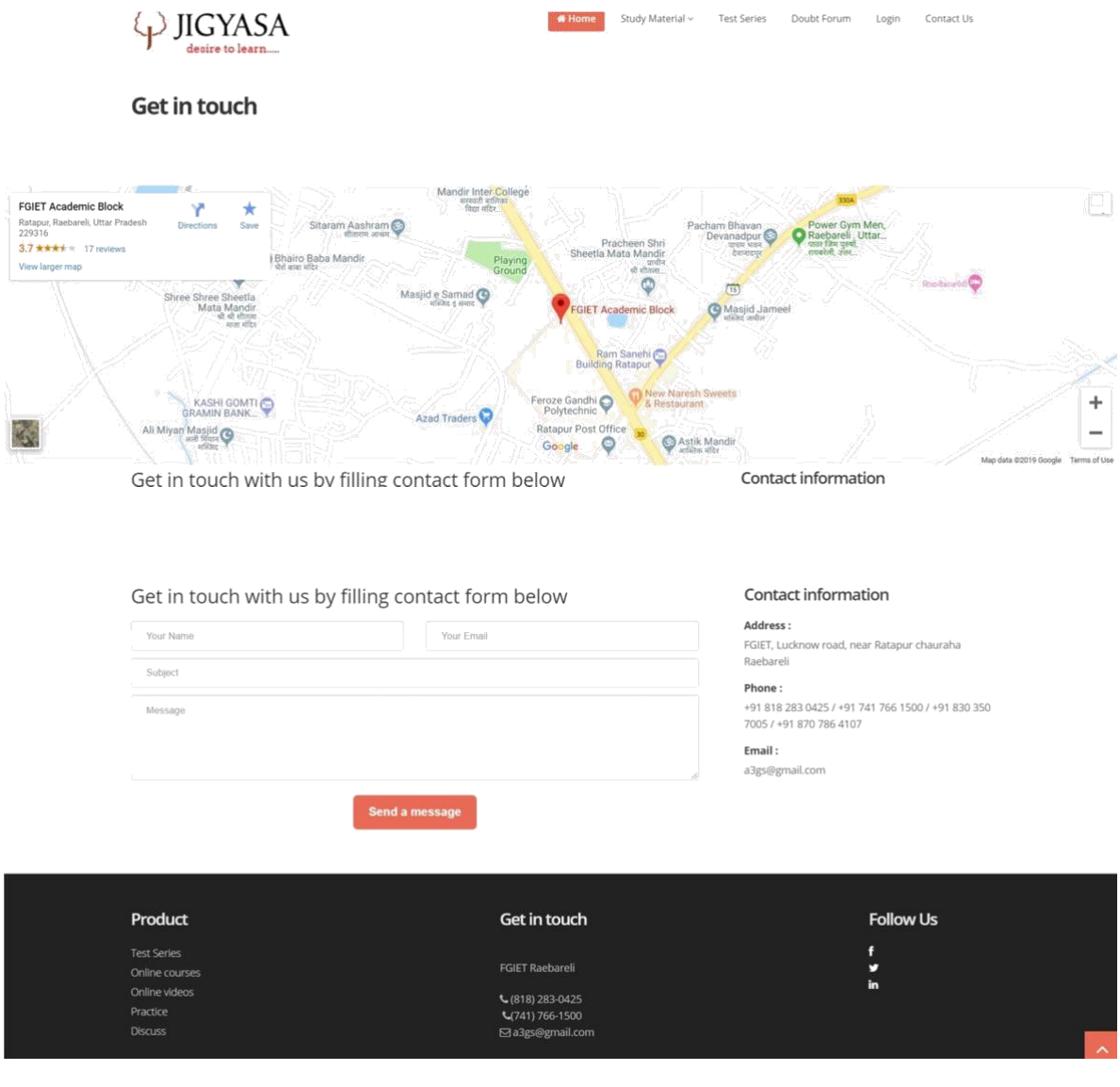
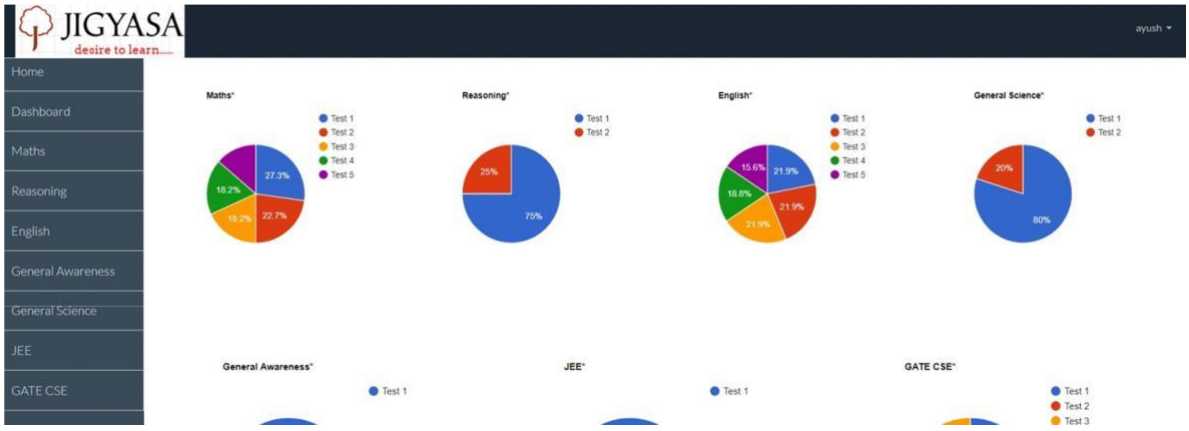


