Online Quiz System

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DECLARATION

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ABSTRACT

The technological development and impact of computers and internet on our lives has been verified over time affected various sectors of activity. And almost every task today is being run through computers the online quiz system is an essential part of the educational institutions. Online quiz exams have ensured educational continuity, providing the option of taking an exam remotely in a secure virtual environment using the latest technology. There are several benefits of an online quiz system as it is conducted digitally to evaluate students' academic knowledge and understanding of the curriculum. It also offers creativity to devise new ideas and solutions. Typically, evaluations continue to be based on the pen-and-paper approach, wherein students are gathered and handed the question paper to be completed within the allotted time. The System is based on web server, which can be implemented on any computer. This application is developed using Python, CSS, and HTML. The Admin plays an important role in the management of this system. In this project, the user has to perform all the main functions from the Admin side. The users will be provided with the separate username and password to make the students status. The System communicates with database residing on a remote server. The System facilitates the end users with interactive design and automated processing of result publication.

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ABREVIATION

HOD-Head of Department.
OQS-Online System System
ICT-Information & Communication Technology.
GUI-Graphical User Interface.
HTML-Hypertext Markup Language.
PHP-Preprocessor.
XML-Extensible Markup Language.
JSP-Java Server Page
CSS-Cascading Style sheet.
SQL-Sequential Query Language.
AJAX- Asynchronous JavaScript and XML
SRS-Software Requirement Specification.

CHAPTER 1 INTRODUCTION

1.1 Background

The increase rates of internet user in previous few years are too high. Everybody used to perform most of the daily tasks with online system and service. Instead of an examination center, students log onto an online system to take the test and share their responses. The assessor evaluates and circulates the test results.. This is an web based application featuring very simple and easy to use functionality along with easy customization. It delivers a wonderful online service for both student and the assessor so that student will not require rushing to check their result.

1.2 Motivation

The following points demonstrate the necessity of an online quiz system…

- **Environment-Friendly :** Using an online exam system will ensure that institutions and organizations can go paper-free and not print exam papers and create a paper record of applicants, etc.
- **Economical :** The advantages of an online quiz examination system include eliminating redundant and expensive processes, bolstering the bottom line of an educational institution administering the system.
- **Quick Turnaround Time :** Traditionally, exam distribution demands adequate time for end-to-end management. On the contrary, the benefits of an online examination system have expedited the process. Examiners can merely upload the email ids of the participants and invite them for the assessment; the most notable aspect is the instant generation of the results.
- **Highly Secure :** One of the main benefits of an online examination system is the enhanced privacy for students, which validates the usefulness of the entire process. There is no room for conducting malicious activities to rig the system and produce incorrect

results, indulge in cheating or other such unlawful practices. In such a secure system, students too embrace the results without contesting the outcomes, which encourages positive growth.

- **Easy-to-use :** One of the main advantages of an online examination system is the ease-of-use for the administration and the students. The examiners can easily set up the questionnaire, determine the grading and send invites to students. Meanwhile, students can take exams remotely. Even participants from remote areas can attend the exam.
- **Auto grading:** The benefits of an online examination system include setting up an automated grading system, more convenient than a standard grading method. The proliferation of technology in eLearning and the increasing number of participants mandate a flawless scoring mechanism that eases teachers' burden, saves time and ensures fairness.

1.3 Outline of Proposed Project

The student's online exam system application will help in taking the student's quiz examination through internet. The project aims to reduce the paper work and saving time . All details about the student's result will be available on a click both user and admin via internet. As the system is online the information is globally present to everyone. Every client will be given with a different username and password so it can be maintained properly.

1.4 Objectives

- Examiners get tired checking huge number of answer sheets, hence the system reduces their workload by automating the manual checking process accurately.
- The system calculates the score and provides results instantly.
- It removes human errors that commonly occur during manual checking.
- The system provides an unbiased result.
- Thus the system excludes human efforts and saves time and resources.

1.5 Outline To Use This Project

If you are keen to get started, all you need is an enthusiasm to learn and a computer running Linux, Windows, Mac OS X, or Solaris. Each of these different operating systems supports Python and postgresql, as is explained later in the book.
In addition to this core platform, it is recommended that you take plenty of time to learn the different skills involved. Learning to bake in your head and solidify. Concepts that may seem obvious to some take a little longer to sink in with others, and you should allow yourself plenty of time to learn these different skills at your own pace.Finally, it is recommended that you have a look around the Internet and join up on some of the Python discussions forums and mailing lists. This will give you a great support mechanism when you don't understand certain concepts or need more help.

1.6 Conclusion

It is important to satisfy user providing good services which encourage them to use the system. Systems popularity largely depends on its stability and services. So, a functional stable online system is necessary . The next chapter demonstrates the Literature Review. Literature Review chapter will cover almost every topic which was used in the proposed projects.

CHAPTER 02 LITERATURE REVIEW

2.1 Introduction

For any research work, the relevant literature is identified, evaluates and synthesizes by literature review. It is a summary of studies related to particular research. A Literature review is essential as it summarizes all the relevant topics. A Literature review should be focused on. So, it should be a limited number of studies rather than collect a wide range of unnecessary studies.

2.2 Software Project Analysis

System Analysis is a described study of the various operations performed by a system and their relationships within and outside of the system. The investigation can be characterized as separating of any entire to discover their tendency, work and so on. It characterizes configuration as to make primer representations of to portray an example of the layout for the arrangement. To plan and complete particularly by a creative course of action or in an apt divider. Framework investigation and configuration can be described as an arrangement of procedures and procedures, a network of premiums, a culture and a scholarly introduction.

2.2.1 Software Process Models

The activities of software development are represented by the software process model. Each process model applies to particular perspectives. The Software process model explains the sequence of the software lifecycle phases.

Let’s take a glance about generic models that are abstractions of the process that can be used to represent various approaches to software development.

Waterfall Model

The phases are Requirements Definition, System and Software Design, Implementation, Testing, and Maintenance. The principle of waterfall models is the previous phase must be completed

before starting the new phase. The Waterfall model requires a plan and schedule every activity before starting working. So it is a plan-driven process.

Prototyping Model

It is a variation of the waterfall model. Building a mock or quick replica of the system to reduce risk is called prototyping. This model is applicable when technical risk is high. The Main goal of this model to reduce risk and costs.

Reuse-oriented Model

Reuse model is based on previously refined phase. But this model may not be always practical. The motive of using this model is to reduce both time and cost.

These generic models are not mutually exclusive. A software project uses them together most of the time. The Proposed process used incremental development method showing in Figure 2.1.

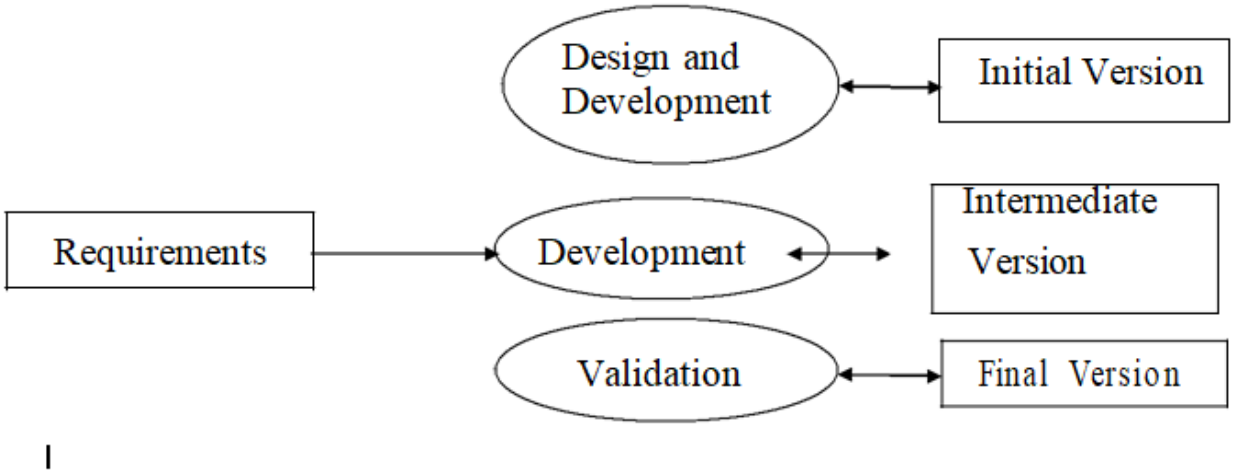

Figure : 2.1

2.2.2 Phases of System Development Life Cycles

- Analysis
- Design
- Implementation
- Maintenance

These phases should be applied serially in order to proper development.

