

# INDEX

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# INTRODUCTION

# **INTRODUCTION**

## **1.1 Objective :-**

The main objective of creating a project on an *aptitude test website* is to provide a platform that assesses and evaluates the cognitive abilities, skills, and potential of individuals in various areas such as numerical reasoning, verbal proficiency, logical reasoning, and critical thinking. The aptitude test website aims to help users, such as job seekers, students, or professionals, understand their strengths and areas for improvement. This can be achieved through a user-friendly interface that delivers accurate and insightful results, aiding individuals in making informed decisions about their career paths, educational pursuits, or skill development. The ultimate goal is to enhance self-awareness, facilitate better decision-making, and contribute to personal and professional growth.

## **1.3 Proposed System :-**

### **Overview :-**

**The aptitude test website project is designed to be a comprehensive online platform catering to individuals, educational institutions, and employers. This website serves as a dynamic tool for self-assessment, skill development, and career exploration.**

**Scope :-** The scope of our aptitude test website project is to provide a user-friendly and adaptive platform

The proposed system is using the computers for all the operations i.e. for information storage, Insertion, updation, Removal, etc. The main difference in older and newer system is as computers are being used all the working is faster and accurate.

**It also avoids the data redundancy. There is no question of changing of data stores, so it is also easy to maintain the data for longer period of time. As computer does all the calculations the report generation is automatic for each member as well as Visitors.**

## **The facilities available in this website are:-**

- User Registration and Profiles
- Real-time Analytics Dashboard
- Multilingual Support
- Customer Support
- Security Measures
- Mobile Accessibility
- Diverse Aptitude Tests

## **Technologies Used Are**

**This project is a desktop application which is developed using PHP development software and Mysql as a backend for data storage.**

- ✓ Database Design(Mysql)
- ✓ Form Design(HTML,CSS,JS)
- ✓ Coding (PHP)

- ✓ Testing (PHP)
- ✓ Reporting Tool (Data Report)

## Goals Of Proposed System

- ❖ **Proper Data Storage :-**The data will be stored properly in the database, which helps in the quick retrieval of information .
- ❖ **Accuracy:-**The level of accuracy in the given system is higher. All the entries would be done correctly and it ensures that whatever information coming from sources is accurate.
- ❖ **Reliability:-**The reliability of the proposed system is higher due to the above stated reasons. The main reason of increased reliability is proper storage of the entered information.
- ❖ **Immediate Retrieval of Information:** -The proper data storage made possible of immediate data retrieval .User of the system can get any type of information he wants just by specifying name.
- ❖ **Immediate Data Storage:-**In manual system there are many problems with large data storage, but this provides the faster data storage with the validation for the redundancy.

**❖ Easy To Operate:** -The system is very easy to operate as it is developed in the user friendly language and with proper labels and hints.

## User Characteristics :-

**Every user -**

- ✓ Must have knowledge of computer.**
- ✓ Must have knowledge of English.**



# **REQUIREMENT ANALYSIS**

## **2.1 Feasibility Study**

- In conducting a feasibility analysis for an aptitude test website, the initial step involves clearly defining the project's scope and objectives, delineating the purpose, target audience, and the range of tests to be offered



**During feasibility analysis for this project , following primary areas of interest are to be considered.**

## **Steps in Feasibility analysis :-**

**Following are some steps which are involved in the feasibility analysis study -**

- 1) Define the Project Scope and Objectives.**
- 2) Legal and Regulatory Feasibility.**
- 3) Technical Feasibility.**
- 4) Financial Feasibility.**
- 5) Determine and evaluate performance and cost effective of each proposed system.**
- 6) Weight system performance and cost data.**
- 7) Select the best proposed system.**
- 8) Market Feasibility.**

### **2.1.1 Technical Feasibility :-**

- ❖ It includes considerations such as the compatibility of the website with various devices and browsers, the capacity of servers to handle potential user traffic, and the feasibility of implementing any required technical features for delivering aptitude tests online.
- ❖ Can the work for the project be done with current equipment, existing software technology and available persons?
- ❖ Can the system be upgraded if developed?

This is concerned with specifying equipment and software that successfully satisfy the user requirement. The technical needs of the system may include.

### **Front–End and Back–End Selection -**

An important issue for the development of a project is the selection of suitable front-end and back-end. When we decide to develop the project we went through an extensive study to determine the most suitable platform that suits the needs of the organization as well as helps in development of the project.

**The aspects of our study include the following factors -**

## **Front-End Selection:-**

- 1)It must have a graphical user interface that assist employees that are not from IT background.**
- 2)Scalability and extensibility.**
- 3)Flexibility.**
- 4)Robustness.**
- 5)Platform independent.**
- 6)Easy to debug and maintain.**
- 7)Front end must support popular back-ends MYSQL.**

## **Back –End Selection:-**

- 1)Multiple user support.**
- 2)Efficient data handling.**
- 3)Provide inherent features for security.**
- 4)Efficient data retrieval and maintenance.**
- 5)Operating system compatible.**
- 6)Easy to install.**
- 7)Popularity.**
- 8)Easy to implant with front end.**

**According to the above stated features we select PHP as the front-end and MYSQL as the back-end for developing our project.**

**The technical feasibility is frequently the most difficult area encountered at this stage. It is essential that the process of analysis and definition be conducted in parallel with an assessment to technical feasibility. It centers on the existing computer system (hardware, software , etc) and to what extent it can support the proposed system.**

## **2.1.2 Economical Feasibility :-**

Economic justification is generally the “Bottom Line” consideration for most of the systems. It includes a broad range of concerns that includes cost benefit analysis. In this we weight the cost and benefit associated with the candidate system and if it suits the basic purpose of the organization i.e. Profit making, the project is making to the analysis and design phase.

- ✓ The financial and the economic questions during the preliminary investigation are verified to estimate the following. The cost to conduct a full system investigation.
- ✓ The cost of the hardware and software for the class of application being considered.
- ✓ The benefits in the form of reduced cost.
- ✓ The proposed system will give the minute information as a result the performance is improved which in turn may be expected to provide increased profits.
  