Figure 8.8 Contact Pages



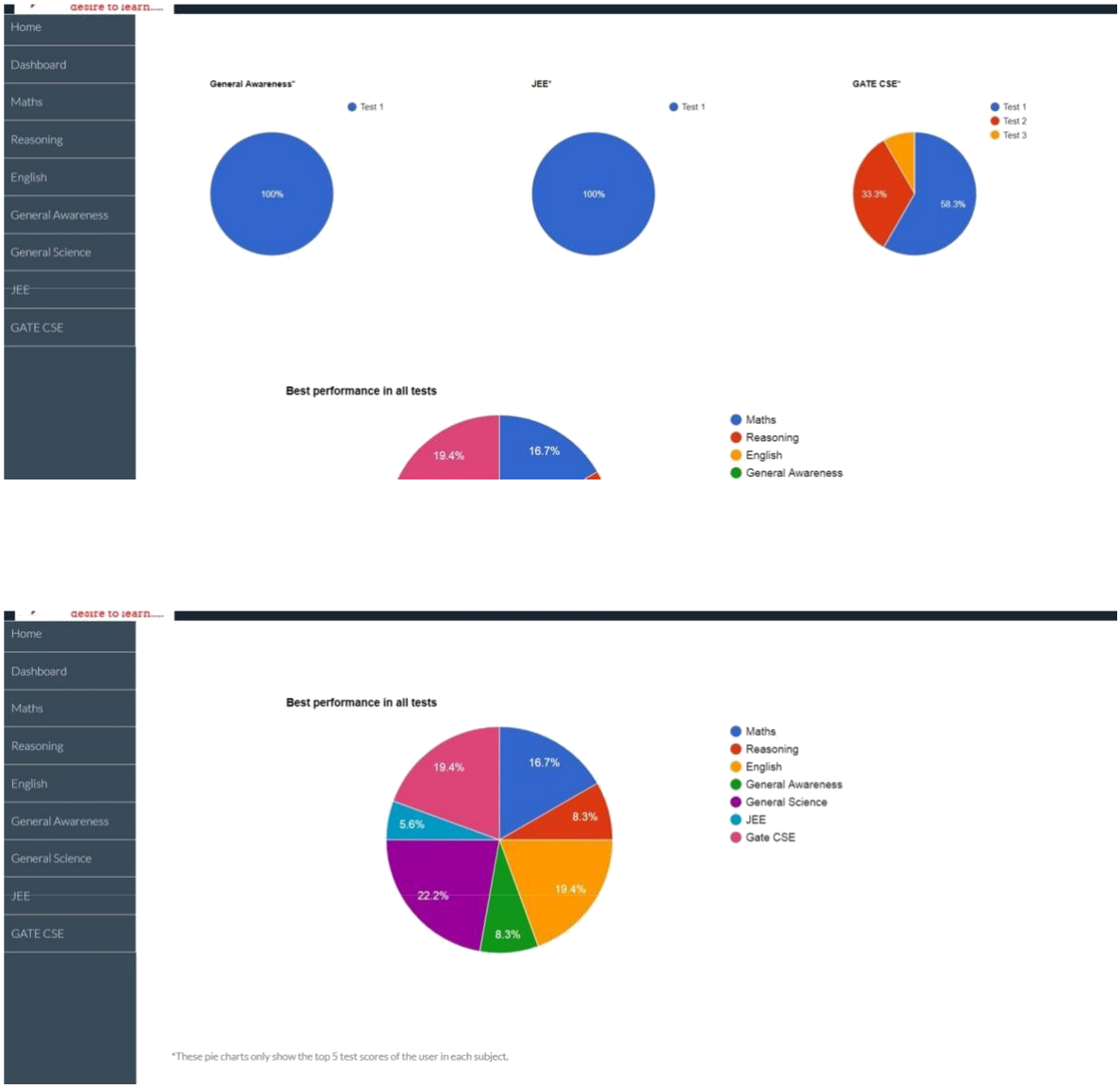
