

Government Polytechnic, Kolhapur

Department of Information Technology

A Project Report On

"Online Quiz Game"

In the partial fulfillment of the requirements of Project Report for Semester VI of Third Year of Diploma in Information Technology proposed by Government Polytechnic, Kolhapur.

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Under The Guidance Of

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CERTIFICATE

This is to certify that

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Student of Third Year Information Technology Government Polytechnic, Kolhapur have satisfactorily completed the project work entitled

"Online Quiz Game"

Towards the partial filament of Diploma in Information Technology in academics 2021-22. This Report Represents the Benefited work done by students.

Place: Kolhapur

Date:

Guide HOD Principal

(Prof. P. V. Kole) (Prof. S. A. Nadgeri) (Prof. D. M. Garge)

Internal Examiner External Examiner

Acknowledgement

Apart from the efforts of us, the success of any project depends largely on the encouragement and guidelines of many others. Our team takes this opportunity to express our gratitude to the people who have been instrumental in the successful completion of this project. We would like to show our greatest appreciation to Prof. P. V. Kole Mam.

We are also thankful to Prof. S. A. Nadgeri(HOD of IT Dept.) and all faculty members of our department for giving us guidance for making this project report successfully.

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	ONLINE QUIZ GAME
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Introduction-

The **E Quiz Game using PHP MySQL** is a project that can be used for educational purposes. This project will help faculty to manage the student quizzes records. Faculty can also monitor if the student already has taken the quiz and how many students have already taken the quiz. Faculty can create questions as much as he/she wants and answerable by choosing four options. Quizzes are restricted to the selected students who are listed by the faculty. Each option is randomly queued per question and so is the question per quizzes. The student can immediately know his/her score after submitting the quiz and also can review their answer sheet to know which question they answered wrong and right.

E Quiz Game system helps students to offer a quick and easy way to appear for the test. It also provides the results immediately after the examination with 100% accuracy and security. Student can enter to perform exam only with their valid username and password. This provides time limit. The user can see their results after completing the exam. This helps the students to write the exam from far distance and which can provide security and simplicity and other beneficial features to the user.

1. Existing system

This system is required to prepare registration\application form, question paper for the students and required to print a lot of number manually. To calculate how many students registered, and verification of details of these students in a month by hand is very difficult. This requires quite a lot of time and wastage of money as it requires quite lot of manpower to do that. Another factor that takes into account that is the possibility of errors. The limitation of existing system is that it is not all personalized. It cannot be used for personal and quick reference. Even the other staff members can make quick entries if the responsible person is not present.

- Time Consuming for creating question paper
- Time to check right and wrong answers
- Calculation of Marks
- Human error
- Limitation of no of student can give examination at a time
- Require teacher to monitor exam center
- Student needs to come exam center for giving test

2. Proposed System

The proposed system has got many advantages. People from different parts of the world can register very easily. The new system is more personalized. It is maze in such a manner that all the new users can understand all the options in it very easily. It is made in a quick and easy referential manner. Access to all important matters are not always locked and can be opened easily at the time of urgency. The advantages of proposed system are that security is maintained in the new system.

Securities for all important data are maintained confidentially. As it is easily understandable and user friendly, quick entries can be made in this system.

- Provides complete online web based solution, including student registration, giving tests, storing of results.
- Complete web based administration, administrator can manage examination and question bank from web interface.
- Student can give examination from anywhere of the world by 24X7
- 100% accuracy in result calculation
- Randomization of question set

Features of E Quiz Game:

- ✓ **Login Page** This page helps to secure the project data and also to helps to manage users' access.
- ✓ **Home Page** This page is the welcoming page or the page where the user is redirected after logging in to the system. On this page also, quizzes summary can be seen.
- ✓ **Faculty Page** On this page, the administrator will manage the faculty list such as creating new and updating and deleting data of the faculty.
- ✓ **Student Page** At this. page, both faculty, and administrator can manage this page. This is where student data are listed and being managed.
- ✓ **Quiz List for Faculty** This page is where can faculty create quizzes and add students who can take the quiz. On this page, the Administrator can also manage quizzes.
- ✓ **Quiz List for Student** This page where student quizzes are listed.
- ✓ **Answer Sheet Page** This is the page where the student will answer their quiz.
- ✓ **Quiz Record Page** On this page, admin and faculty can see the records of the students each quiz.

2. REQUIREMENT AN	ALYSIS

Requirement Analysis

In most institute all the examination are manually handled by Teachers. This procedure is time consuming. Each and everything related to department or related to student examination is stored manually and if this paper stored is lost by mistake, then there is loss of record and also wastage of papers. All this work is very tedious to all the staff.