- ✓ The feasibility checks whether the system can be developed with the available funds. Also our system does not require huge amount of money for the

**development. This can be done economically if planned judicially, so it is economically feasible.**

So, if we consider all the above points the *Aptitude Test Website* is economically feasible.

### **2.1.3 Operational Feasibility :-**

**Operational feasibility for an aptitude test website involves assessing the practicality of integrating the platform into existing processes and ensuring smooth day-to-day operations. Here are key points to consider:**

- ❖ **User-Friendliness**
- ❖ **Integration with Existing Systems**
- ❖ **Impact on Daily Operations**
- ❖ **Scalability If not, can they be trained in the course of time?**
- ❖ **User Acceptance**
- ❖ **Data Security**

**If we consider the above points then our system is operationally feasible as it is very easy for the end users to operate it. It only needs basic information of computer and Windows Platform, if they don't have knowledge then they can be trained to operate this system just in few days.**

## **2.1.4 Schedule Feasibility :-**

Time evaluation is the most important consideration in the development of any project. The time schedule required for this project is very important since more development time effect machine time, cost and cause delay in the development of other systems. But we can develop a reliable Aptitude Test Website in the considerable amount of time.

## **2.2 Fact Finding Techniques**

**Right from encountering the problem till the analysis, design & implementation of system, information about various aspects & expectations from the system is collected.**

**Various fact finding techniques are:**

- **Interview.**
- **Record Review.**
- **Observation.**

**Analyst implements any one of these techniques to develop a system which is accurate & comprehensive.**

**We used the following Fact Finding Technique:**

- **Observation**
- **Record Review**

### **Observation:-**

**It allows analyst to collect information, which they can't get by other fact finding techniques. His method allows analyst to gain first hand information about how activities are carried out. It is very useful when analyst needs to observe how process is carried out and which steps are followed. Experienced observers know what to look for and how to access the significance of what they observed. It gives answers to doubts or questions remaining in mind of analyst.**

We observed websites on internet. Also we have observed the HTML designings of that available systems.

## Record Review:-

Many types of records & reports can provide analyst with lots of valuable information regarding website & its operations. Here analyst records information that has been recorded about system & users. It is performed at the beginning of study as an introduction or later in study as a basis for comparing actual operations with what the records indicate should be happening.

Record policy includes written policy, manuals, regulations & standard operating procedures used by organizer as a guide for managers & employees. They don't show what activities are actually occurring, where decision making power lies or how task are performed, however they can help analyst understand system familiarizing them with what operations must be supported & with formal relations within organizers.

## **Information provided by record includes:**

- Standard operating procedures.
- Control & check for accuracy completeness.
- Properly completed documents.
- Efficiently & timely completion of work.
- Delay in work.
- Skipped steps.
- New control if needed.

**Using Record Review Technique, we observed hat how aptitude test website works. We observed how records were stored manually and how they were retrieved and manipulated. Accordingly, we developed these facilities in our project.**

