CHAPTER 1

INTRODUCTION

1.1. Background

Databases and database technology have a major impact on the growing use of computers. It is fair to say that databases play a critical role in almost all areas where computers are used, including business, electronic commerce, engineering, medicine, genetics, law, education, and library science. The word database is so commonly used that we must begin by defining what a database is. Our initial definition is quite general.

1.2. Problem Definition

This project is aimed to reduce the manual work involved in data maintenance in Online Examination and automates the Online Examination Management System. This project is developed mainly to simplify the manual work and allows smooth administration of the operations of a Online Examination. The purpose of the project is to computerize the administrative operations of a Online Examination and to develop software which is user friendly, simple, fast, and cost – effective. It deals with the collection of , Subject, Test and Exam information etc. Traditionally, it was done manually. The main function of the system is to conduct exam online and reduce the delay of results.

1.3. Motivation

Manual System: The system is very time consuming and lazy. This system is more prone to errors and sometimes the approaches to various problems are unstructured

Technical System: With the invent of latest technology, we should update our systems which are very fast, accurate, user-friendly and reliable.

1.4. Objective

Main goal of this project is to simplify the manual operation of a Student Attendance with the following advantages:

1. Faster System

2. Accuracy

3. Reliability

4. Cost Effective

5. User Friendly

6. Immediate access to the data and statistics

1.5. Scope of the project

The project provides a very simple application which simplifies the manual work done by the operations of Examination.

When comparing with traditional exam scenario the cost for an online examination will be almost zero after the online exam system is establishment and if maintenance cost is not considered.

CHAPTER 2

Entity-Relationship Diagram Relational Schema Diagram

An entity relationship diagram, usually referred to as an e-r diagram represents the attributes, entities and relationships in a relational schema design. Entity types like Student and events are represented using rectangular boxes in the e-r diagram. The attributes which characterize the entities are represented in ovals, each attached to the entity type using a straight line.

The attribute which is designated as the primary key is identified by underlining it within the oval. Relationships like enroll, creates are represented in diamond boxes which are attached to the entity types participating in the relationship using straight lines. The total participation of the entities participating in the relationship represented inside the rhombus is identified by two straight lines from the entity type to the diamond. Where as, the partial participation is identified by a single line.

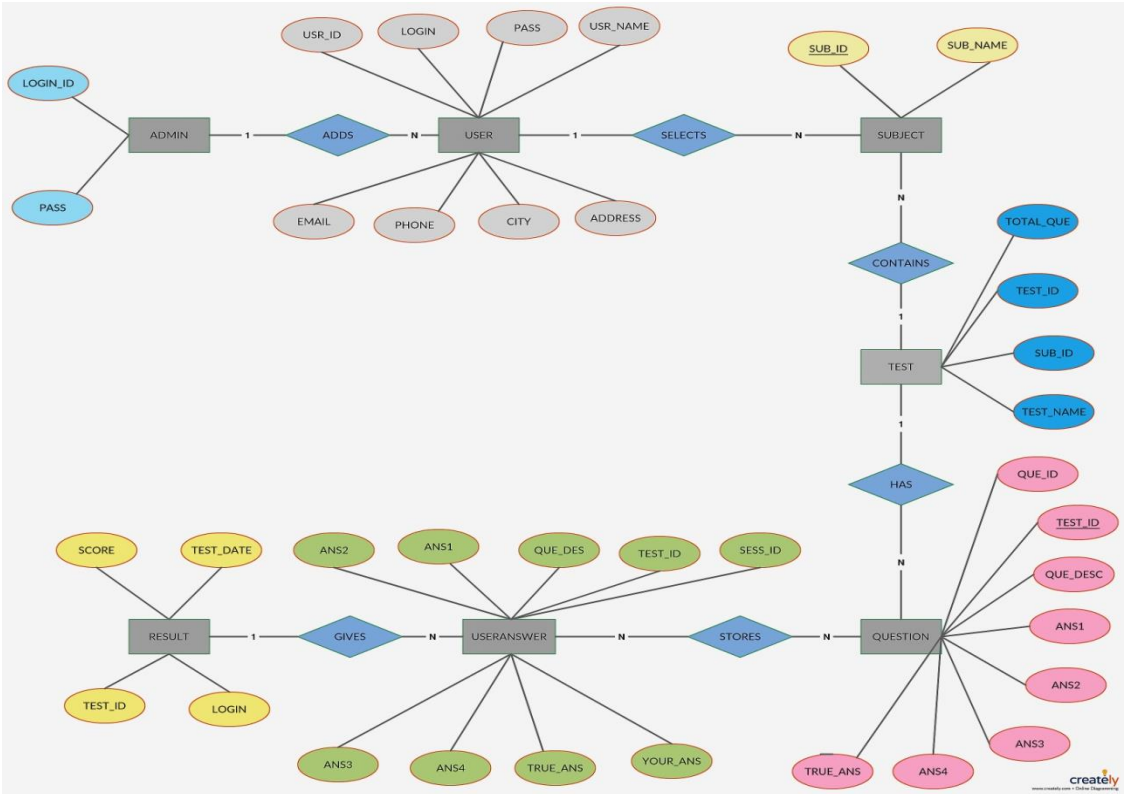

Fig 2.1 ER Diagram of Online Examination

- **ADMIN:** The ADMIN is one who is responsible for Exam conduction. He organizes the test the way he wants. A Admin is top level entity having access to all the features and operations of Online Exam. Admin can define different users having access to limited set of functionality to manage examination process.

- **USER:** The USER is one who takes up the test by signing in and login with his valid Login id and password. A user is a person who utilizes a computer or network service. Users of computer systems and software products generally lack the technical expertise required to fully understand how they work.[1] Power users use advanced features of programs, though they are not necessarily capable of computer programming and system administration.

- **SUBJECT:** User has options to take up quiz of particular subject on the list.

- **TEST:** User gives the examination for the subject he/she has selected. A test or examination is an assessment intended to measure a test-taker's knowledge, skill, aptitude, or classification in many other topics(e.g., beliefs). ... Formal testing often results in a grade or a test score.

- **QUESTION:** User selects the answers which he/she feels is correct and selects an option. You can choose between multiple choice questions or free text questions. The students are provided with a link to the online exam, they sign up and can take the exam. They see the results immediately afterwards.