A lot of paper is needlessly wasted in the traditional evaluation process. Wasting such a valuable environmental resource often goes against the institution's 'green' initiatives and university wide goals.

In some institutes online examination can be taken for short manner. But there is a risk of server hack. Or the lack of knowledge of the computer system. This is online examination system so students think that they can give the examination from computer. So, they can search the answer on internet and give the answer. So, for that we can set the timer and stop the student from the searching answers.

Many times, in the colleges there is lack of computers, so only limited students are giving the exam at a time, so it is important to make examination online and can be taken on the mobile, so any can give the exam from anywhere and anytime.

Requirement Analysis

1. Software Requirements

- A. Front end:
 - I. HTML
 - II. CSS
 - III. JavaScript
- B. Back end:
 - 1. PHP
 - 2. MYSQL
- C. Browser used: Google Chrome, Opera Mozilla
- D. **Software used:** XAMPP Server

2. Hardware Requirements

Client Side =

Intel Core i5 processor, 2GB RAM

Server Side =

Intel Core i5 processor, minimum 6GB RAM, 1TB Hard Disk

Description of software Environment/Technology:

1.HTML:

The HyperText Markup Language or HTML is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as JavaScript.

Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.

HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects such as interactive forms may be embedded into the rendered page. HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. HTML elements are delineated by tags, written using angle brackets. Tags such as and <input /> directly introduce content into the page. Other tags such as surround and provide information about document text and may include other tags as sub-elements. Browsers do not display the HTML tags but use them to interpret the content of the page.

HTML can embed programs written in a scripting language such as JavaScript, which affects the behavior and content of web pages. Inclusion of CSS defines the look and layout of content. The World Wide Web Consortium (W3C), former maintainer of the HTML and current maintainer of the CSS standards, has encouraged the use of CSS over explicit presentational HTML since 1997. A form of HTML, known as HTML5, is used to display video and audio, primarily using the <canvas> element, in collaboration with javascript.

2.CSS:

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language such as HTML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript.

CSS is designed to enable the separation of presentation and content, including layout, colors, and fonts.^[3] This separation can improve content accessibility; provide more flexibility and control in the specification of presentation characteristics; enable multiple web pages to share formatting by specifying the relevant CSS in a separate .css file, which reduces complexity and repetition in the structural content; and enable the .css file to be cached to improve the page load speed between the pages that share the file and its formatting.

Separation of formatting and content also makes it feasible to present the same markup page in different styles for different rendering methods, such as on-screen, in print, by voice (via speech-based browser or screen reader), and on Braille-based tactile devices. CSS also has rules for alternate formatting if the content is accessed on a mobile device.

The name cascading comes from the specified priority scheme to determine which style rule applies if more than one rule matches a particular element. This cascading priority scheme is predictable.

The CSS specifications are maintained by the World Wide Web Consortium (W3C). Internet media type (MIME type) text/css is registered for use with CSS by RFC 2318 (March 1998). The W3C operates a free CSS validation service for CSS documents.^[5]

In addition to HTML, other markup languages support the use of CSS including XHTML, plain XML, SVG, and XUL.

3.Javascript:

JavaScript often abbreviated JS, is a programming language that is one of the core technologies of the World Wide Web, alongside HTML and CSS. Over 97% of websites use JavaScript on the client side for web page behavior,^[12] often incorporating third-party libraries.^[13] All major web browsers have a dedicated JavaScript engine to execute the code on users' devices.

JavaScript is a high-level, often just-in-time compiled language that conforms to the ECMAScript standard. It has dynamic typing, prototype-based object-orientation, and first-class functions. It is multi-paradigm, supporting event-driven, functional, and imperative programming styles. It has application programming interfaces (APIs) for working with text, dates, regular expressions, standard data structures, and the Document Object Model (DOM).

The ECMAScript standard does not include any input/output (I/O), such as networking, storage, or graphics facilities. In practice, the web browser or other runtime system provides JavaScript APIs for I/O.

JavaScript engines were originally used only in web browsers, but are now core components of some servers and a variety of applications. The most popular runtime system for this usage is Node.js.

Although Java and JavaScript are similar in name, syntax, and respective standard libraries, the two languages are distinct and differ greatly in design.

4.PHP:

PHP is a general-purpose scripting language geared toward web development. It was originally created by Danish-Canadian programmer Rasmus Lerdorf in 1994. The PHP reference implementation is now produced by The PHP Group. PHP originally stood for Personal Home Page, but it now stands for the recursive initialism PHP: Hypertext Preprocessor.