## **2.3 Project Requirements :-**

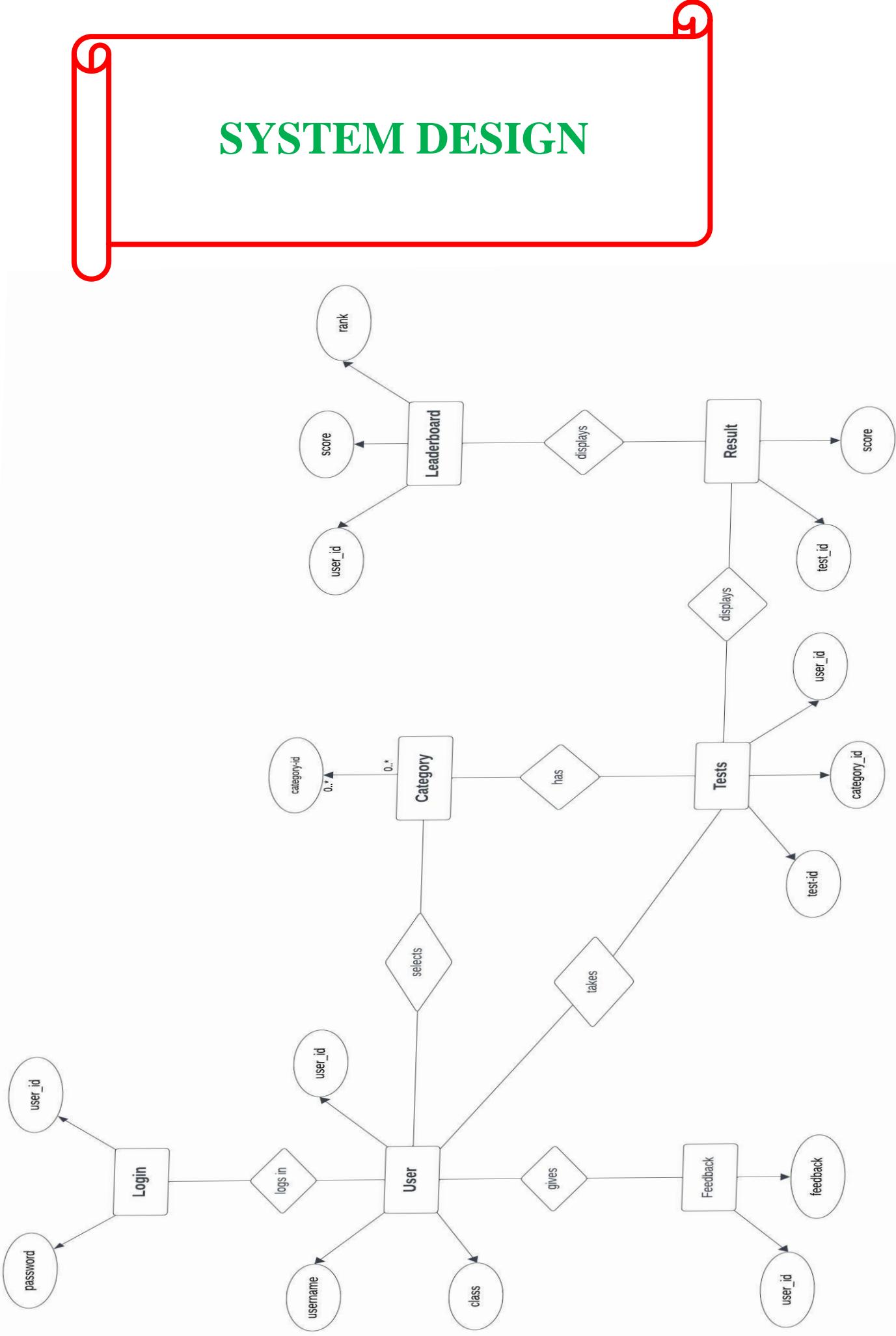
### **Hardware Requirements:-**

Processor	Ram	Disk Space
Intel Pentium	8GB	100 Mb or More
Higher version		

### **Software Requirements:-**

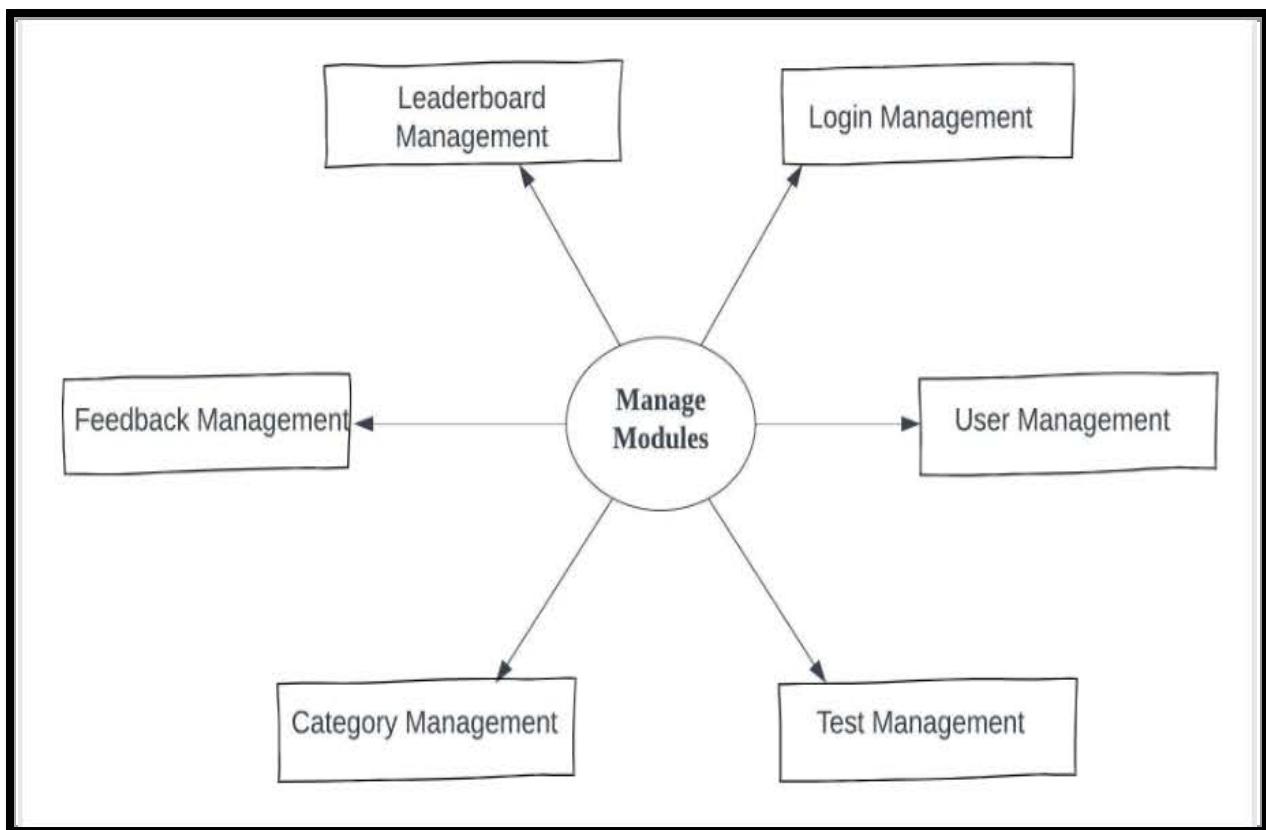
Operating System	Database
Windows-98,xp or Any Higher Version	Mysql
Any version of Xampp	