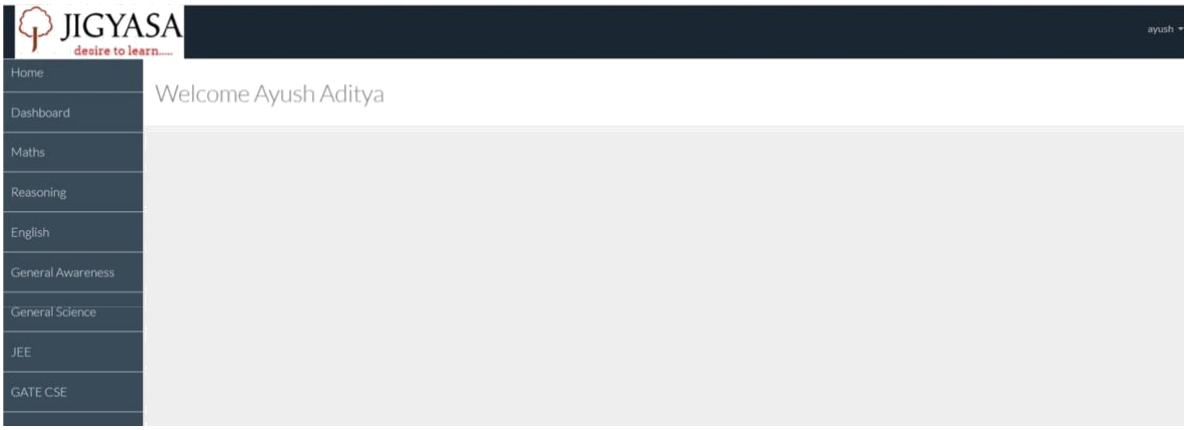
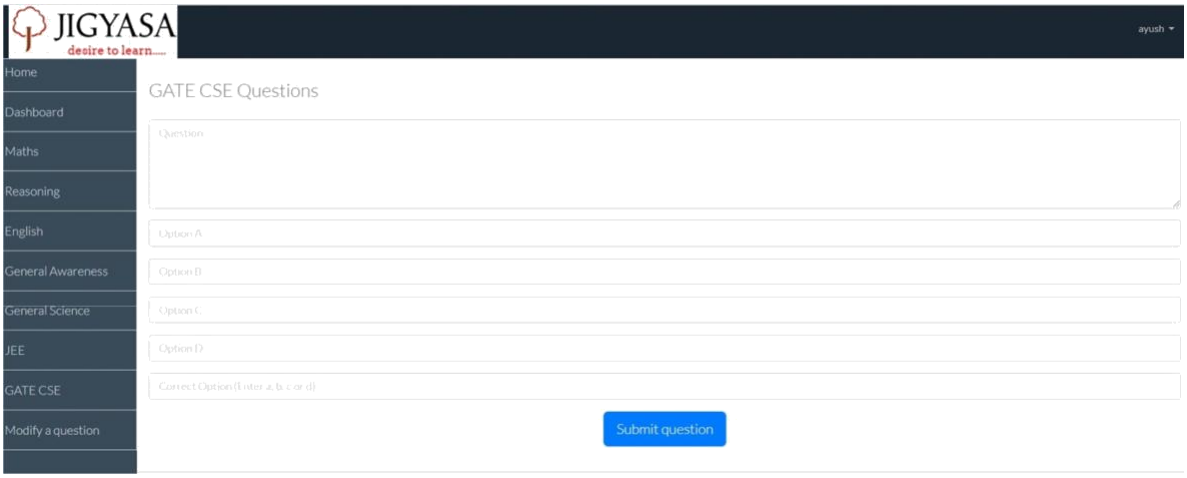