- **USER ANSWER:** It stores all the correct answers of the questions which will be stored by the admin.

- **RESULT:** It displays all the scoring made by the User after taking up the test. The purpose of this rigorous examination is to assess the knowledge and skills considered essential for self-directed practice, with emphasis on comprehensive patient management.

The term database schema refers to the description of the database that includes the database structure and various constraints on the database.

Relational Schema

The schema diagram is in turn an illustrative display of the database schema.

The primary keys are underlined and the referential integrity constraints are depicted by arrows pointing to the keys they reference.

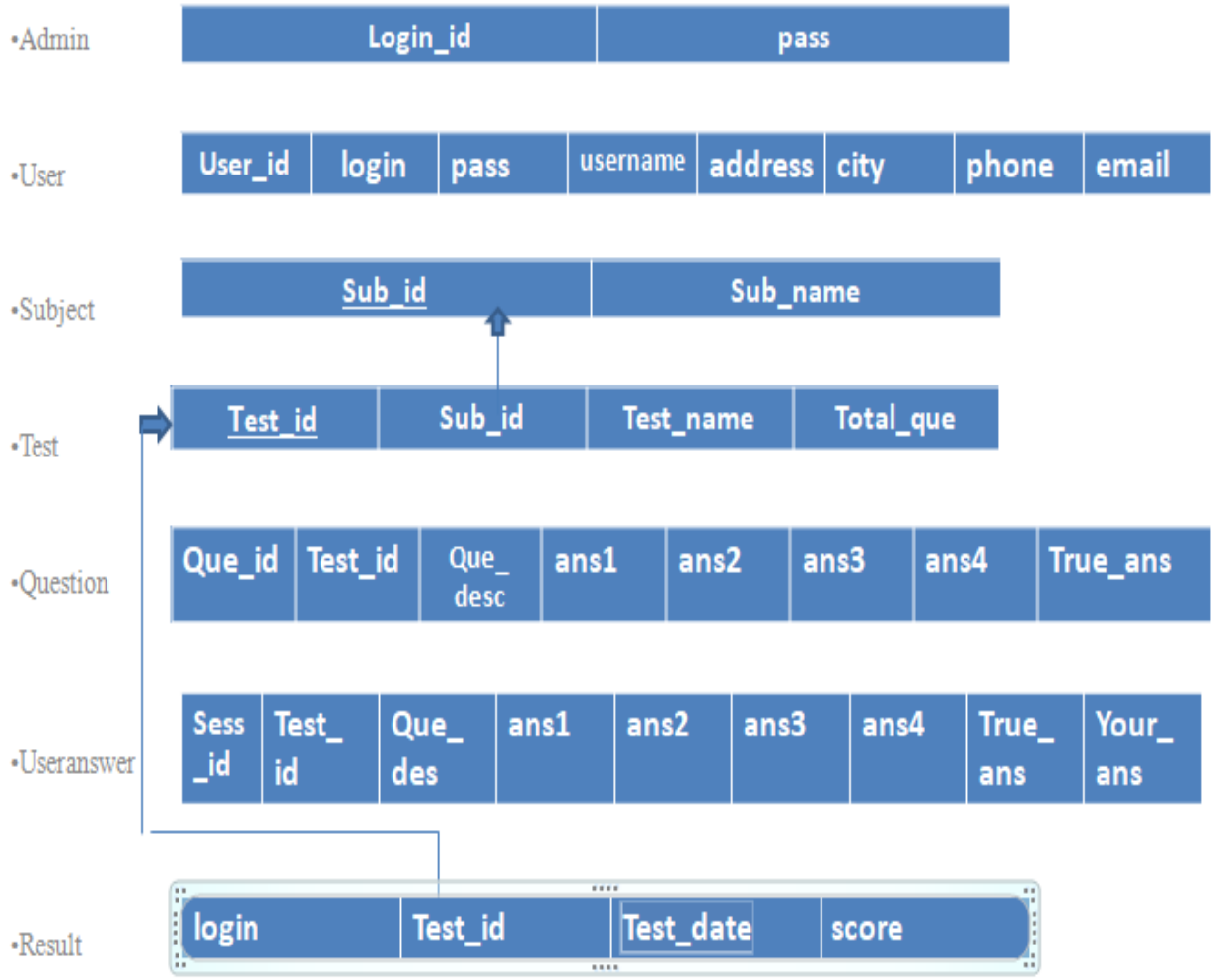

Fig 3.1 Schema Diagram of Online Examination System

CHAPTER 3

IMPLEMENTATION

3.1 Requirements

The requirements can be broken down into 2 major categories namely hardware and software requirements. The former specifies the minimal hardware facilities expected in a system in which the project has to be run. The latter specifies the essential software needed to build and run the project.

3.1.1 Software Requirements

- Language Used : PHP
- Database : MySQL
- User Interface Design: HTML

3.1.2 Hardware Requirements

The Hardware requirements are very minimal and the program can be run on most of the machines.

- Processor - Intel i3
- Processor Speed - 500 MHz or above
- RAM – 1GB or above
- Storage Space - Approx. 1GB

The requirements can be broken down into 2 major categories namely hardware and software requirements. The former specifies the minimal hardware facilities expected in a system in which the project has to be run.

3.2 Front End and Back End

MySQL

MySQL is an open-source relational database management system (RDBMS). Its name is a combination of "My", the name of co-founder Michael Widenius's daughter, and "SQL", the abbreviation for Structured Query Language. The MySQL development project has made its source code available under the terms of the GNU General Public License, as well as under a variety of proprietary agreements. MySQL was owned and sponsored by a single for-profit firm, the Swedish company MySQL AB, now owned by Oracle Corporation. For proprietary use, several paid editions are available, and offer additional functionality.

MySQL is compatible with many major programming languages. The most common one is PHP. An ODBC interface (called MyODBC) has been made so that users of Microsoft's ASP language can use MySQL. MySQL also one of the fastest database available which is easy to import. It is also easy and less strain to learn MySQL. It is also Useful for both small as well as large databases containing billions of records and terabytes of data in hundreds of thousands of tables. It has additional features to provide selectively grant or revoke permissions to users.