### 3.1 Entity Relationship Diagram For Aptitude Test website :

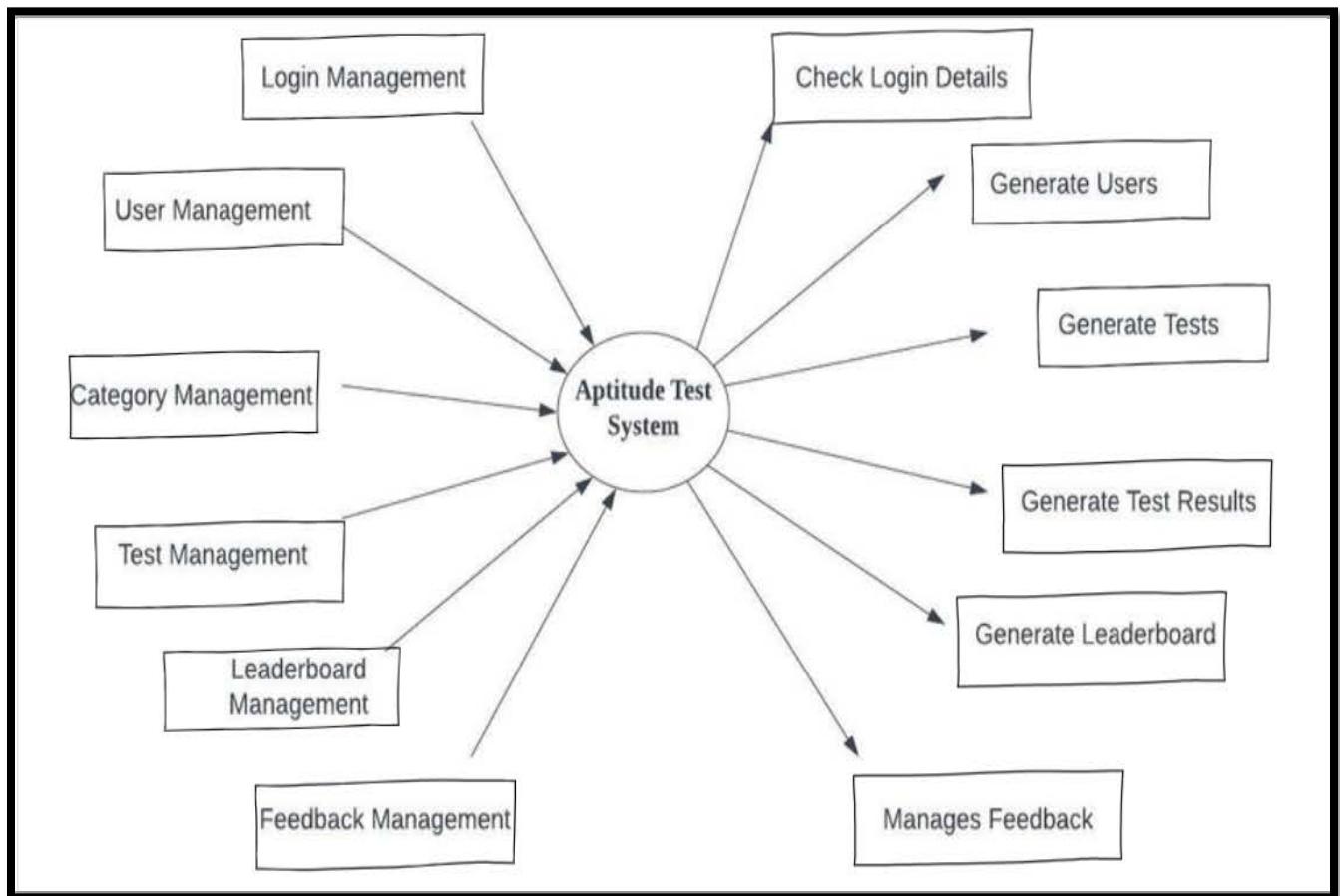


## 3.2

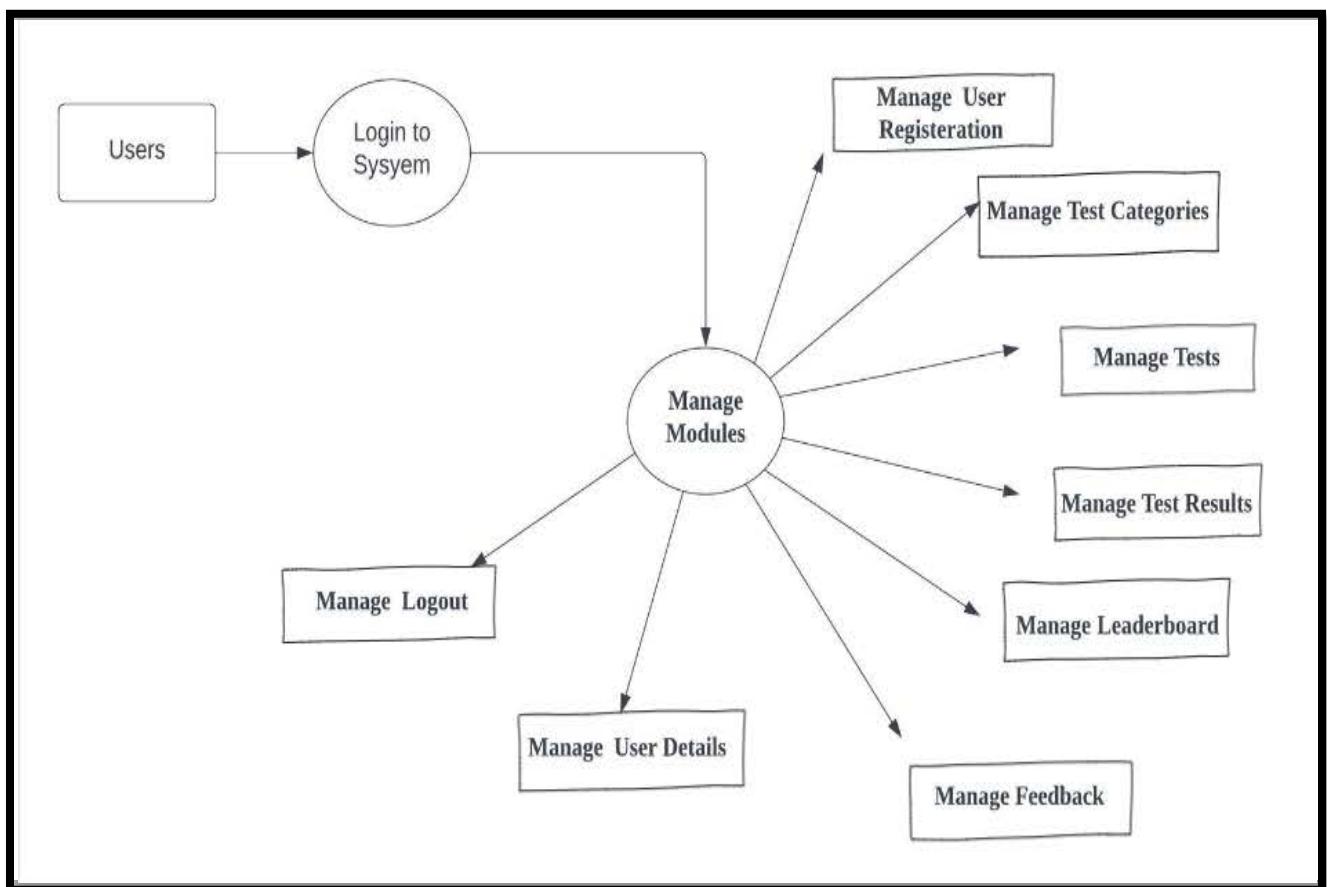
### 1) 0<sup>th</sup> Level Data Flow Diagram For Aptitude Test Website :