2.3 Technologies Used in the Project

Client-side and Server-side are normally two main places of any websites where the scripts run. Generally, Client-side refers to the front-end side and Server-side refers to the back-end. The working procedures of both sides are different. Client-side can be explained as a web browser by which we can browse websites and Server-side as a host. Programming languages that are used in web applications can refer to as web coding language.

Front End and Back End

1. **Front End:** HTML, CSS, Bootstrap,Ajax.
2. **Back End:** Net beans, JavaScript
3. **Database:** My SQL
4. **Server:** JSP, Glassfish Framework provides a lightweight server for development

2.4 HTML

Hypertext Markup Language (HTML) is the standard markup language for creating web pages and web applications. A web browser receives HTML code from the server or a local device and renders them into web pages. HTML can be embedded with a scripting language like JavaScript which affects the behavior of the web page. The Inclusion of CSS defines the outlook, layout, color, typography of the content. JavaScript with HTML

2.4.1 HTML Tags

The first publicly available HTML version is called “HTML Tags”, first mentioned on the internet by Tim Berners-Lee in late 1991. The building blocks of HTML are called HTML elements. These elements are represented by some tags. Browser use those tags to render the content

Html tags can be a character or a word surrounded by angle brackets. They normally comes in pair named start tag and end tag. End tag is similar to the start tag but with a forwarded slash comes before the tag name. Figure 2.3 shows an syntax format of HTML tags.

Figure 2.2: HTML tag structure

There are many tags in HTML but some of them are frequently used. Some of them are include in Table 2.1

Tags	Uses
	To write paragraph
to	Heading
<a> 	Hyperlink tag
<img>	Insert image to the html pages
<form> </form>	To create html form
	To create unordered list
	To create ordered list
	Division
<i>, <b>	Italic and bold font

Table: 2.1Frequently
Used HTML tags

2.4.2HTML Version

There are many version of HTML. The most updated version of HTML is HTML5. Table 2.2 shows a list of previous HTML versions and release years.

Versions	Year
HTML	1991
HTML 2.0	1995
HTML 3.2	1997
HTML 4.01	1999
XHTML	2000
HTML 5	2014

Table: 2.2HTMLversions

2.5 Cascading Style Sheets (CSS)

CSS describes the style of an HTML document. It defined how a HTML document should be displayed. According to Wikipedia, "CSS is a cornerstone technology of the World Wide Web, alongside HTML. The Web page would be a plain text without CSS. CSS facilitates us to add color, background image, font color, shape, and margin-padding or change the layout overall make our work as an art.

2.5.1 The Importance of Cascading Style Sheets (CSS)

Improves Website Presentation

Design Flexibility and interactivity is the major advantage of CSS. It allows the developer to a flexible environment and provides control over the layout allowing them to make a section-wise change.

Reduce web page loading time

The Browser loaded all the CSS rules once and loaded them in the cache. This cache is used to loading all other pages. This process increases browsing speed as well as user experience

CSS rules are applied continuously to the updated content or sections. This service reduces the repetitive coding style of HTML and Errors

Professional Look

The outlook of the web page largely depends on the CSS. It makes a simple web page to a professional page by adding color, font, images, etc.

Search Engine Friendly

CSS coding style is so much cleaner and the search engine won't have to struggle to read CSS content. So CSS does not affect the Search Engine Optimization procedure.

Browser Compatibility

Today's internet user has more options to browse websites with a different browser. So browser compatibility will be a major problem if any user won't be able to view websites content. CSS increase websites adaptability and ensure more visitor able to view websites content properly.

2.5.2 CSS Selectors

Class Selector: To apply CSS effects on a HTML element, element class can be easily accessed with a dot (.) sign.

```
.myclass {
background-color: green;
padding-left: 20px;
margin-top: 10px; }
```

Id Selector:

HTML elements id can be used to apply CSS effects. Id selector is # sign. #id_name selects the specified id.

Child Selector: Any elements or tags are inside another element or tags are called child elements. Consider this example:

```
body p{
color: #000000
}
```

Here, p is a direct child of the body and the CSS rule directly apply to the all p in the body.

Attribute Selector:

Attribute can also be selected by Attribute Selector for applying CSS effects.

```
input [type = “text”] {
color: #000000
}
```

2.5.3 CSS Inclusion

CSS can be included in four ways. Among them inline CSS and External CSS are most commonly used.

- **Inline CSS:** Inline CSS are applied inside the html tags and that element will only get CSS effects. It is specified by HTML style attributes.
- **External CSS:** It is an external text file with CSS code and .css file extension. <link> tag is used to include external css file in the head section of any html document. External CSS ensure clean code.

2.5.4 Some Important CSS Properties Reference

CSS properties are some keyword that describe rule for how CSS effects are apply to the webpage. CSS properties also include measurements of effects. CSS properties does not the page element but decides the element design and responsiveness. By applying proper property measurements, the HTML looks professional and attractive.

Table 2.3 Describe some common CSS properties with their descriptions.

Background-image	Set an image as the background.
Border	Shorthand property for setting all border properties.
Display	Sets how an element is displayed.
Height and width	Sets the height and width of an element.
Font	Shorthand property for setting all font properties.
Margin	Sets the margin.
Padding	Sets the padding.
Text align	Align the text in an element.

Table 2.3: Important CSS properties

2.6 Bootstrap 4

Among other CSS Framework, Bootstrap is the most popular. It is used for developing responsive and mobile-first websites. Bootstrap is free, open-source. It contains CSS. Bootstrap 4 is the newest version of Bootstrap but Bootstrap 3 is a more stable version of bootstrap.

2.6.1 Features of Bootstrap

Developer who wants to make mobile responsive websites.

- It is pretty easy, to learn Bootstrap. Behind the bootstrap popularity, easiness is the main factor.
- Bootstrap is easily customizable. Though the fact is that bootstrap is designed in 12-grid responsive columns, it is also very easy to customize.

- Responsive utility classes
- are another prominent feature of Bootstrap. This feature is extremely helpful for

Dropdown Component menu is supported in Bootstrap and it is one of the responsive additive features.

2.6.2 There are two ways to include Bootstrap 4 on projects.

- Download Bootstrap 4
- Bootstrap using CDN

2.6.3Drawback of Bootstrap

Everything has its pros and cons. One of the severe drawbacks is Bootstrap's free availability. Since it is "Free for all" program, there are big chances of developer using same theme on their individual websites. In web development, it is a big competition to develop the unique and different website, Bootstrap cannot ensure the uniqueness. Sometimes it becomes hard to implement personalize bootstrap design.

2.7JSP server

JSP is a server side technology that does all the processing at server. It is used for creating dynamic web applications, using java as programming language.

Basically, any html file can be converted to JSP file by just changing the file extension from ".html" to ".jsp", it would run just fine. What differentiates JSP from HTML is the ability to use java code inside HTML. In JSP, you can embed Java code in HTML using JSP tags. for e.g. run the code below, every time you run this, it would display the current time. That is what makes this code dynamic.

```
<HTML>
<BODY>
Hello BeginnersBook Readers!
Current time is: <%= new java.util.Date() %>
</BODY>
</HTML>
```

Explanation of above code

1) The line **<%–JSP Comment–%>** represents the JSP element called JSP Comment, While adding comments to a JSP page you can use this tag, we will discuss this in detail in coming posts.
Note: JSP Comments must starts with a tag **<%–** and ends with **–%>**

2) Head, Title and Body tags are HTML tags – They are HTML tags, frequently used for static web pages. Whatever content they have is delivered to client(Web browser) as such.