PHP

Hypertext Preprocessor (or simply PHP) is a scripting language designed for Web development, and also used as a general-purpose programming language. It was originally created by Rasmus Lerdorf in 1994; the PHP reference implementation is now produced by The PHP Group.[6] PHP originally stood for Personal Home Page, but it now stands for the recursive initialism PHP: Hypertext Preprocessor.

PHP code may be embedded into HTML code, or it can be used in combination with various web template systems, web content management systems, and web frameworks. PHP code is usually processed by a PHP interpreter implemented as a module in the web server or as a Common Gateway Interface (CGI) executable. The web server combines the results of the interpreted and executed PHP code, which may be any type of data, including images, with the generated web page. PHP code may also be executed with a command-line interface (CLI) and can be used to implement standalone graphical applications.

Hypertext Markup Language (HTML)

It is a markup language for creating a webpage. Webpages are usually viewed in a web browser. They can include writing, links, pictures, and even sound and video. HTML is used to mark and describe each of these kinds of content so the web browser can display them correctly. HTML can also be used to add meta information to a webpage. Meta information is usually not shown by web browsers and is data about the web page, e.g., the name of the person who created the page. Cascading Style Sheets (CSS) is used to style HTML elements while JavaScript is used to manipulate HTML elements and CSS styles.

3.3 DISCUSSION OF CODE SEGMENTS

Login

```
<?php
session_start();
error_reporting(1);
?>
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">
<html>
<head>
<title>Adminstrative AreaOnline Quiz </title>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
<link href="../quiz.css" rel="stylesheet" type="text/css">
</head>
<body>
<?php
include("header.php");
extract($_POST);
if(isset($submit))
{
	include("../database.php");
	$rs=mysql_query("select * from mst_admin where loginid='$loginid' and pass='$pass'",$cn) or die(mysql_error());
	if(mysql_num_rows($rs)<1)
	{
```

```
                echo "<BR><BR><BR><BR><div class=head1> Invalid User Name or Password<div>";
                exit;

        }
        $_SESSION['alogin']="true";
}
else if(!isset($_SESSION[alogin]))
{
        echo "<BR><BR><BR><BR><div class=head1> Your are not logged in<br> Please <a href=index.php>Login</a><div>";
                exit;
}
?>
<p class="head1">Welcome to Admistrative Area </p>
<div style="margin:auto;width:90%;height:500px;box-shadow:2px 1px 2px 2px #CCCCCC;text-align:left">
<div style="margin-left:20%;padding-top:5%">
<p class="style7"><a href="subadd.php">Add Subject</a></p>
<p class="style7"><a href="testadd.php">Add Test</a></p>
<p class="style7"><a href="questionadd.php">Add Question </a></p>
<p align="center" class="head1"> </p>
</div>
</div>
</body>
</html>
```

Connector

```
<?php
$servername = "localhost";
$username = "root";
$password = "";
$db = "book_store";
try {
  $conn = new PDO("mysql:host=$servername;dbname=myDB", $username, $password, $db);
  // set the PDO error mode to exception
  $conn->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);
  echo "Connected successfully";
  }
catch(PDOException $e)
  {
  echo "Connection failed: " . $e->getMessage();
  }
?>
```

CHAPTER 4

SNAPSHOTS

ADMIN SIDE

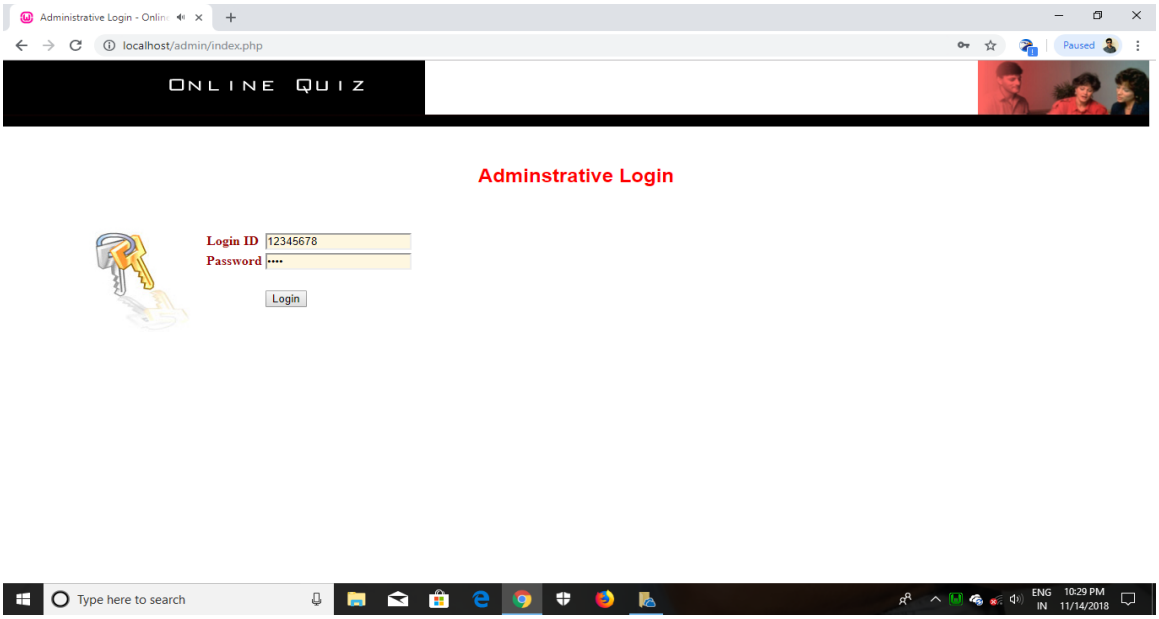

Fig 4.1 LOGIN PAGE

The ADMIN is required to enter their respective Login_ID's and password for them to login into their respective portals.