## 2) 1<sup>st</sup> Level Data Flow Diagram For Aptitude Test Website :



### 3] 2<sup>nd</sup> Level Data Flow Diagram For Aptitude Test Website :



# DATA DICTIONARY

## Table

### Feedback:

Attributes	Types	Key
<b>Username</b>	Varchar	Primary key
<b>feedback</b>	text	

## Leaderboard:

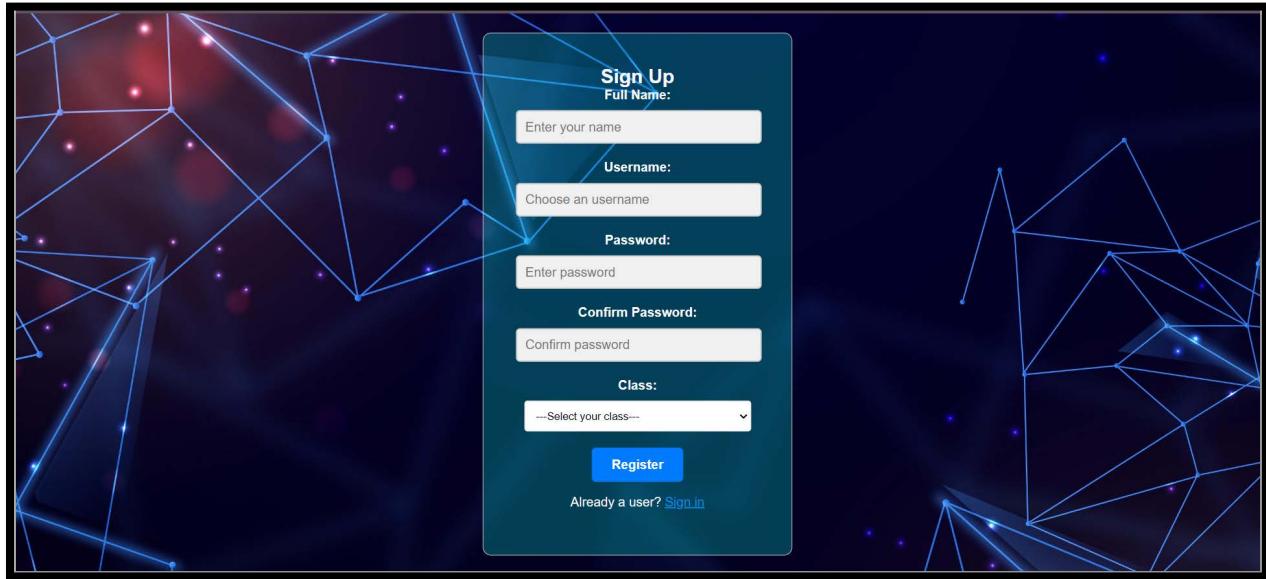
Attribute	type	Key
Username	varchar(255)	Primary key
Score	int(11)	
Category	varchar(255)	

## Users:

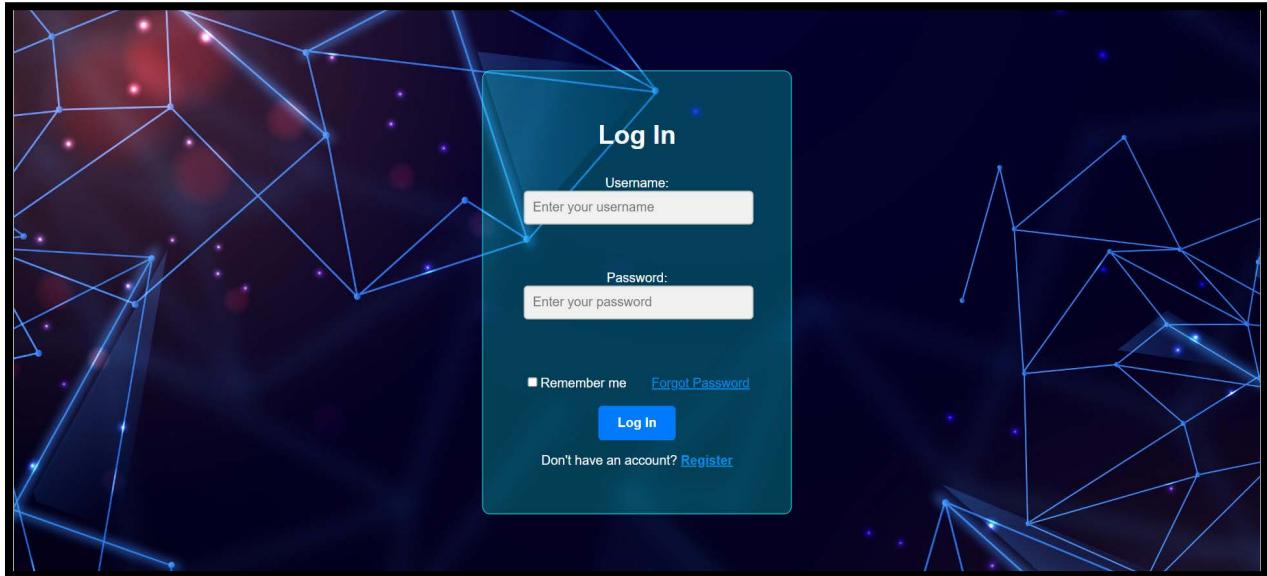
Attribute	Type	Key
Name	varchar(50)	
Username	varchar(100)	Primary key
Password	varchar(50)	
Class	varchar(100)	
Remember_token	varchar(255)	

# SCREENS

## 1.Sign Up :



## 2.Login



## 3.Dashboard/Home Page

The dashboard/home page for SkillSensei features a dark header with the logo and navigation links: Home, Category, Leaderboard, Feedback, and Logout. Below the header is a colorful, abstract geometric background. A central banner reads "Welcome to our Website!" and provides an overview of the platform's offerings across various categories like logical reasoning, mathematical proficiency, and programming. It also highlights leaderboards and feedback features. At the bottom, there's a "Get Started" button and copyright information: "© 2024 SkillSensei | About Us".