3) <%out.print(" Hello, Sample JSP code ");%> is a JSP element, which is known as Scriptlet. Scriptlets can contain Java codes. **syntax of scriptlet is:** <%Executable java code%>. As the code in Scriptlets is java statement, they must end with a semicolon(;). out.print(" Hello, Sample JSP code ") is a java statement, which prints" Hello, Sample JSP code".

As discussed, JSP is used for creating dynamic webpages. Dynamic webpages are usually a mix of static & dynamic content.

The **static content** can have text-based formats such as HTML, XML etc and the **dynamic content** is generated by JSP tags using java code inside HTML .

2.7.1. Advantages of JSP

- JSP has all the advantages of servlet, like: Better performance than CGI Built in session features, it also inherits the features of java technology like – multithreading, exception handling, Database connectivity, etc.
- JSP enables the separation of content generation from content presentation. Which makes it more flexible?
- With the JSP, it is now easy for web designers to show case the information what is needed.
- Web Application Programmers can concentrate on how to process/build the information.

2.7.2Architecture of a JSP Application

Before we start developing web application, we should have a basic idea of architectures. Based on the location where request processing happens (Servlet OR JSP(java server pages)) there are two architectures for JSP. They are – Model1 Architecture & Model2 Architecture

.

1) Model Architecture: In this Model, JSP plays a key role and it is responsible for of processing the request made by client. Client (Web browser) makes a request, JSP then creates a bean object which then fulfils the request and pass the response to JSP. JSP then sends the response back to client. Unlike Model2 architecture, in this Model most of the processing is done by JSP itself.

2) Model2 Architecture: In this Model, Servlet plays a major role and it is responsible for processing the client's(web browser) request. Presentation part (GUI part) will be handled by

JSP and it is done with the help of bean as shown in image below. The servlet acts as controller and in charge of request processing. It creates the bean objects if required by the jsp page and calls the respective jsp page. The jsp handles the presentation part by using the bean object. In this Model, JSP doesn't do any processing, Servlet creates the bean Object and calls the JSP program as per the request made by client.

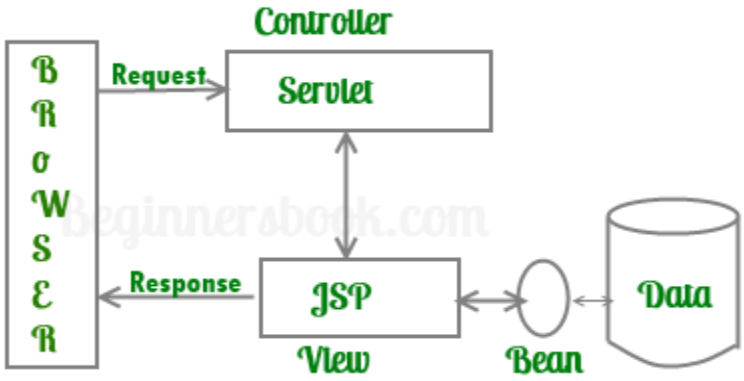

Figure:2.3

2.8 AJAX (Asynchronous JavaScript And XML)

AJAX is not a programming language.AJAX just uses a combination of:

- A browser built-in XMLHttpRequest object (to request data from a web server)
- JavaScript and HTML DOM (to display or use the data)

AJAX is a misleading name. AJAX applications might use XML to transport data, but it is equally common to transport data as plain text or JSON text.

AJAX allows web pages to be updated asynchronously by exchanging data with a web server behind the scenes. This means that it is possible to update parts of a web page, without reloading the whole page.

2.8.1 How AJAX Works

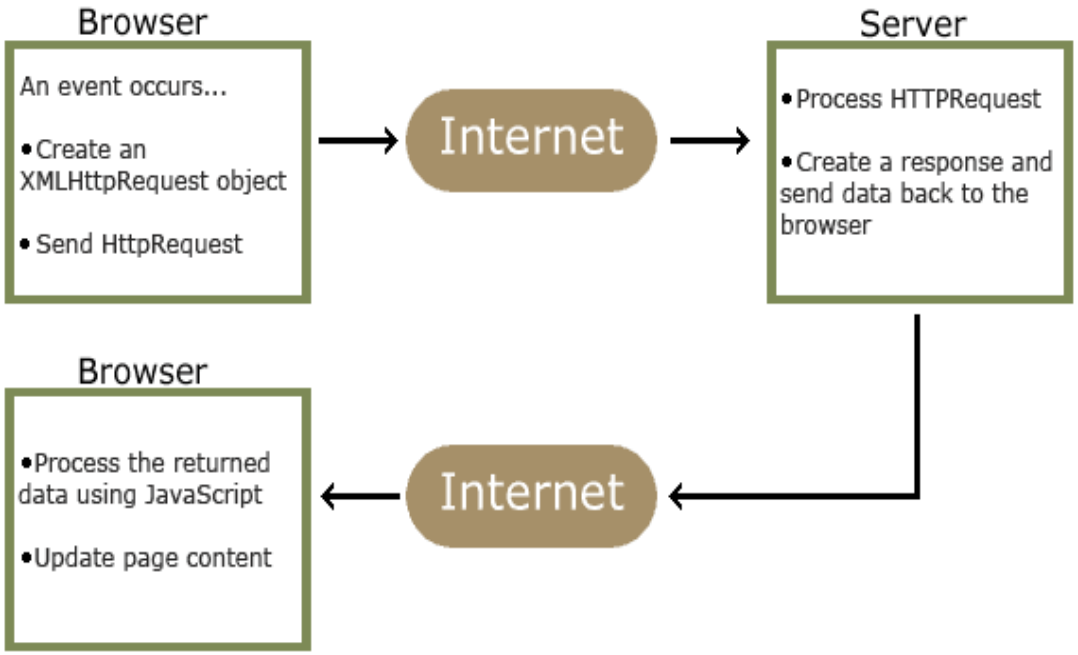

Figure:2.4

2.8.2HTML Page

```
<!DOCTYPE html>
<html>
<body>

<div id="demo">
  <h2>Let AJAX change this text</h2>
  <button type="button" onclick="loadDoc()">Change Content</button>
</div>

</body>
</html>
```

The HTML page contains a section and a <button>.

The section is used to display information from a server.

The <button> calls a function (if it is clicked).

The function requests data from a web server and displays it:

2.8.3Function loadDoc()

```
function loadDoc() {
  var xhttp = new XMLHttpRequest();
  xhttp.onreadystatechange = function() {
    if (this.readyState == 4 && this.status == 200) {
     document.getElementById("demo").innerHTML = this.responseText;
    }
  };
  xhttp.open("GET", "ajax_info.txt", true);
  xhttp.send();
}
```

2.9. Introduction of My sql

MySQL is a Relational DataBase Management System (RDBMS).

RDBMS means R--DB--MS.

- DB stands for Database, a repository for the information store.

- The data in a database is organized into tables, and each table is organized into rows and columns.
- Each row in a table is called a record. A record may contains several pieces (called fields) of information, and each column in a table is known as a field.

2.9.1 Features of MySQL

1. Speed: Ofcourse, the speed at which a server side program runs depends primarily on the server hardware. Given that the server hardware is optimal, MySQL runs very fast. It supports clustered servers for demanding applications.

2. Ease of use: MySQL is a high-performance, relatively simple database system. From the beginning, MySQL has typically been configured, monitored, and managed from the command line. However, several MySQL graphical interfaces are available as described below:

- MySQL Administrator: This tool makes it possible for administrators to set up, evaluate, and tune their MySQL database server. This is intended as a replacement for mysqladmin.
- MySQL Query Browser: Provides database developers and operators with a graphical database operation interface. It is especially useful for seeing multiple query plans and result sets in a single user interface.

3. Cost: MySQL is available free of cost. MySQL is a "Open Source" database. MySQL is part of LAMP (Linux, Apache, MySQL, PHP / Perl / Python) environemtn, a fast growing open source enterprise software stack. More and more companies are using LAMP as an alternative to expensive proprietary software stacks because of its lower cost, reliability, and documentation.

5.Capability : Many clients can connect to the server at the same time. Clients can use multiple database simultaneously. You can access MySQL using several interfaces such as command-line clients, Web browsers.