PHP code is usually processed on a web server by a PHP interpreter implemented as a module, a daemon or as a Common Gateway Interface (CGI) executable. On a web server, the result of the interpreted and executed PHP code – which may be any type of data, such as generated HTML or binary image data – would form the whole or part of an HTTP response. Various web template systems, web content management systems, and web frameworks exist which can be employed to orchestrate or facilitate the generation of that response. Additionally, PHP can be used for many programming tasks outside the web context, such as standalone graphical applications^[11] and robotic drone control. PHP code can also be directly executed from the command line.

The standard PHP interpreter, powered by the Zend Engine, is free software released under the PHP License. PHP has been widely ported and can be deployed on most web servers on a variety of operating systems and platforms.

The PHP language evolved without a written formal specification or standard until 2014, with the original implementation acting as the de facto standard which other implementations aimed to follow. Since 2014, work has gone on to create a formal PHP specification.

W3Techs reports that, as of January 2022, "PHP is used by 78.1% of all the websites whose server-side programming language we know." PHP version 7.4 is the most used version. Support for version 7.3 was dropped on 6 December 2021.

5.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. A relational database organizes data into one or more data tables in which data may be related to each other; these relations help structure the data. SQL is a language programmers use to create, modify and extract data from the relational database, as well as control user access to the database. In addition to relational databases and SQL, an RDBMS like MySQL works with an operating system to implement a relational database in a computer's storage system, manages users, allows for network access and facilitates testing database integrity and creation of backups.

MySQL is free and open-source software under the terms of the GNU General Public License, and is also available under a variety of proprietary licenses. MySQL was owned and sponsored by the

Swedish company MySQL AB, which was bought by Sun Microsystems (now Oracle Corporation). In 2010, when Oracle acquired Sun, Widenius forked the open-source MySQL project to create MariaDB.

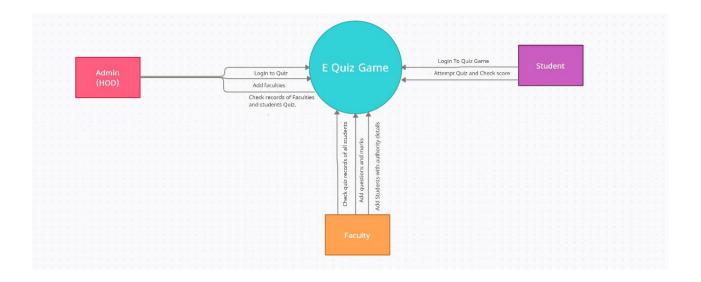
6.XAMPP:

XAMP is a free and open-source cross-platform web server solution stack package developed by Apache Friends, consisting mainly of the Apache HTTP Server, MariaDB database, and interpreters for scripts written in the PHP and Perl programming languages. Since most actual web server deployments use the same components as XAMPP, it makes transitioning from a local test server to a live server possible.

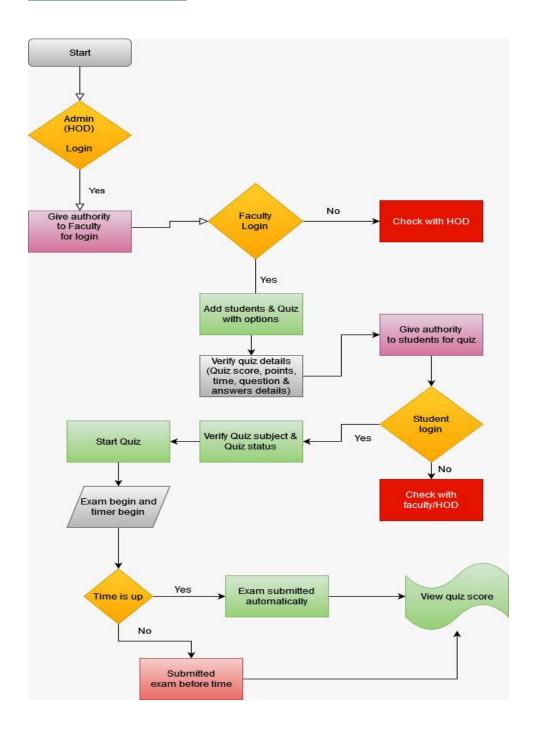
XAMPP's ease of deployment means a WAMP or LAMP stack can be installed quickly and simply on an operating system by a developer, with the advantage that common add-in applications such as WordPress and Joomla! can also be installed with similar ease using Bitnami.