## 4. Instructions / Select Category Page

The screenshot shows the SkillSensei website's test-taking instructions. At the top, there is a navigation bar with links for Home, Category, Leaderboard, Feedback, and Logout. Below the navigation bar is a dropdown menu labeled "Select an option". A "Start Test" button is located just below the dropdown. The main content area features a blue header titled "Instructions for Taking a Test". Below the header is a bulleted list of test-taking instructions:

- Read Carefully: Read each question and all options carefully before selecting your answer.
- Time Management: You have 30 minutes to complete the test. Pace yourself accordingly to ensure you have enough time for each question.
- Answer Every Question: Try to answer every question. If you're unsure about an answer, make your best guess.
- Selecting Answers: Choose the best answer for each question by clicking on the radio button next to your choice.
- Review Your Answers: If time permits, review your answers before submitting the test to ensure accuracy.
- Use of Scratch Paper: You may use scratch paper for rough work if needed. However, answers must be selected on the test interface.
- Single Selection: Only one answer is correct for each question. Choose the option that you believe is most accurate.
- No Skipping Questions: You cannot go back to previous questions once you move to the next question. Answer each question before proceeding.
- Avoid Distractions: Minimize distractions during the test to focus on each question effectively.
- Submit Before Time Expires: Make sure to submit your test before the timer runs out. Unsubmitted answers will not be counted.
- Remember, this test is designed to assess your understanding of the subject matter. Good luck!

The background of the page features a faint image of a pen resting on a grid of numbers, likely representing a test answer sheet.

## Select Category

The screenshot shows the SkillSensei website's category selection page. At the top, there is a navigation bar with links for Home, Category, Leaderboard, Feedback, and Logout. Below the navigation bar is a dropdown menu labeled "Select an option". The dropdown menu lists several test categories: General IT Test, C Language Test, C++ Test, JavaScript Test, PHP Test, and jQuery Test. The "PHP Test" option is currently selected, indicated by a blue background and white text. The main content area features a blue header titled "Instructions for Taking a Test". Below the header is a bulleted list of test-taking instructions, which is identical to the one shown in the previous screenshot.

# Test Page:

Time Left: 29:27

Question 1: What does PHP stand for?

PHP: Hypertext Preprocessor  
 Personal Home Page  
 Preprocessed Hypertext Pages  
 PHP Hypertext Pages

Question 2: Which of the following is not a PHP data type?

Integer  
 String  
 Double  
 Boolean

Question 3: What is the output of the PHP code: echo "10" + 5;

15  
 "10"5  
 105  
 Error

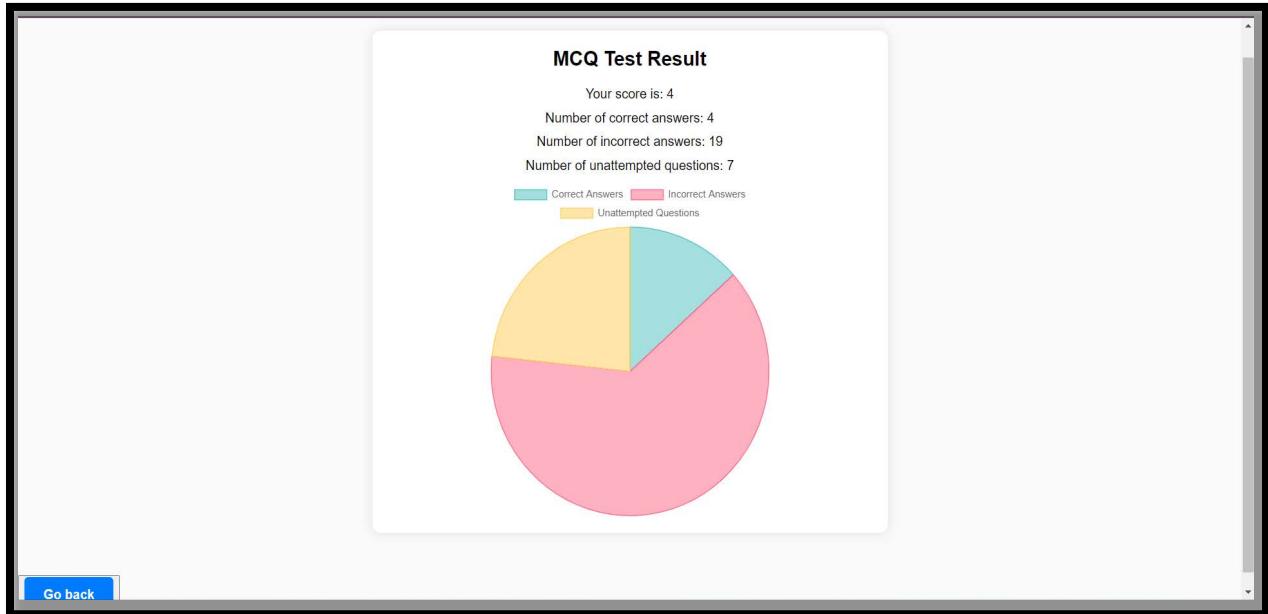
Question 4: Which PHP function is used to redirect the user to another page?

redirect()  
 header()  
 location()  
 forward()