6.Connectivity and security: MySQL is fully networked, and database can be accessed from anywhere on the Internet, so you can share your data with anyone, anywhere. The connectivity could be achieved with Windows programs by using ODBC drivers. By using the ODBC connector to MySQL, any ODBC-aware client application (for example, Microsoft Office, report writers, Visual Basic) can connect to MySQL.

7.Portability: MySQL runs on many varieties of UNIX, as well as on other non-UNIX systems, such as Windows and OS/2. MySQL runs on hardware from home PCs to high-end server. MySQL can be installed on Windows XP, Windows Server 2003, Red Hat Fedora Linux, Debian Linux, and others.

2.9.2 MySQL Tools

- A SQL server: This is an engine which provides access to your databases.
- Client programs for accessing the server: A program allows you to enter queries directly and view results.
- A client library for writing your own programs: You can write your own programs into the client library using C.

2.9.3Recommended Hardware Requirements For MySql Installation

- Pentium V processor
- 128 MB RAM

Note that MySQL can be installed on a platform with as little as 32 MB. However, for better performance it is recommended to have at least 128MB memory.

You can freely download MySQL from the website https://www.mysql.com

If setting up a MySQL is something you do not want to take on, consider checking out Web Hosting Choice to find a suitable server provider. In this case, the hosting provider sets up MySQL server and MySQL Admin.

2.10 Conclusion

Literature reviews play an important role in research or project work. One should only focus the studies and be expert on those mentioned in the literature review. A Literature review is structured necessary lists of technologies and support for project work. It provides context for the study.

CHAPTER0 3 METHODOLOGY

3.1 Introduction

This chapter describes an overview of the methodology of the proposed online system. This can refer to the theoretical discussion about the implementation of the proposed system. After making a proper plan of the websites, this phase starts with the analysis of suitable technologies for developing. This chapter divided with three sections which refer to the front-end, back-end, and database. This chapter does not show the coding but an overview of how the system implemented.

Any description of a means of calculation of a specific result is always a description of a method and never a description of a methodology. It is thus important to avoid using methodology as a synonym for method or body of methods. Doing this shifts it away from its true epistemological meaning and reduces it to being the procedure itself, or the set of tools, or the instruments that should have been its outcome. A methodology is the design process for carrying out research or the development of a procedure and is not in itself an instrument, or method, or procedure for doing things

3.2 Front-end Design

Converting the web application client view to HTML code and adding CSS and JavaScript where necessary are involve in frontend design. Here given the details of the ront end design procedure-

Homepage of the websites divided into some block. Each block shows some information or provides functionality for navigating into the main application.
f

- Title bar: Showing application title name with customized font and design.
- Navigation bar: Navigation bar contains important links to travel inside the websites like profile, job posts, search, blog, etc.
- Welcome message for giving an idea about the total website to a user with a line of text.
- Profile Card with important profile information and profile navigation link like notifications, hiring requests, update status.
- At the footer, there are some shortcut links of different professionals. Using those links users can easily find certain professionals with a better searching procedure.

A base template is implemented for a default view for any page with a navigation bar because the navigation bar should be common in any level template. All other template extend that base templates. For example, the homepage is implemented in index.html but it extends the base HTML file to receive the parent information.

Template for different page written separately but all of them extends the base template. This inheritance property reduces the code redundancies and waste of time. Template inheritance also ensures clean HTML code.

Glassfish serves static files in a different way. All of the static files like CSS, JavaScript are stored in a structured directory and Glassfish server them when necessary.
.

Pycharm Community Edition IDE was used to write most of the code. It is a free IDE from jetbrains with embedded editor. But for HTML code, sometimes Notepad++ editor was used. Pycharm IDE is more comfortable for writing code as navigating different project directory is possible. Pycharm also maintains the projects dependencies and facilitates immediate running the server to testing the projects. For CSS, a popular CSS framework name Bootstrap was used besides the raw CSS codes. Bootstrap helped to create a responsive design in a short time but sometimes it was mandatory to write CSS codes. There are two running version of Bootstrap. For proposed projects, Bootstrap 4 was used as it is the most advanced Bootstrap version. Bootstrap rule was included by CDN because downloading and hosting the Bootstrap with projects make projects heavier. Bootstrap 4 can be irresponsive in too much older internet explorer but works fine in all modern browser without any problem.

3.3 Back-end Design

Back-end services of a websites involves the functionality of controlling application and communicate with database on action of user. Back-end technology brings database information from server side to the client side or browser. Back-end generally start work with an user interaction like clicking buttons, links, submitting forms, entering URLs etc. Back-end technology must be efficient for increase user experience.

- Back-end design can be referred as programming section of any application. A programming language is used to design models, creating controllers, view functions, database modules etc. Systems efficiency largely depends on back-end designs.

- Models: models are the blueprint of the database table. Model defines about database table column, data types and some widgets related to them. Sometimes models render forms which can be used for taking data from users. Models are the intermediate part between database and application.
- Our proposed online application was divided into 2 apps named users, and blo
- URL patterns: It maps an URL address with collaboration of root address.
- Template directory: Stores the template and static files and Serve them when necessary.

Users app: It is the largest app on our proposed projects as all profile information and transaction are done on this app. User registration, login, profile information, working information are handle with this app. This app has two custom models and one inherited model from Django authentication.

.

3.4Conclusion

Design and implementation requires very high skills to complete. Most of the time, developers stuck with errors and it takes hours to solve them. This phase also challenging and interesting for developers as creativeness are shown in this phase. Systems performance largely depends on this phase and for further update, knowledge of this phase are required

CHAPTER 4 ANALYSIS AND DESIGN

4.1Architecture Design of System basing on modules

The purpose of any analysis activity in the software life-cycle is to create a model of the system's functional requirements that is independent of implementation constraints. We organize requirements around objects, which integrate both behaviors (processes) and states (data) modeled after real world objects that the system interacts with. In other or traditional analysis methodologies, the two aspects: processes and data are considered separately. For example, data may be modeled by ER diagrams, and behaviors by flow charts or structure charts.

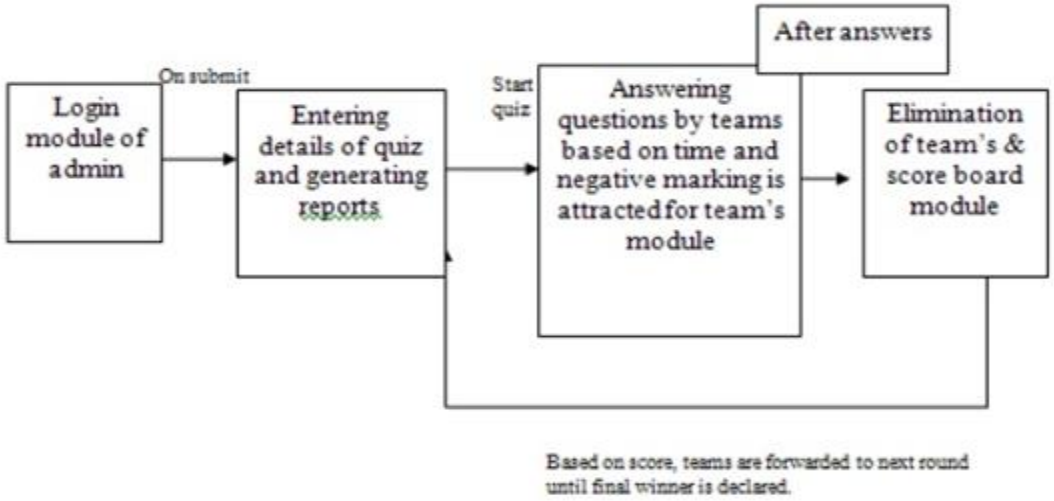

Figure:4.1architecture design

4.2:E-R Design

ER Diagram stands for Entity Relationship Diagram, also known as ERD is a diagram that displays the relationship of entity sets stored in a database. In other words, ER diagrams help to explain the logical structure of databases. ER diagrams are created based on three basic concepts: entities, attributes and relationships.