	ONLINE QUIZ GAMI
DESIGN	

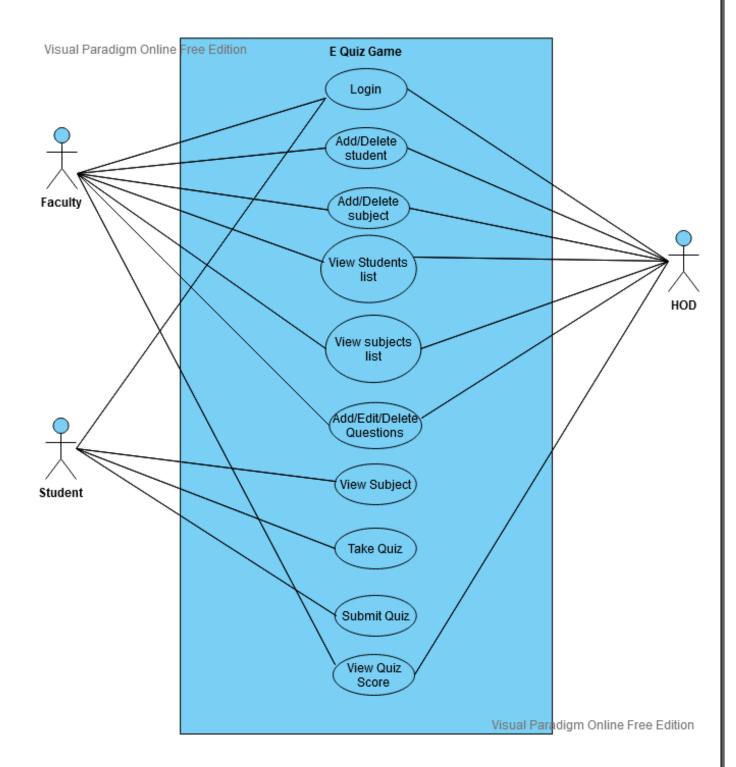
1. DFD LEVEL 0



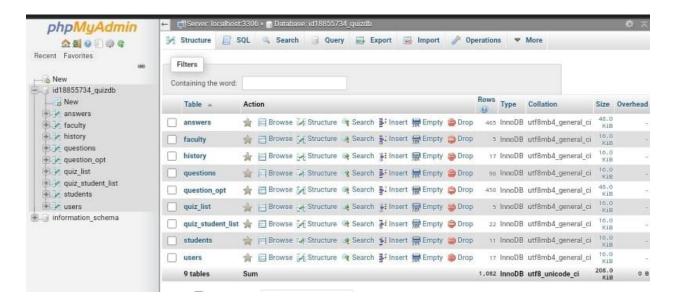
2. Algorithm Diagram



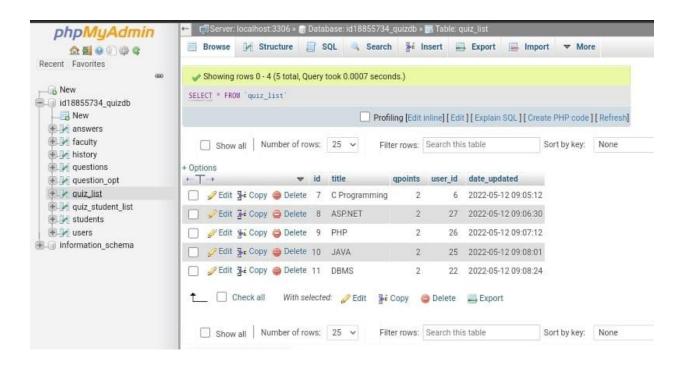
3. <u>Use Case Diagram</u>



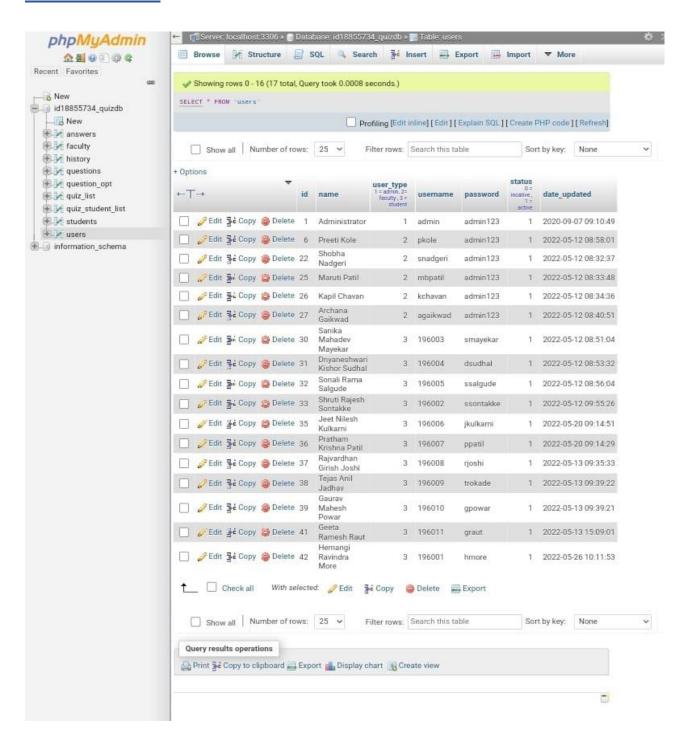
4. Back End (Database view)