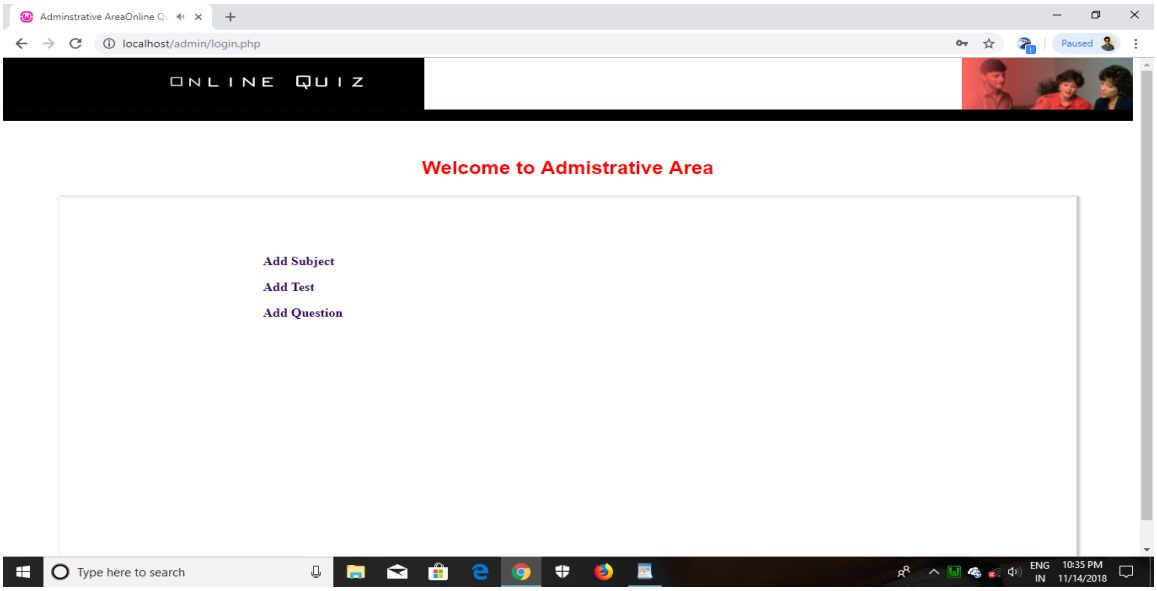

Fig 4.2 ADMISTRATIVE AREA

Has option to add subject, add test, and add questions.

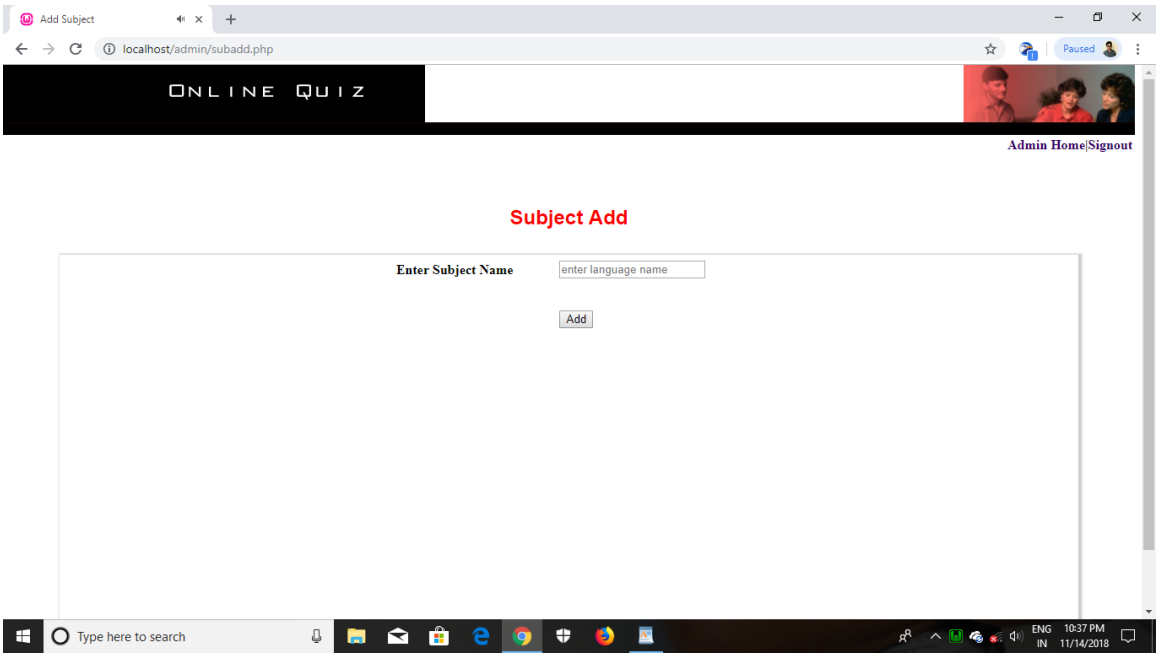

Fig 4.3 ADD SUBJECT

Admin is provided an option to add subject.