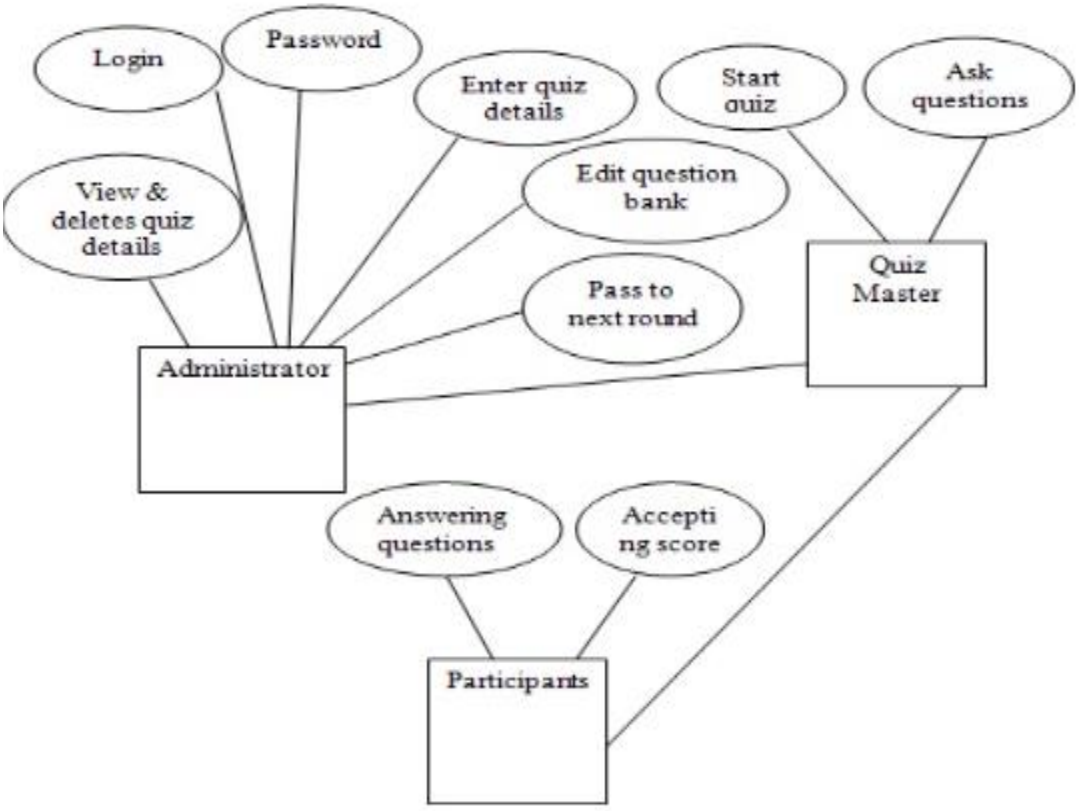

Figure:4.2E-R diagram

4.3 User-case Diagram

A user case diagram at its simplest is a representation of a user's interaction with the system that shows the relationship between the user and the different use cases in which the user is involved. A use case diagram can identify the different types of users of a system and the different use cases and will often be accompanied by other types of diagrams as well. The use cases are represented by either circles or ellipses.

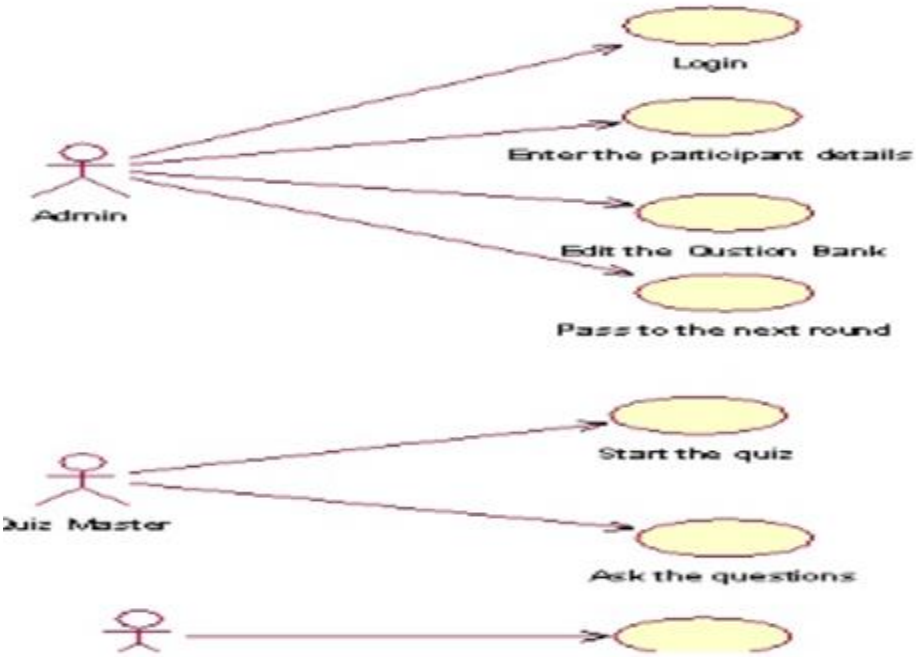

Figure:4.3

4.4 Class Diagram

Admin Can create quiz after getting logged in and creating quiz.10 Question for each quiz required to be completed. User can search quiz according to their interest and Click on the id of quiz and ready to start it just clicking on a button. After completing all questions, result will be displayed automatically and can view the description about each and every question in the respective quiz.

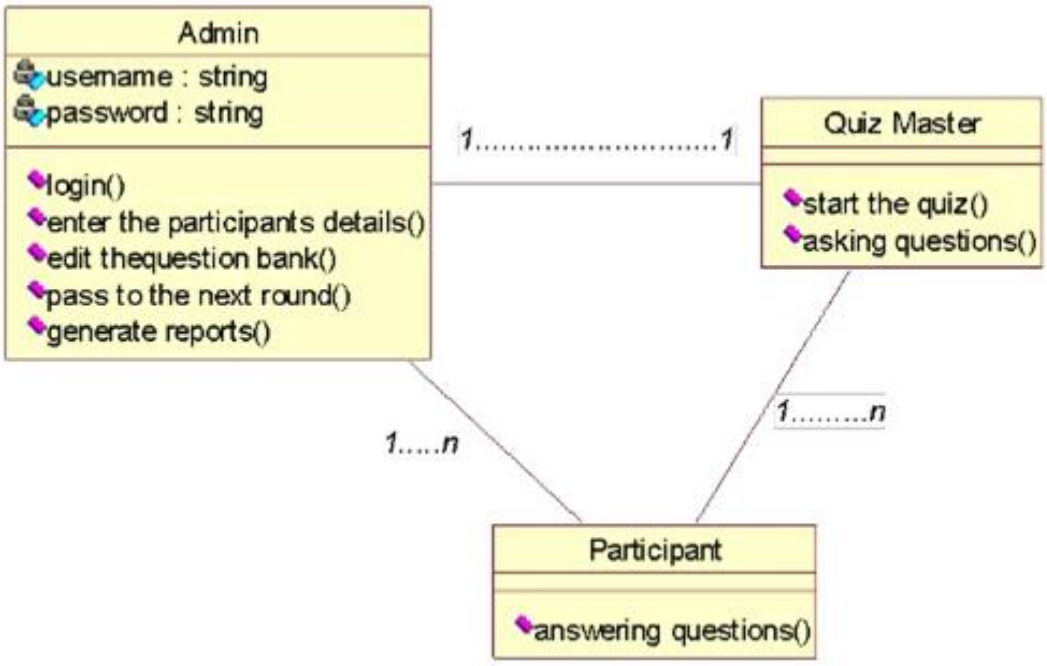

Figure:4. Class diagram

4.5 Conclusion

The purpose of any analysis activity in the software life-cycle is to create a model of the system's functional requirements that is independent of implementation constraints. We organize requirements around objects, which integrate both behaviors (processes) and states (data) modeled after real world objects that the system interacts with. In other or traditional analysis methodologies, the two aspects: processes and data are considered separately

CHAPTER 5 IMPLEMENTATION

5.1 Introduction

The Previous chapter describes the methodology of the proposed projects. After constructing a structural design, the implementation phase can be started. Implementation refers to the coding phase and high technical skill is required to work in this phase. This chapter describes the coding, data structures, algorithms and databases implementation with description, diagram, and some Pseudo-code.