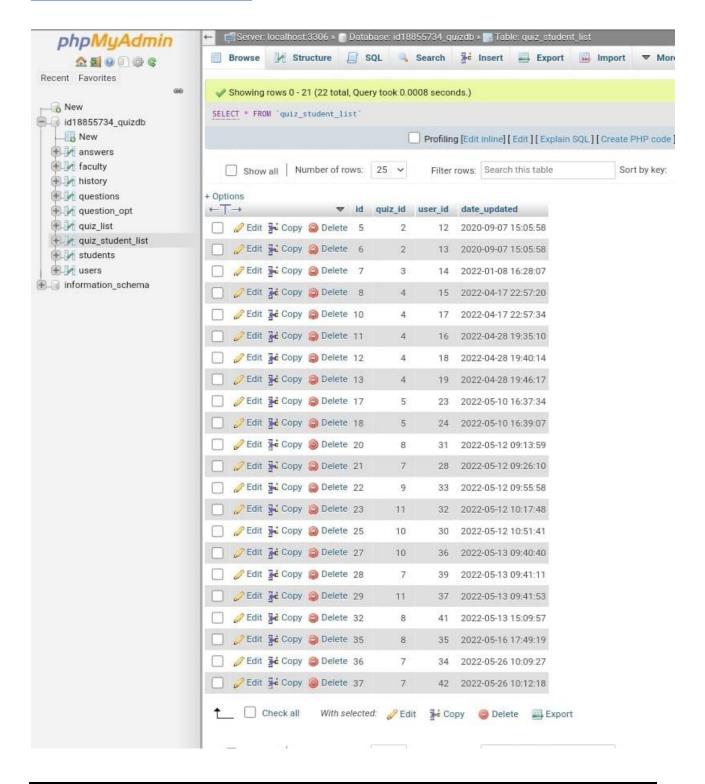
QUIZ LIST RECORD



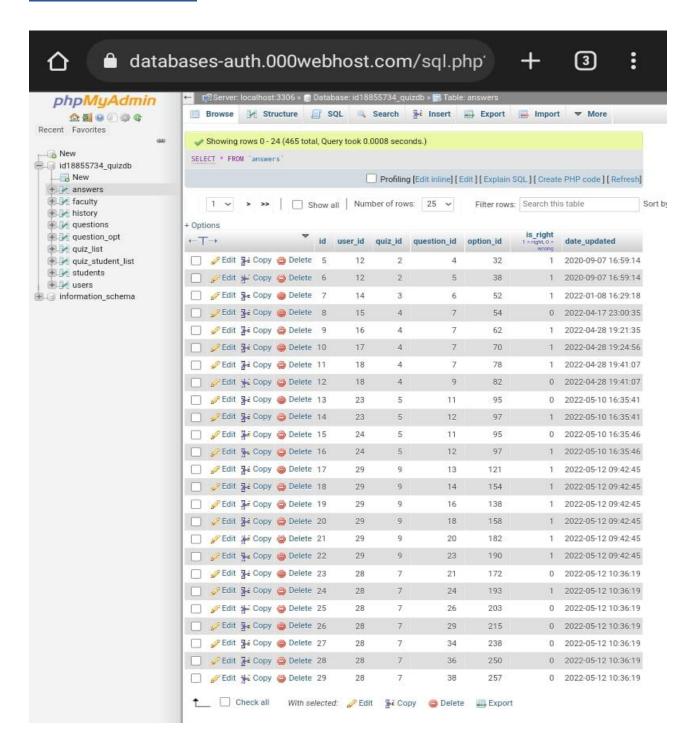
USER RECORD



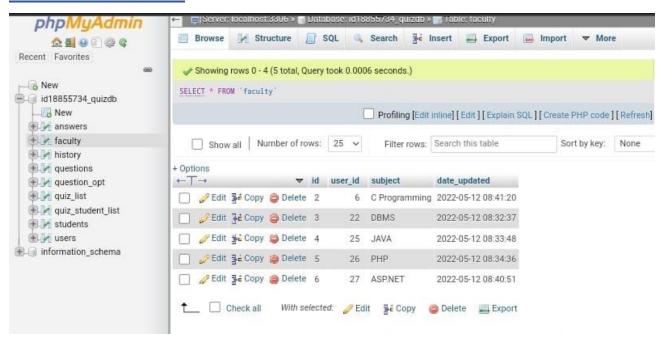
STUDENT LIST RECORD



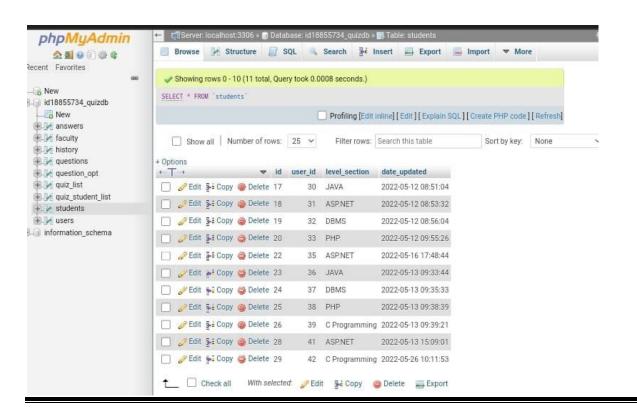
ANSWER RECORD



FACULTY RECORD



STUDENT RECORD



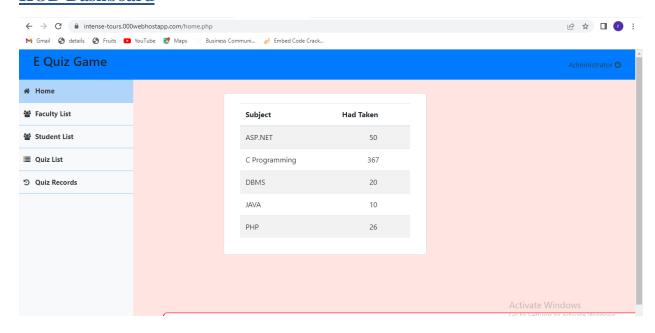
	ONLINE QUIZ GAME