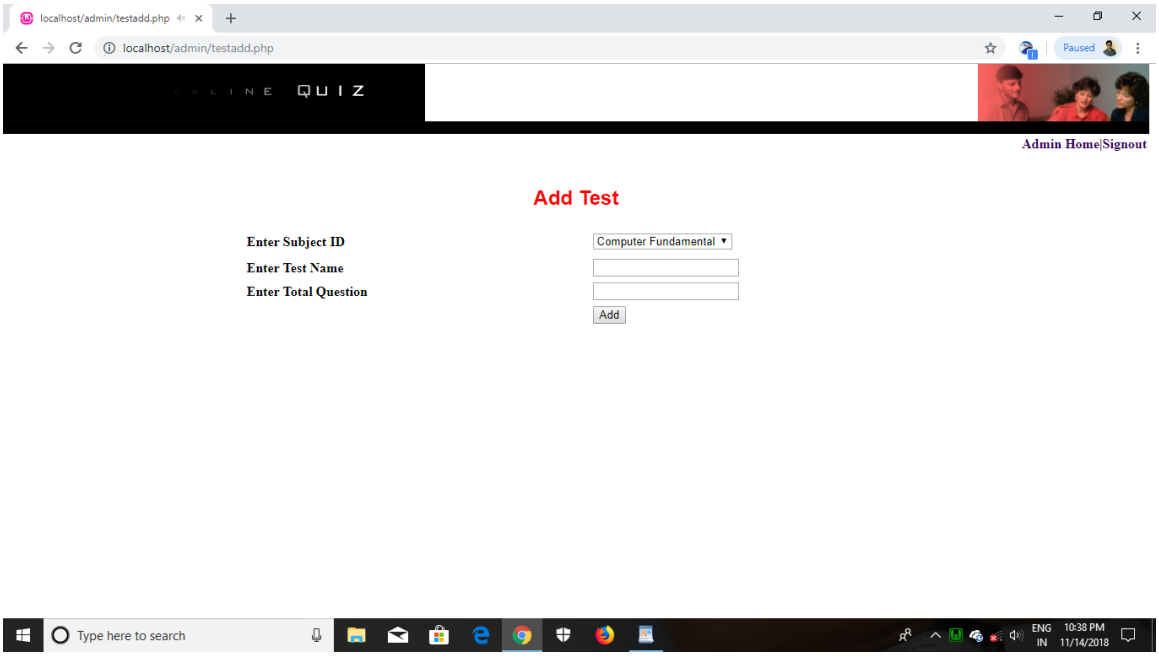

Fig 4.4 ADD TEST

Admin adds test details.

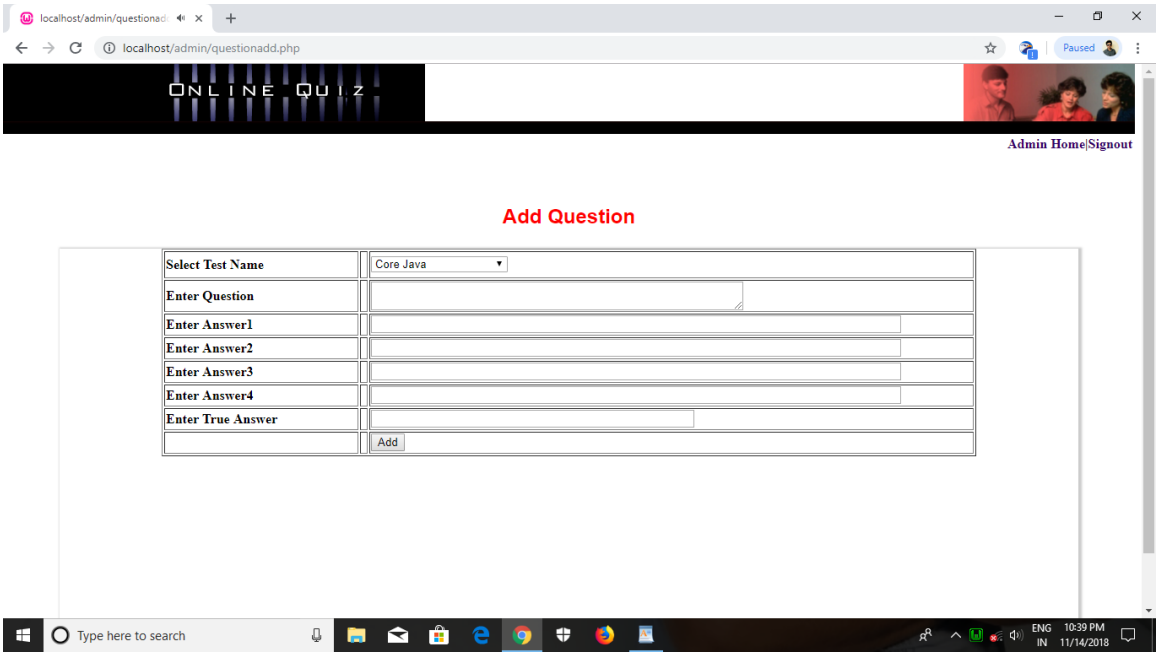

Fig 4.5 ADD QUESTION

Admin add the questions.

USER SIDE

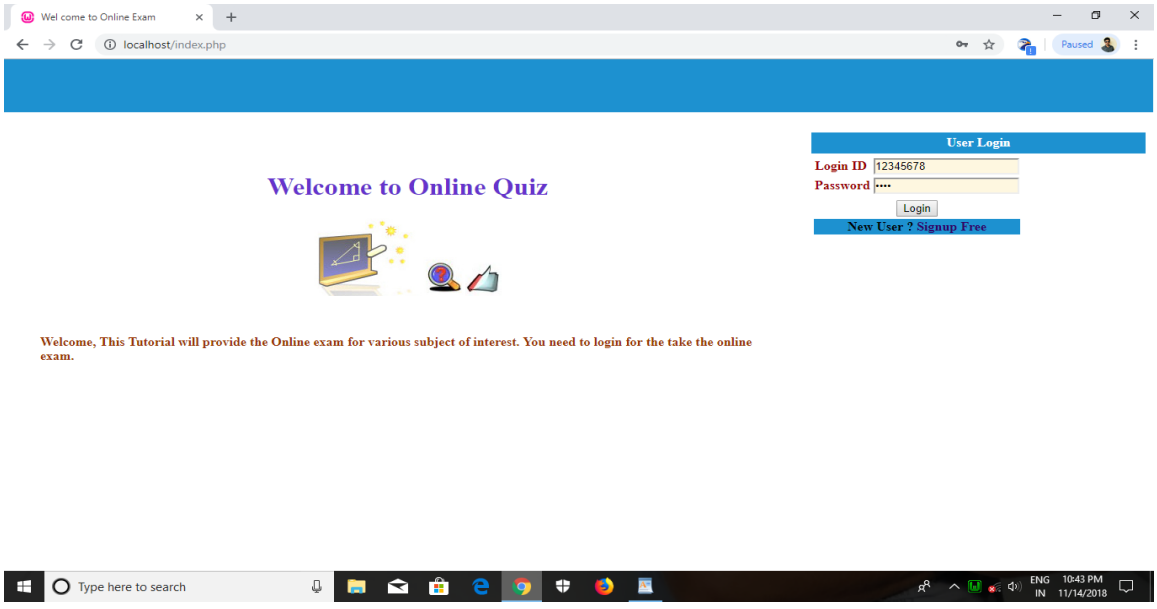

Fig 4.6 STUDENT LOGIN

Student logs in with his valid login_id and password.