5.2 Basic Project Structure

GlassFish Server provides a server for the development and deployment of Java Platform, Enterprise Edition (Java EE platform) applications and web technologies based on Java technology. GlassFish Server 5.0 provides the following:

- A lightweight and extensible core based on OSGi Alliance standards
- A web container
- An easy-to-use Administration Console for configuration and management

.

5.3 Basic App Structure

Ajax framework defines some apps for the total projects. Every section of the project is maintained by some different app which contains models for database, controller for views, and corresponding templates and static files. This section of the chapter describes almost every part of apps and how to write major app modules.

5.3.1 Writing Model

A model is the single, definitive source of information about user. It contains the essential fields and behaviors of the data are going to store in the database. Generally, each model maps to a single database table. The most important part of a model – and the only required part of a model – is the list of database fields it defines.

Fields are specified by class attributes. Here given a snippet of creating models [27].

```
class ModelClassName(InheritedClassName):
        #Here goes the description of model fields
        #Django provide some customized model field class
        #ModelClass can also contain definitions like widgets
        name = models.CharField(fields attributes goes here) age
        = models.IntegerField(fields attributes)

        def __str__(self):
                return something to output models
```

5.3.2 Writing View Function

A view function is simply a Python function that takes a Web request and returns a Web response. This response can be the HTML contents of a Web page, or a redirect, or an error, or an XML document, or an image . . . or anything.

```
def FunctionName(request, **kwargs):
if request.method == "POST":
#Do something...
#.....
#.....
#redirect somewhere_to_the_application else:
#Do something like
#generate some form
# somewhere
#aking queries  return render(request, "rendering html path", arguments)
```

5.4 Conclusion

Implementation should be performed carefully as the application efficiency largely depends on this. During implementing algorithm or using data structures, most suitable form should be used. There may be arise many bugs during implementations, these errors should be solved before productions phase and deployments

CHAPTER 6 SOURCE CODE

6.1 Creating the Home Page

Home page is pretty straightforward. We have a menu and 8 images displayed in a table format with two rows; each row containing 4 images. On the home page we also make a check, whether the user is logged in or not. If the user is logged in we also display the username and provide a logout link.

6.2 Creating Menu for Home Page

```
< div id='cssmenu'>
< ul>
  < li class=''>< a href='${pageContext.request.contextPath}'>< span>Home< /span>< /a>< /li>
  < li>< a href='${pageContext.request.contextPath}/login'>< span>Login< /span>< /a>< /li>
  < li>< a href='${pageContext.request.contextPath}/register'>< span>Register< /span>< /a>< /li>
  < li class='#'>< a href='#'>< span>Submit a Question< /span>< /a>< /li>
  < li class='#'>< a href='#'>< span>Feedback< /span>< /a>< /li>
  < li>< a href='#'>< span>Contribute< /span>< /a>< /li>
  < li>< a href='#'>< span>Contact us< /span>< /a>< /li>
< /ul>
< /div>
```

6.3Showing the quiz images on home page

```
<%--
   Document   : login.jsp
   Created on : Dec 23, 2019, 8:00:30 PM
  --%>
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
   <head>
      <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
      <title>LOGIN</title>
      <meta charset="utf-8">
      <meta name="viewport" content="width=device-width, initial-scale=1">
      <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.0/css/bootstrap.min.css">
      <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.4.1/jquery.min.js"></script>
      <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.0/js/bootstrap.min.js"></script>
  <script>
```

```
/*
        $(document).ready(function () {
  $("#login").click(function () {
  var email = $("#email").val();
    var pwd = $("#pwd").val();

              alert("email : "+email+", pass : "+pwd);

                 alert("data : "+Object.values(data)+", status : "+status);
              });


              $.post("LoginController", {
                 email: email,
                 pwd: pwd
              }, function (data, status) {

              //alert(email+"  "+pwd);


            });

        });
*/


      </script>

   </head>
   <body>



      <div class="container">


         <div>


            <div style="width:30%">
               <h2>Login</h2>
                <%
                  String error = (String) request.getAttribute("error");
                  if(error!=null){
                     %>
                     <p style="color: red"><%=error%></p>
                     <%
                  }

               %>
               <form action="LoginController" method="post">
```

```
                <div class="form-group">
                  <label for="email">Email:</label>
                  <input type="email" class="form-control" id="email" placeholder="Enter
email" name="email">
                </div>
                <div class="form-group">
                  <label for="pwd">Password:</label>
                  <input type="password" class="form-control" id="pwd" placeholder="Enter
password" name="pwd">
                </div>

                <button type="submit" id="login" class="btn btn-primary">Login</button>
              </form>
              <a  href="registration.jsp" >Have not any account? Create an account.</a>
            </div>

          </div>



        </div>


    </body>
</html>
```

Creating the User Registration Page

There is nothing fancy in the registration page; just an HTML form awaiting the user to provide his name, email and password. Once we get that, we pass this to RegistrationController servlet to create an account.

Note: We are not doing any validation like password should contain 8 characters with at least one uppercase character, one number and special symbol. We will do that in upcoming posts, when we extend this application.

6.4Registration Code

```
<%--
    Document   : registration
    Created on : Jan 5, 2020, 8:00:45 PM
    Author     : mahbuba

--%>

<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
    <head>
        <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
        <title>REGISTRATION</title>
        <meta charset="utf-8">
        <meta name="viewport" content="width=device-width, initial-scale=1">
```

```
        <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.0/css/bootstrap.min.css">
        <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.4.1/jquery.min.js"></script>
        <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.0/js/bootstrap.min.js"></script>

    </head>
    <body>




        <div class="container">

            <div>
                <div style="width:30%">
                    <h2>Sign Up Here</h2>

                    <%
                        String error = (String) request.getAttribute("error");
                        if(error!=null){
                            %>
                            <p style="color: red"><%=error%></p>
                            <%
                        }

                    %>

                    <form action="RegistrationController" method="post">
                        <div class="form-group">
                            <label for="email">Username:</label>
                            <input type="text" class="form-control"  placeholder="Enter email"
name="username">
                        </div>
                        <div class="form-group">
                            <label for="email">Email:</label>
                            <input type="email" class="form-control"  placeholder="Enter email"
name="email">
                        </div>
                        <div class="form-group">
                            <label for="pwd">Password:</label>
                            <input type="password" class="form-control" placeholder="Enter
password" name="pwd">
                        </div>

                        <button type="submit" id="login" class="btn btn-primary">Sign up</button>
                    </form>
                </div>
```

```
        </div>
    </div>
 </body>
</html>
```

Users' table

create table users(username varchar(50),email varchar(50),password varchar(50))
If you are working with some other database like Oracle you have to change the properties of the DatabaseConnectionFactory class accordingly.

6.5DatabaseConnectionFactory.java

```
public class DatabaseConnectionFactory {

        private static String dbURL="jdbc:mysql://localhost/quiz";
        private static String dbUser="root";
        private static String dbPassword="";

        public static Connection createConnection()
        {
                Connection con=null;
                try{
                        try {
                                Class.forName("com.mysql.jdbc.Driver");
                            }
                            catch(ClassNotFoundException ex) {
                                System.out.println("Error: unable to load driver class!");
                                System.exit(1);
                            }
                    con = DriverManager.getConnection(dbURL,dbUser,dbPassword);
                   }
                  catch(SQLException sqe){ System.out.println("Error: While Creating
connection to database");sqe.printStackTrace();}
                return con;
        }

}
```

Creating the Login Page
Login page is very much similar to registration page where we are providing two input fields asking user to provide a username and password. Once we get the username and password entered by the user we pass it to LoginController to authenticate user.