IMPLEMENTATION	

5. Frond End (Web view):

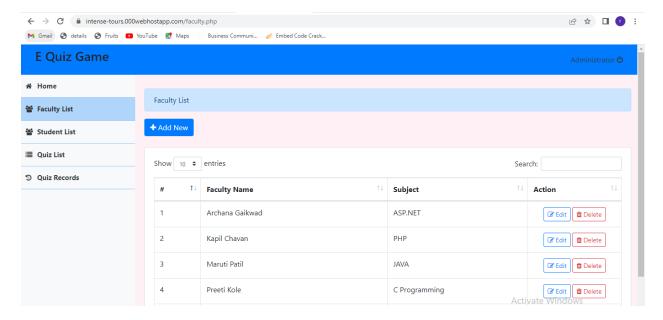
Login Page



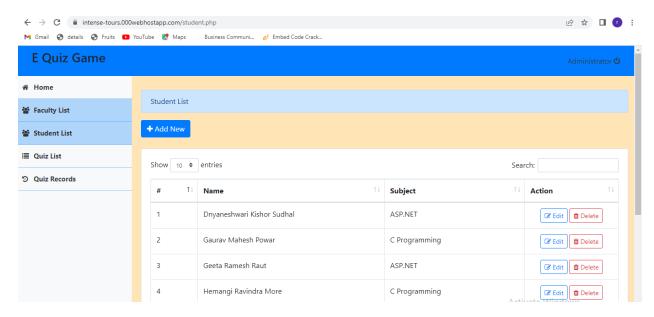
HOD Dashboard



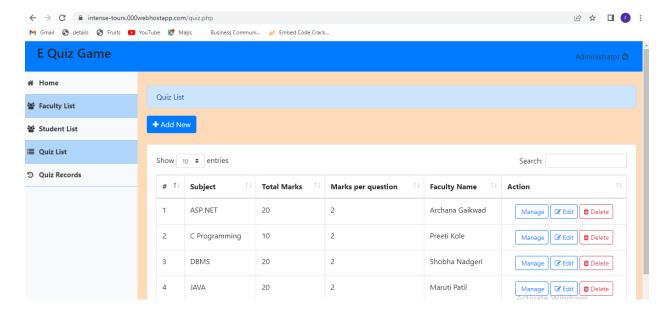
Admin can add/edit/delete faculties



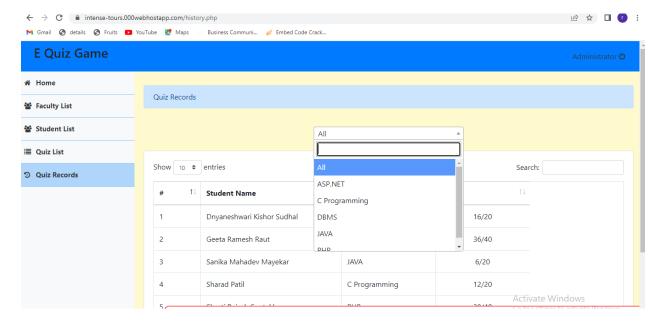
Admin can add/edit/delete/view added students by faculties