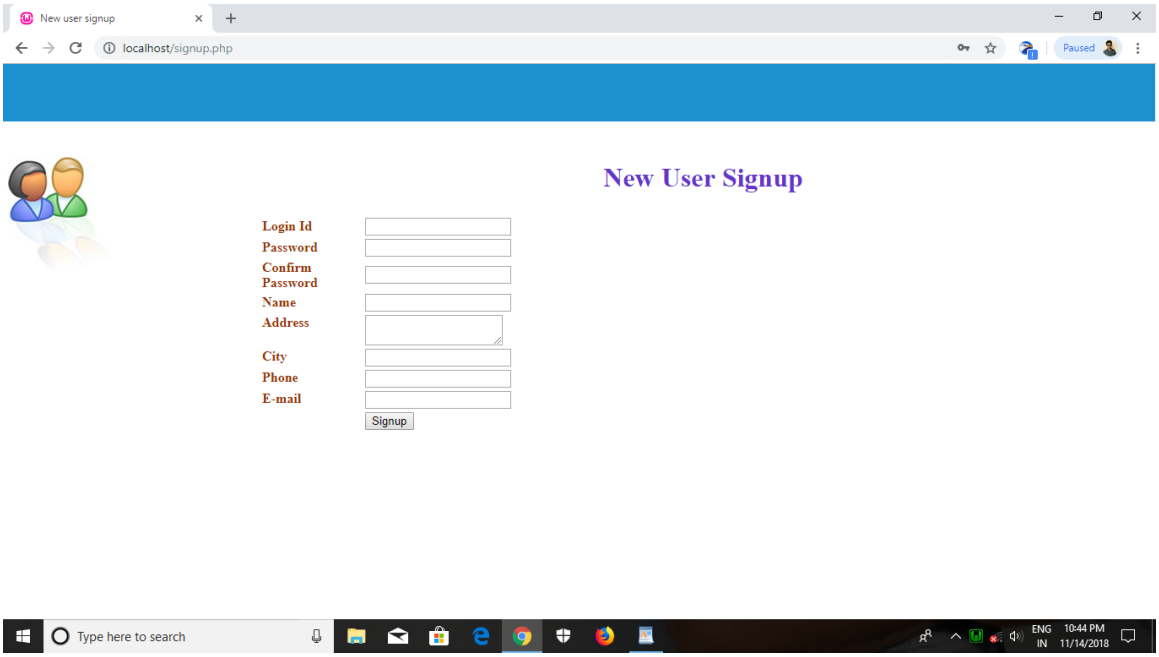

Fig 4.7 USER SIGNUP

User has to Sign up before he has to login.

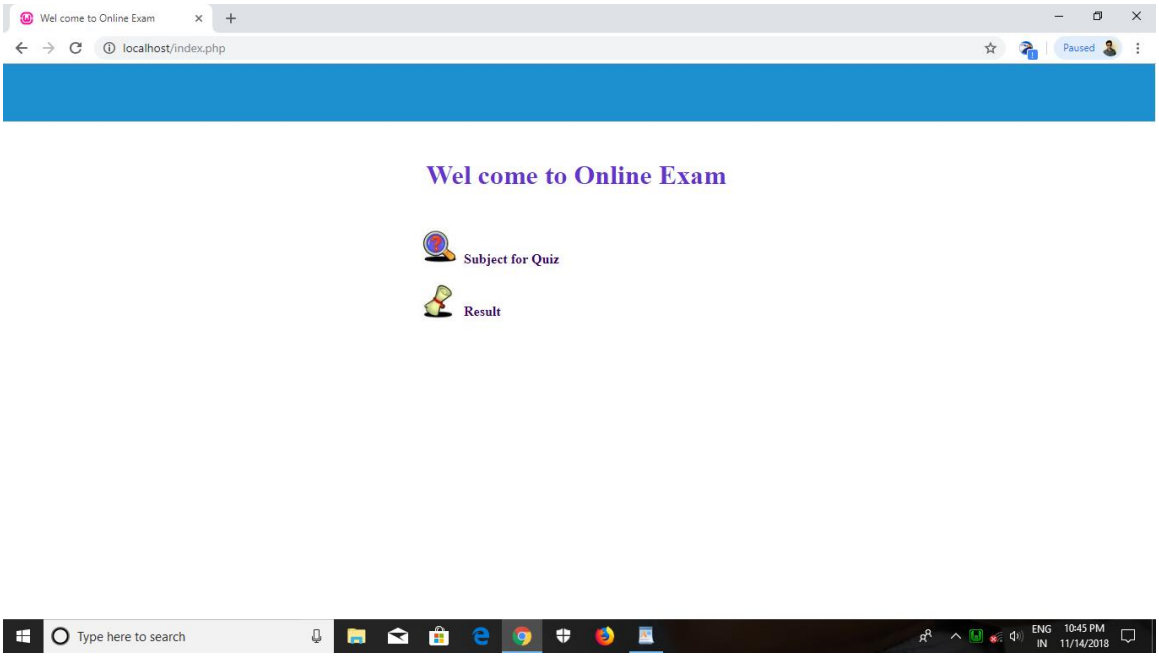

Fig 4.8 WELCOME PAGE

User takes up the quiz.