Figure 8.9 User Dashboard Page





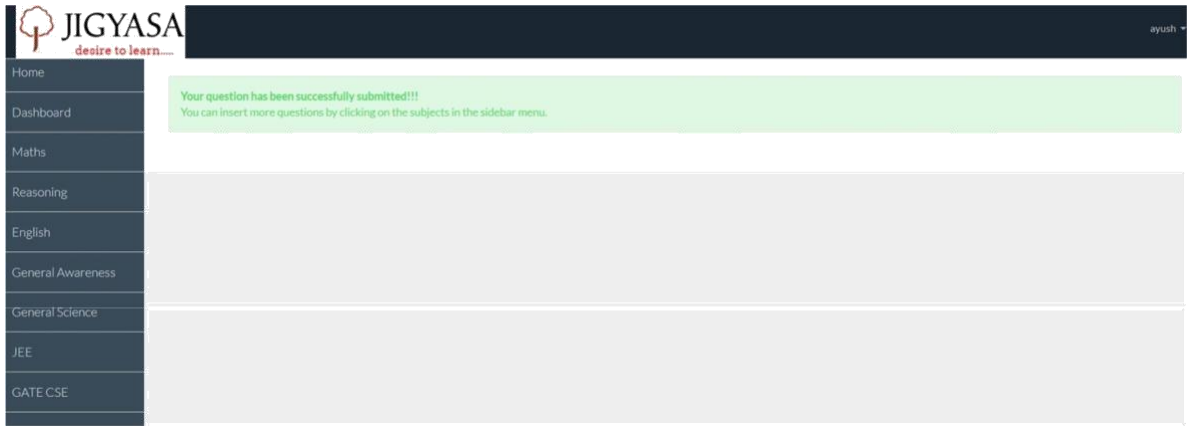


Figure 8.10 Admin Pages

CHAPTER-9

CONCLUSION

9.1 CONCLUDING REMARKS

As evidence of the success of this mission, there are thousands of study materials listed each day in hundreds of different categories in form of text and lectures. There is material for almost any topic that one could imagine, from Railways to SSC to JEE to GATE. And the variety doesn't stop there. Need a study material? One may find it listed in the proper category, in any form from very old and obsolete to the latest greatest technology available. What about practise exams? One can find an exam that is based on particular exam or particular subject. Doubts, Maybe a doubt arise for the strategy for a exam to the particular question of the syllabus. One can even find that special representation of results in form of pie charts to review the tests in a graphical manner.

In this instance it may be true that on Jigyasa, we have something for every student, whatever their requirement may be.

9.2 FUTURE REMARK

Since this system has been generated by using Object Oriented programming, there are many chances of reusability of the codes in other environment even in different platforms. Also its present features can be enhanced by some simple modification in the codes so as to reuse it in the changing scenario.

The site is made in all possible way to meet the user requirements using latest version of available software and hardware.But as user requirements and operating environment keep changing further extensions can be made on this.In future some more exams can be added in the "Online Tutorial and Exam Section" hence these pages are to be included in the software developed.

9.3 LIMITATIONS

Since, every system has some limitations so our proposed system is also not untouchable in this regard. Although it includes every kind of features, but it can't be used as a mobile application for now, because it is not created for mobile devices. The database used in this system is an average one, so the highest concurrency could not be achieved. Also it doesn't have different kind of access feature for different users.

Though it was planned for this system to be absolutely perfect but everything as such has some limitations, so does the System. Following may be the drawback in this system.

Though this system is developed as a multi user system but it is not a real time system.

The interaction with the database, every time they are loaded thus the system tends to be a bit slow.

REFERENCES

http://www.sun.com

http://www.coreservlets.com

http://www.serverside.com

http://www.w3schools.com

http://www.google.com

http://www.webopedia.com

http://www.ddj.com