6.6 Login Validation Code

```
<%--
    Document   : login.jsp
    Created on : Dec 23, 2019, 8:00:30 PM

--%>
```

```
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
   <head>
      <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
      <title>LOGIN</title>
      <meta charset="utf-8">
      <meta name="viewport" content="width=device-width, initial-scale=1">
      <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.0/css/bootstrap.min.css">
      <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.4.1/jquery.min.js"></script>
      <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.0/js/bootstrap.min.js"></script>


      <script>


/*
         $(document).ready(function () {

            $("#login").click(function () {

               var email = $("#email").val();
               var pwd = $("#pwd").val();

              alert("email : "+email+", pass : "+pwd);

               $.post("LoginController", {
                  email: email,
                  pwd: pwd
               }, function (data, status) {

                  alert("data : "+Object.values(data)+", status : "+status);
               });

               //alert(email+"  "+pwd);


            });

         });
*/


      </script>

   </head>
   <body>
```

```
    <div class="container">


      <div>


        <div style="width:30%">
          <h2>Login</h2>
           <%
            String error = (String) request.getAttribute("error");
            if(error!=null){
              %>
              <p style="color: red"><%=error%></p>
              <%
            }

          %>
          <form action="LoginController" method="post">
            <div class="form-group">
              <label for="email">Email:</label>
              <input type="email" class="form-control" id="email" placeholder="Enter
email" name="email">
            </div>
            <div class="form-group">
              <label for="pwd">Password:</label>
              <input type="password" class="form-control" id="pwd" placeholder="Enter
password" name="pwd">
            </div>

            <button type="submit" id="login" class="btn btn-primary">Login</button>
          </form>
          <a  href="registration.jsp" >Have not any account? Create an account.</a>
        </div>

      </div>



    </div>
  </body>
</html>
```

Implementing the Logout Functionality
Once the user clicks on logout, link session is invalidated and all the objects bind in the session are removed.

QuizQuestion is the class that represents a single quiz question; each question will have a number, question statement, options and one correct option index.

6.7QuizQuestion.java

```
<%--
   Document   : exam
   Created on : Dec 31, 2019, 9:17:31 AM
   Author     : mahbuba
--%>

<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
   <head>
      <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
      <title>EXAM</title>
      <meta charset="utf-8">
      <meta name="viewport" content="width=device-width, initial-scale=1">
      <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.0/css/bootstrap.min.css">
      <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.4.1/jquery.min.js"></script>
      <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.0/js/bootstrap.min.js"></script>
      <link rel="stylesheet" type="text/css"
href="https://cdn.datatables.net/1.10.19/css/jquery.dataTables.css">
      <script type="text/javascript" charset="utf8"
      src="https://cdn.datatables.net/1.10.19/js/jquery.dataTables.js"></script>


      <script>



         $(document).ready(function () {



            // alert("hi");

            $("#submitBtn").hide();
            $("#cancelBtn").hide();
            $("#startBtn").click(function () {

               $("#submitBtn").show();
               $("#cancelBtn").show();
               num_of_ques = $("#selectedQues").val();
               // alert(num_of_ques);

               $.post("ExamController", {num_of_ques: num_of_ques}, function (data, status)
{

                  // alert(data);
```

```
            $("#startBtn").hide(200);

            keySet = Object.keys(data);
            valueSet = Object.values(data);

            //alert(keySet);
            //alert(valueSet[0]['ques']);
            createQuesList(valueSet);
        });
    });



    function createQuesList(data)
    {

        tblData = "";

        //alert(data.length);
        for (i = 0; i < data.length; i++) {

            //alert(data[i]["id"]);
            q = data[i];
            tblData += "<div id=" + i + ">";
            tblData += "<h4 > "+(1+i)+". "+ q["ques"] + "</h4> ";
            tblData += " <input type = 'radio' name = " + i + " value='a' > " + q["a"] +
"<br/>";

            tblData += " <input type = 'radio' name =  " + i + " value='b' > " + q['b'] +
"<br/>";
            tblData += "  <input type = 'radio' name =  " + i + " value='c' > " + q['c'] +
"<br/>";
            tblData += " <input type = 'radio' name =  " + i + " value='d' > " + q['d'] +
"<br/>";
            tblData += " </div><br/>";

            $("#quesHolder").empty();
            $("#quesHolder").append(tblData);


        }


    }


    $("#submitBtn").click(function () {


        child = $("#quesHolder").children("div");
```

```
        wrongAns = 0;
        rightAns = 0;
        noAns = 0;

        for (x of child)
        {
            //id = x["id"];
            id = $(x).attr("id");
            myans = $("#" + id + " input[name=" + id + "]:checked").val();
            //alert(id);

            if (myans === undefined) {
                noAns++;
            } else {

                curans = valueSet[id]["ans"];
                if (myans === curans) {
                    rightAns++;
                } else {
                    wrongAns++;
                }

                //alert("My ANS : " + myans + ", ANS : ");

            }

        }

        displayResult();

    });


    function displayResult()
    {
        $("#startBtn").show(200);
        $("#submitBtn").hide();
        $("#cancelBtn").hide();
        $("#quesHolder").empty();

        alert("Right : " + rightAns + "\nWrong : " + wrongAns + "\nNo Ans : " +
noAns);
    }



    $("#cancelBtn").click(function(){

         $("#startBtn").show(200);
        $("#submitBtn").hide();
        $("#cancelBtn").hide();
```

```
            $("#quesHolder").empty();

        });



    });



</script>



</head>
<body>

    <div class="row">

        <div style="padding: 50px; " class="col-sm-3">


            <select id="selectedQues"  class="form-control" >

                <option>5</option>
                <option>10</option>
                <option>15</option>
                <option>20</option>
                <option>25</option>
                <option>30</option>
                <option>35</option>
                <option>40</option>
                <option>45</option>
            </select>


            <button id="startBtn" style="margin-top:20px;"  class="btn btn-primary" >Start
Exam</button>
            <br/>
            <button id="submitBtn" style="margin-top:60px;" class="btn btn-success"
>Submit</button>
            <button id="cancelBtn" style="margin-top:60px;" class="btn btn-danger"
>Cancel</button>
```

```
        </div>

        <div style="padding: 50px;" class="col-sm-9">

          <div id="quesHolder">
          </div>

        </div>

      </div>


  </body>
</html>
```

QuizQuestion is the class that represents a single quiz question; each question will have a number, question statement, options and one correct option index.

6.8 Exam.Control.Java

```
<%--
   Document   : cpanel
   Created on : Dec 25, 2019, 10:24:30 AM
   Author     : mahbuba
--%>

<%@page import="model.Question"%>
<%@page import="java.util.List"%>
<%@page import="service.Service"%>
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
   <head>
      <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
      <title> CPANEL </title>


      <meta charset="utf-8">
      <meta name="viewport" content="width=device-width, initial-scale=1">
      <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.0/css/bootstrap.min.css">
      <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.4.1/jquery.min.js"></script>
      <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.0/js/bootstrap.min.js"></script>
      <link rel="stylesheet" type="text/css"
href="https://cdn.datatables.net/1.10.19/css/jquery.dataTables.css">
      <script type="text/javascript" charset="utf8"
      src="https://cdn.datatables.net/1.10.19/js/jquery.dataTables.js"></script>
```

```
<script>


$(document).ready(function () {
  $('#myTable').DataTable();
});

/*
 function deleteQuestion(del_id){

 //alert("Delete id : "+del_id);

 $.post("CpanelControler",{
 opt_type: 'DELETE_DATA',
 del_id: del_id
 }, function(data, status){
 // alert("Data "+data+", Status : "+status);

 request.getRequestDispatcher("cpanel.jsp").forward(request, response);
 });

 }
 */



</script>







</head>
<body>

<div class="container">

<form  action="CpanelControler" method="post" style="margin-bottom:30px;">

<input type="hidden" name="opt_type" value="SAVE_DATA"/>
<table>
<tr>
<td>Question : </td>
<td> <input class="form-control" type="text-area" name="ques" required/>
</td>
</tr>
<tr>
<td>Option A : </td>
```

```
            <td> <input class="form-control" type="text" name="a" required/> </td>
          </tr>
          <tr>
            <td>Option B : </td>
            <td> <input class="form-control" type="text" name="b" required/> </td>
          </tr>
          <tr>
            <td>Option C : </td>
            <td> <input class="form-control" type="text" name="c" required/> </td>
          </tr>
          <tr>
            <td>Option D : </td>
            <td> <input class="form-control" type="text" name="d" required/> </td>
          </tr>
          <tr>
            <td> Select Answer : </td>
            <td>

              <!--                  <input type="text" name="ans" required/> -->


              <label class="radio-inline">
                <input type="radio" name="optradio" checked value="a">Option A
              </label>
              <label class="radio-inline">
                <input  type="radio" name="optradio" value="b">Option B
              </label>
              <label class="radio-inline">
                <input type="radio" name="optradio" value="c">Option C
              </label>
              <label class="radio-inline">
                <input type="radio" name="optradio" value="d">Option D
              </label>

            </td>
          </tr>
          <tr>
            <td><input class="btn btn-success" type="submit" value="Save Question"/>
</td>
          </tr>

        </table>

      </form>



      <table id="myTable" class="display " >

        <thead>
        <tr>
```

```
                <th>SL No.</th>
                <th>Question</th>
                <th>Option A</th>
                <th>Option B</th>
                <th>Option C</th>
                <th>Option D</th>
                <th>Answer</th>
                <th>Delete</th>
            </tr>
            </thead>

            <%
                Service s = new Service();

                List<Question> datalist = (List<Question>) s.getData();

                for (int i = 0; i < datalist.size(); i++) {

                    Question data = datalist.get(i);
            %>
            <tbody>
            <tr>
                <td><%=data.getId()%></td>
                <td><%=data.getQues()%></td>
                <td><%=data.getA()%></td>
                <td><%=data.getB()%></td>
                <td><%=data.getC()%></td>
                <td><%=data.getD()%></td>
                <td><%=data.getAns()%></td>

                <td>
                    <form   action="CpanelControler" method="post" >
                        <input type="hidden" name="opt_type" value="DELETE_DATA"/>
                        <input type="hidden" name="del_id" value="<%=data.getId()%>"/>
                        <input type="submit" class="btn btn-danger"  value="Delete">

                    </form>
                </td>
            </tr>
            </tbody>
            <%
                }
            %>

        </table>

    </div>
</body>
</html>
```