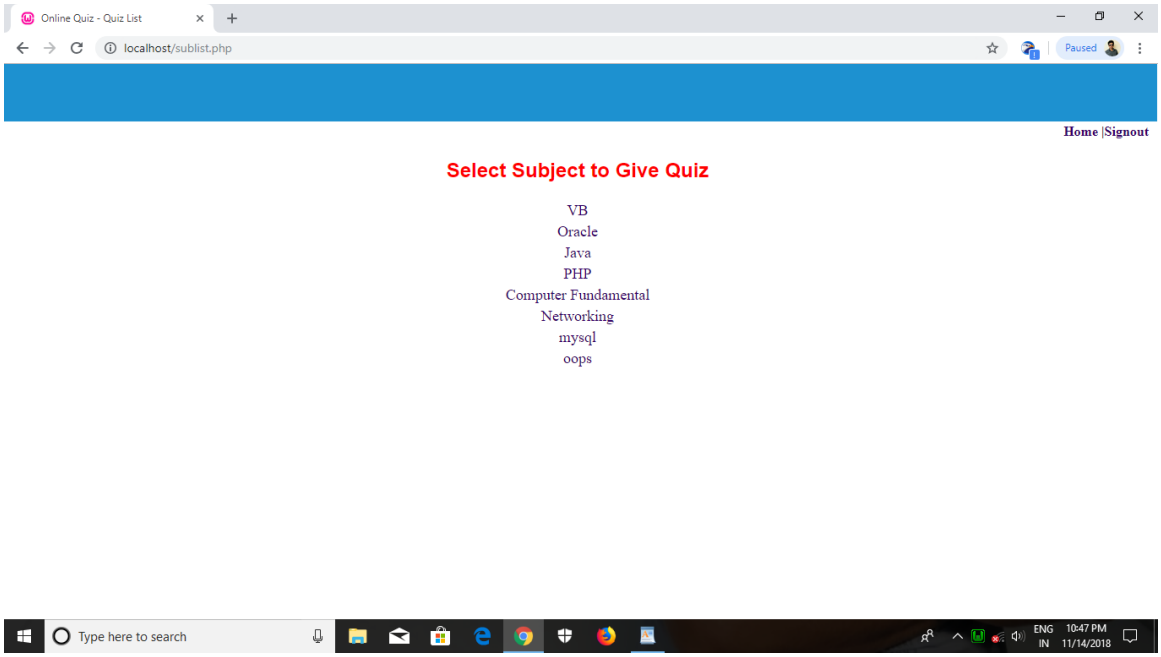

Fig 4.9 SELECT SUBJECT

User has options to take up quiz of particular subject on the list.

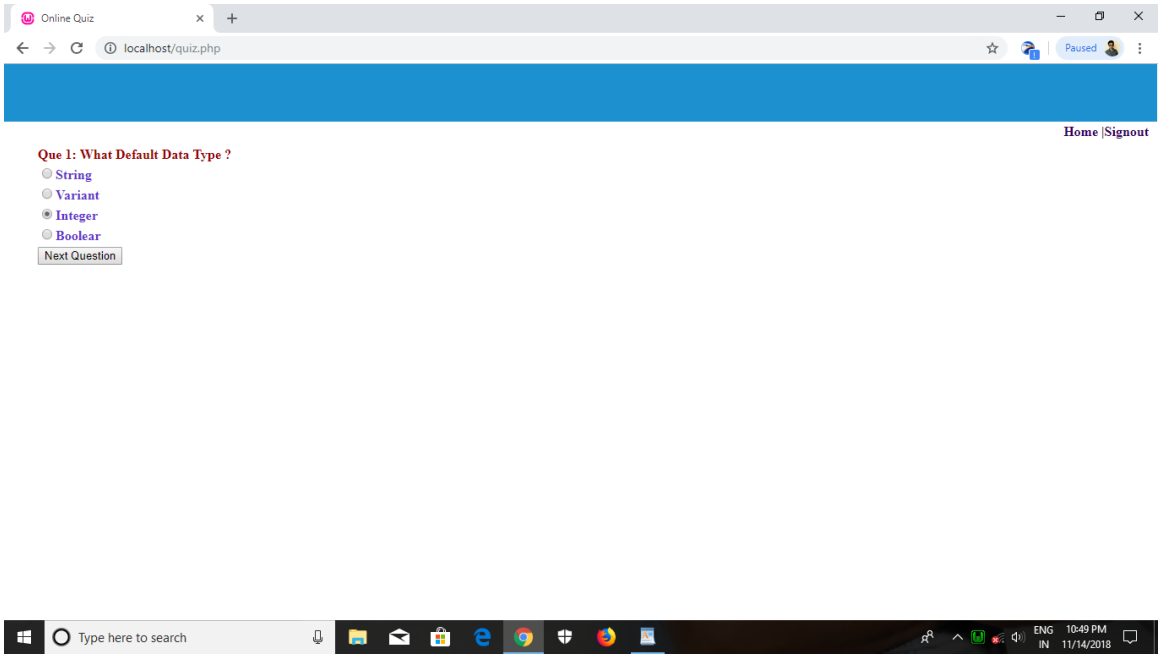

Fig 4.10 QUIZ QUESTIONS

User gives the examination.

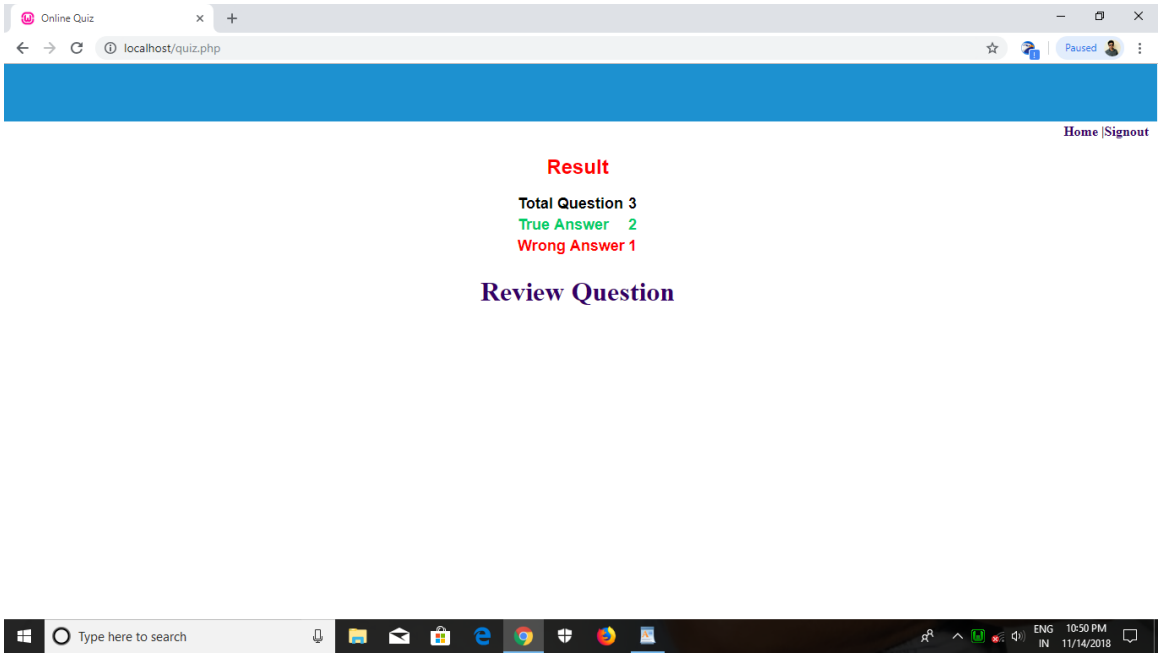

Fig 4.11 RESULT PAGE

User gets result based on his performance.