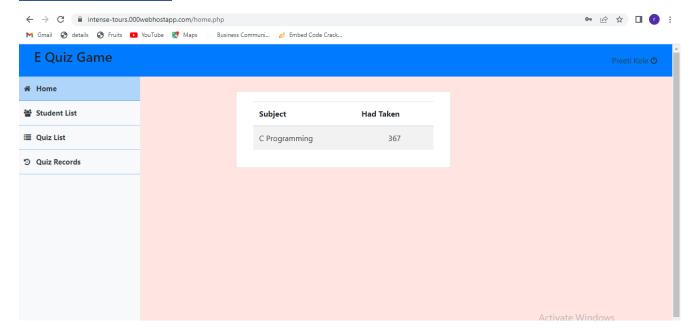
Admin can manage/view quiz list added by faculties



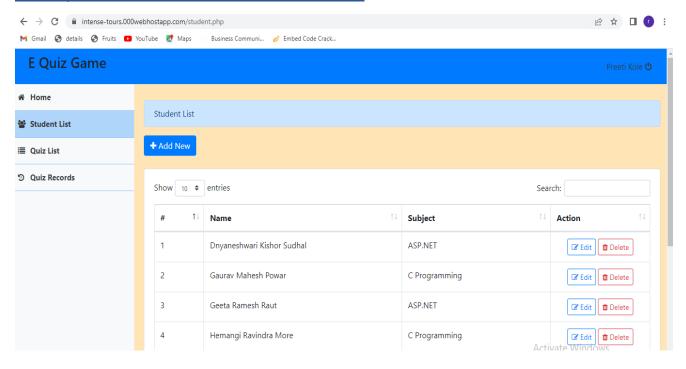
Admin can view quiz records by subject wise and view quiz records by searching specific students from search view



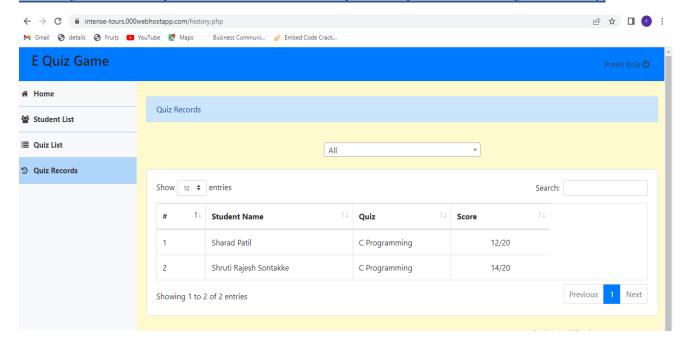
Faculty Dashboard



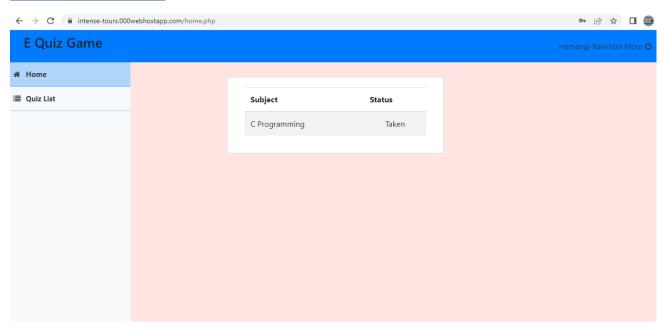
Faculty can add/view/delete student records



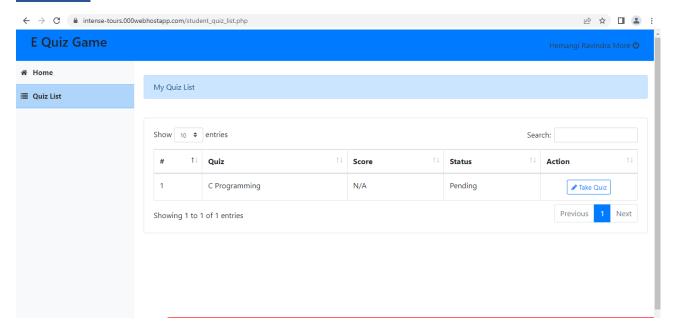
Faculty can view quiz records and view specific quiz records by searching