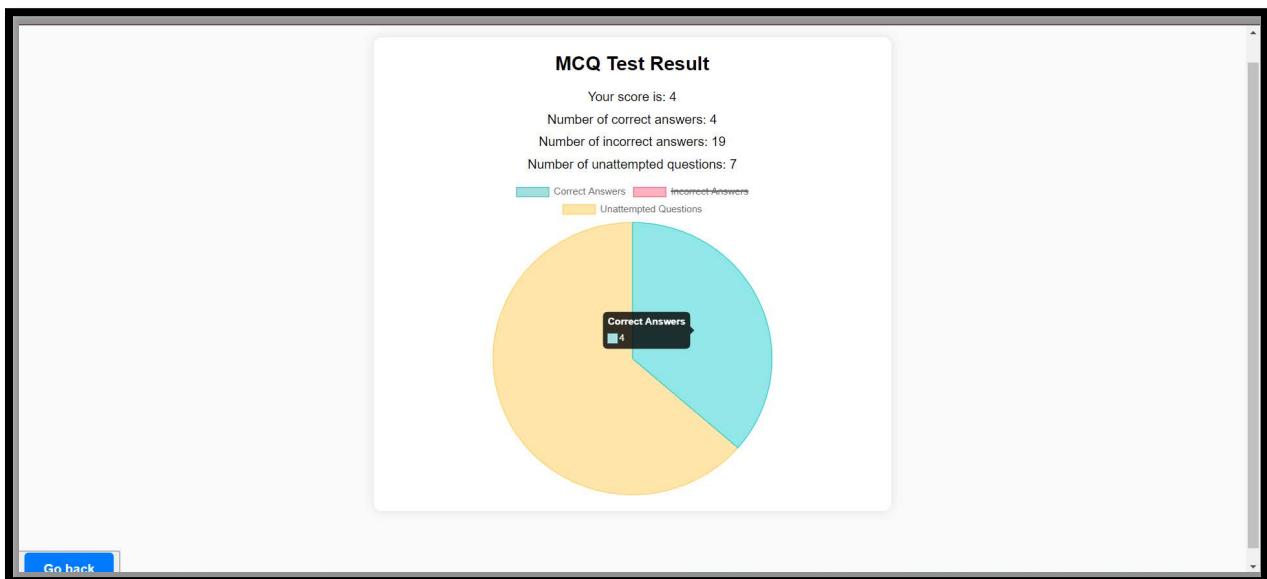
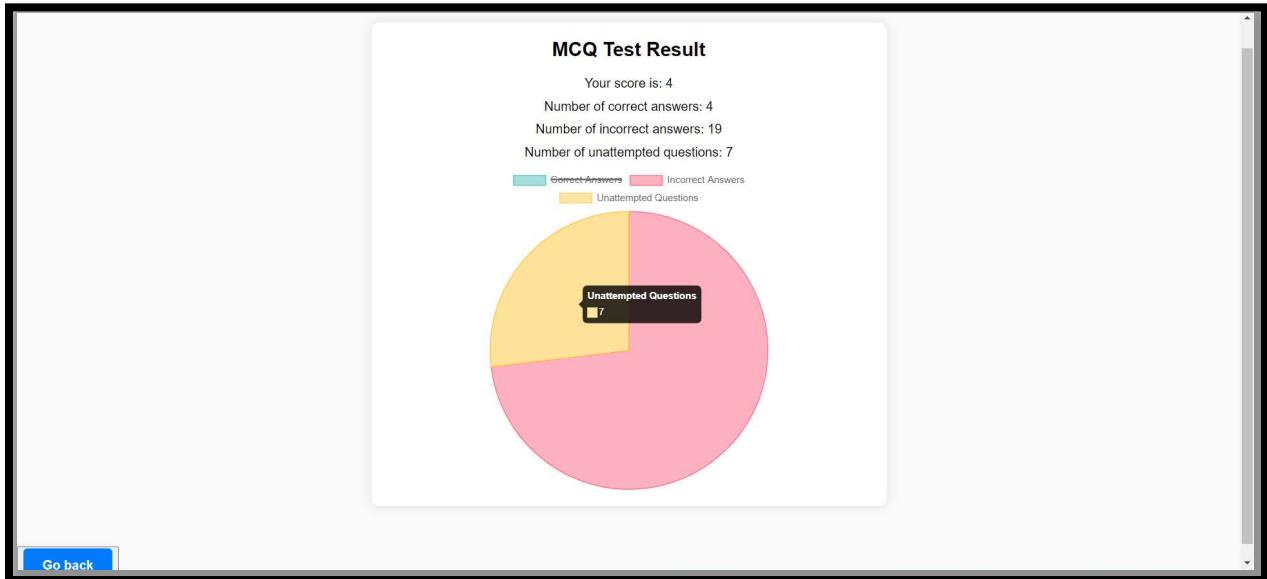
Question 5: What is the correct way to start a PHP block of code?

<?php  
 <script>  
 start\_php()

# 5.Result Page



# Pie chart features:



## 6.Leaderboard:

The screenshot shows the SkillSensei website's Leaderboard page. The header includes the logo "SkillSensei" and navigation links for "Home", "Category", "Leaderboard", "Feedback", and a blue "Logout" button. A dropdown menu labeled "Select Category: General" is open, and a "Show Leaderboard" button is visible. The main content area is titled "Leaderboard" and displays a table of user scores:

| Username | Score |
|----------|-------|
| Shyama   | 29    |
| Vansh    | 28    |
| Piyush   | 25    |
| Manisha  | 22    |
| Bhakti   | 20    |

At the bottom of the page, there is a copyright notice: "© 2024 SkillSensei | About Us".

## Feedback Page:

The screenshot shows the SkillSensei website's Feedback page. The header includes the logo "SkillSensei" and navigation links for "Home", "Category", "Leaderboard", "Feedback", and a blue "Logout" button. The main content area is titled "Feedback Form" and features a large orange background graphic with a large orange double quotes symbol. In the center, there is a light green rectangular box containing a feedback message and a "Submit Feedback" button.

**Your Feedback:**

It was a Great experience interacting with you!

**Submit Feedback**

At the bottom of the page, there is a copyright notice: "© 2024 SkillSensei | About Us".

# About Us:

The screenshot shows the SkillSensei website's "About Us" page. At the top, there's a navigation bar with links for Home, Category, Leaderboard, and Feedback. A "Logout" button is also visible. The main content area features a heading "About Us" and several paragraphs of text describing the platform's offerings in logical reasoning, mathematical proficiency, programming languages, and web development. It also highlights leaderboards and community features. The footer contains a copyright notice: "© 2024 SkillSensei | About Us".

**SkillSensei**

Home Category Leaderboard Feedback

Logout

**About Us**

Welcome to SkillSensei, your ultimate destination for comprehensive aptitude testing across a myriad of domains, including logical reasoning, mathematical proficiency, programming languages like C and C++, as well as web development technologies such as HTML, CSS, and JavaScript. Our platform caters to individuals at all skill levels, from beginners seeking to solidify their foundations to experts aiming to refine their expertise.