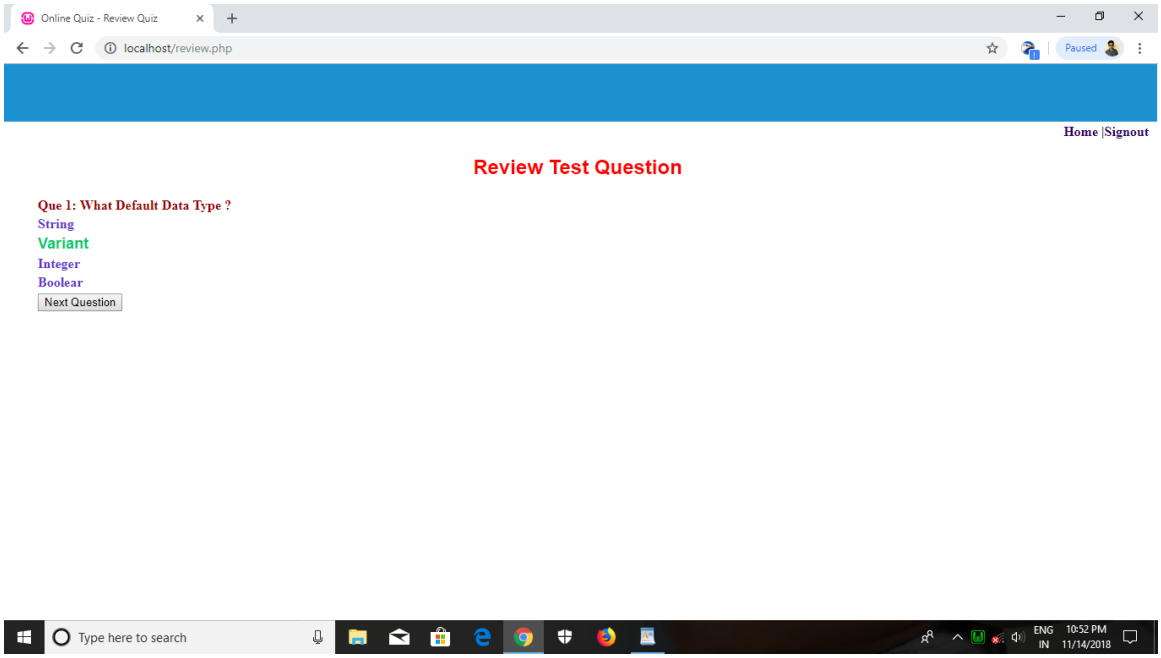

Fig 4.12 REVIEW TEST QUESTION

Shows the right answer.

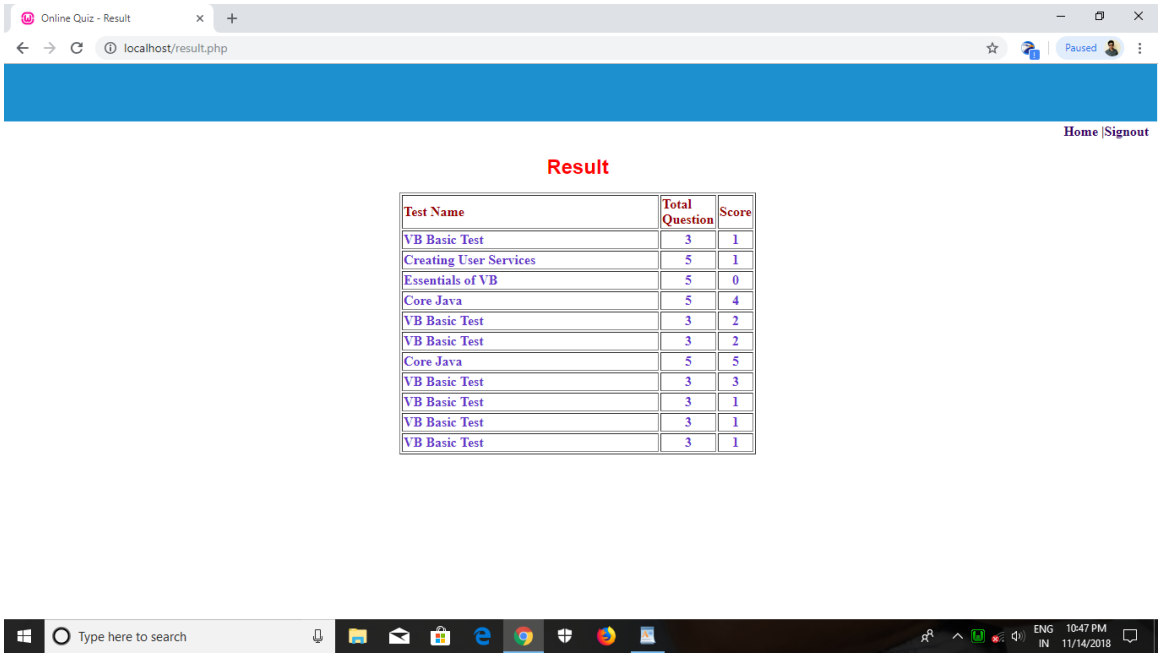

Fig 4.13 RESULT

Result sheet of all users.

CHAPTER 5

CONCLUSION AND FUTURE ENHANCEMENTS

The Online Examination System is developed using html and MySQL fully meets the objectives of the system for which it has been developed. The system has reached a steady state where all bugs have been eliminated. The system is operated at a high level of efficiency and all the teachers and user associated with the system understands its advantage. The system solves the problem. It was intended to solve as requirement specification.

This can be used in educational institutions as well as in corporate world. Can be used anywhere any time as it is a web based application(user location doesn't matter). No restriction that examiner has to be present when the candidate takes the test.

REFERENCES

https://www.wikipedia.com

https://www.Quora.com

https://www.MySql.com

https://www.Wamp.com