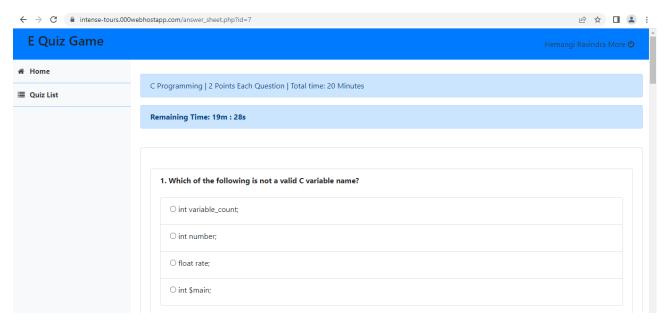
Student Dashboard



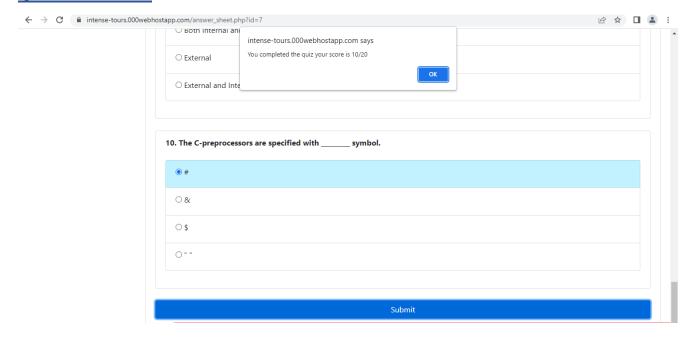
Quiz List



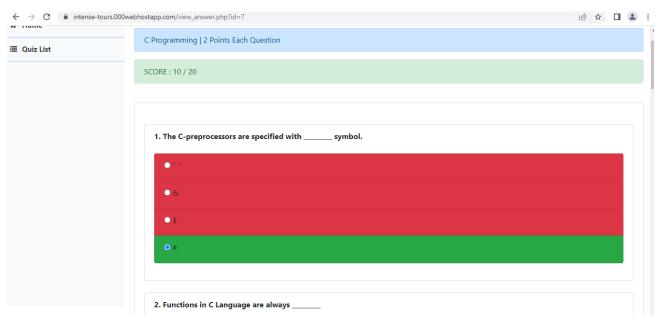
Quiz Page



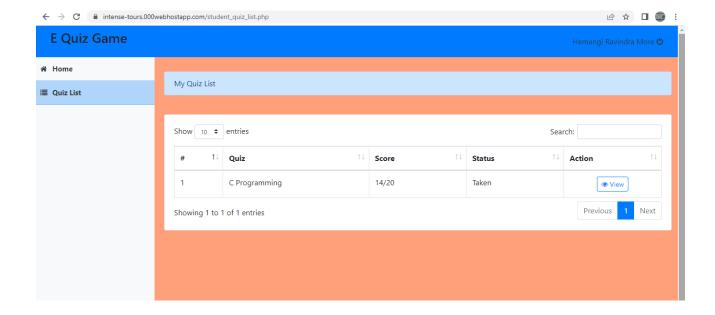
Quiz Score Alert



View Answer Sheet



Student status after attempting exam



	ONLINE QUIZ GAME
CONCLUSION	
CONCLUSION	

Conclusion

With the completion of this project, we conclude that it has achieved its purpose. The whole project provides a base for students to take their exam using software and allow lecturers to add questions and answers into the system. The system is developed using PHP, HTML, CSS, JavaScript and data are saved in the MYSQL database.

E Quiz game for introduction to management course is the best compared to paper-based exam. The automated system helps students and lecturers to save time and makes the process faster. It saves space since answers papers will not be used. With a user-friendly system that has security, integrity and the database is neither inconsistent nor redundant.

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FUTURE SCOPE OF E QUIZ GAME

E Quiz Game System is widely used as compared to other exams .E Quiz Game system can be used inprivate institutes as well as educational institution. As it is user friendly web base application it can be usedanywhere and anytime. Every software may have some cases of bugs, errors, security related problems or system faults. There are manyproblems or system faults for example; computer collapse or crashes due to power supply problem will invalidate efforts of number of students. There are large numbers of chances in which software may produce wrong results ormay display invalid data. These bugs must be identified and solved for improving quality of software. So in futurewe can develop more secure software by using advanced technologies.

Following are the future enhancement

- Subject can added / removed by Teachers
- ➤ Multiple attemts in case of failure
- ➤ To make web application more securly

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