Dive into our logical reasoning category, where you'll encounter a diverse array of puzzles and scenarios designed to challenge your deductive reasoning and problem-solving abilities. Explore our mathematical aptitude tests covering algebra, geometry, and calculus, providing a rigorous evaluation of your quantitative skills.

For programming enthusiasts, we offer specialized tests in both C and C++, presenting coding challenges and algorithmic tasks to assess your proficiency in these fundamental languages. Additionally, delve into our web development category, where you can test your knowledge of HTML, CSS, and JavaScript syntax, as well as your understanding of web design principles and interactive scripting.

To add an extra layer of excitement to your learning journey, check out our leaderboards for each test category, showcasing the top performers and providing motivation for your own progress. Compete with peers, track your rankings, and strive for mastery in your chosen disciplines.

At SkillSensei, we're dedicated to providing a dynamic and engaging platform for personal and professional growth. Join us today and embark on a journey of discovery, exploration, and accomplishment. Unleash your potential with SkillSensei and take the first step towards achieving your aspirations.

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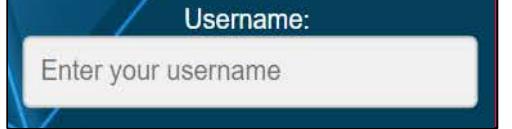
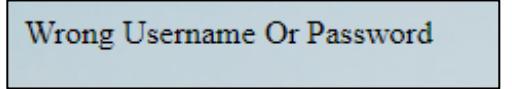
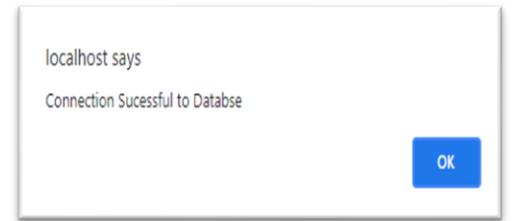
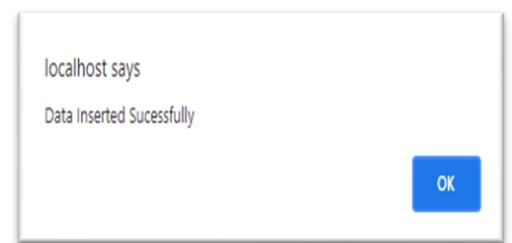
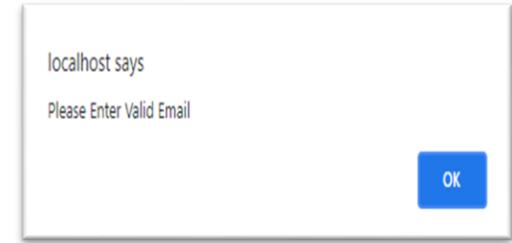
# **TESTING**

## **Test Plan:**

A test plan is a document detailing the objectives, resources, and processes for a specific test for a software or hardware product. The plan typically contains a detailed understanding of the eventual workflow.

## **Data Validation Test Cases & Results And Functional Validation Test Cases & Results:**

**Data Testing** is checking the tables data of the database .The Stored Procedure provides the end-user with the Expected result. Adding,Updating,Deleting of Data is Perfomed. **Functional Testing** verifies that the software performs its stated functions in a way that the users expect.

| Step No | Test Step   | Expected Result   | Actual Result   |
|---------|---|---|---|
| 1       | <b>Enter Username and Password(if Username and Password is Incorrect)</b>                     | <b>A Message must be displayed Wrong Username or Password</b>     | <br><br> |
| 2       | <b>Click on View (if Connection to database is done)</b>                                      | <b>A Pop must be Displayed Connection Sucessful to Database .</b> |   |
| 3       | <b>Add data in Particular Tableby Filling Required Infomation then Click on Submit button</b> | <b>A Pop must be Displayed Data Inserted Sucessgully.</b>         |    |
| 4       | <b>Enter Email Id(if email id is Inorrect)</b>  | <b>A Pop must be Displayed Please Enter Valid Email Id.</b>       |    |

## LIMITATIONS AND FUTURE ENHANCEMENT

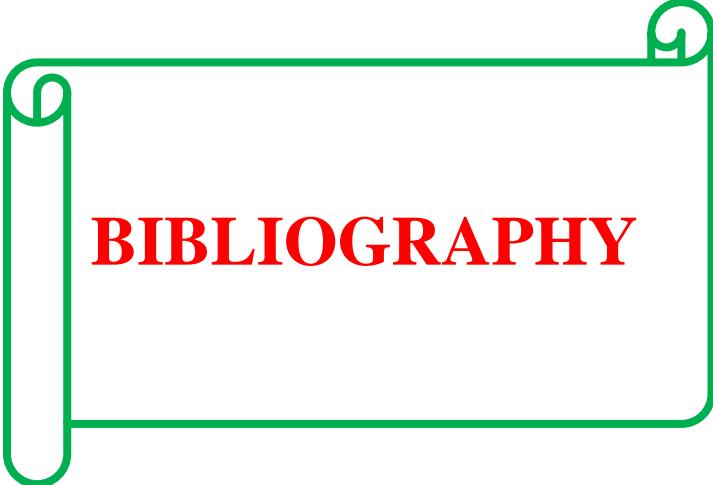
### LIMITATIONS & FUTURE ENHANCEMENT

#### 7.1 Limitations :-

✓ Due to lack of time we could not offer more

#### 7.2 Future Enhancement:-

- 1) We can Introduce gamification features to enhance user engagement, such as leaderboards, badges, or virtual rewards for achievements in aptitude tests.
- 2) Develop a mobile application for convenient access to aptitude tests on smartphones and tablets, catering to users who prefer on-the-go learning and assessment.
- 3) Collaborations with Educational Institutions and Employers



## **BIBLIOGRAPHY**

- 1) W3 Schools**
- 2) StackOverFlow**
- 3) Javatpoints**

**THANK  
YOU**