6.9 Conclusion

Note that since this is a web application, multiple users will be taking exams simultaneously. We have to make sure that one user's exam does not get into another user's exam. For example, one user might have just started Java exam and another user is on question 5 of SQL exam; we have to treat them as two separate exams. To do that we will maintain the state of each exam using session.

CHAPTER 7 PROJECT REVIEW

7.1 Introduction

This chapters does not discuss with any technical knowledge but only represents the implemented proposed system with some pictures and demonstrate them. This chapters also covers the features and user manual for familiar with the system. Though the system all characteristic cannot be defined with some picture and descriptions, but this chapter can give an initial presentation of proposed projects.

7.2 Homepage

Figure:7.1

7.3 Administration Log in page

In this page adminsttration homepage are showing .They can update result ,user exam.When an Administrator click on Log in our site. The following page will be shown:

Welcome page of the admin

Figure:7.2

7.4User Log in Page

- When a user click on Log in our site. The following page will be shown:

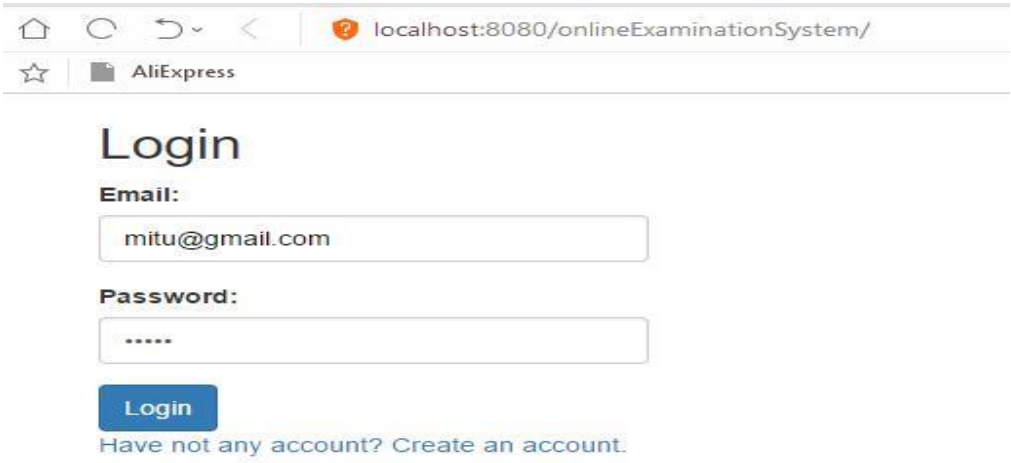

Figure:7.3

7.5User access and Joined information

-
- Shows the profile page.
- If any user will want to contact with us, he/she can click on Contact Us Bar and the following page will be shown:

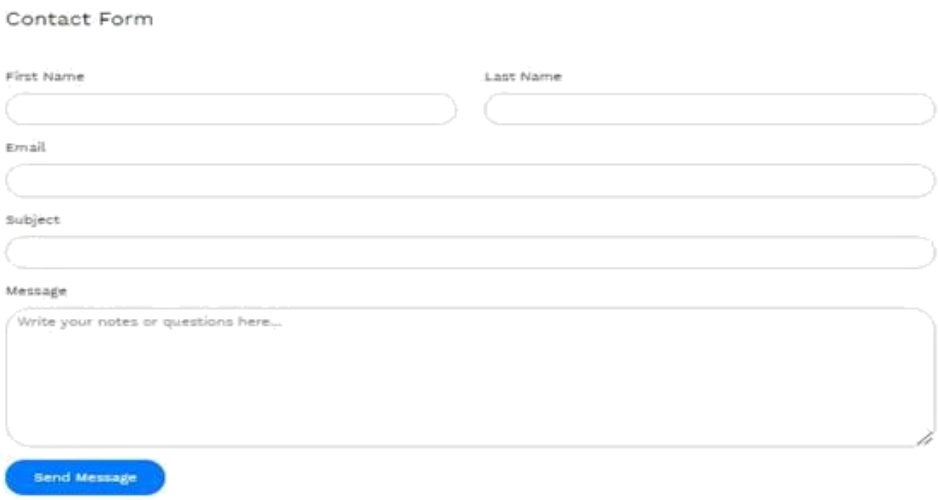

Figure:7.4

7.6Registration and Login

- At the heart of a web application is the ability for any user, anywhere in the world, to register an account with your app and start using it.
- At first a student should sign up to this application. After completing the registration form, he must click on the register button.

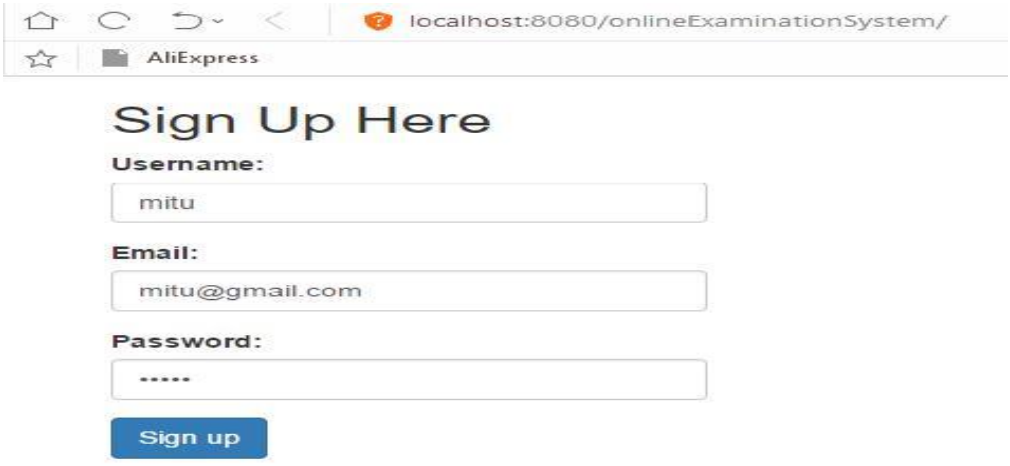

Figure:7.5

- Then the student is enlisted to the Database of the online exam where he can participate for the exam and finally the applicant can get login and password to sit in the exam

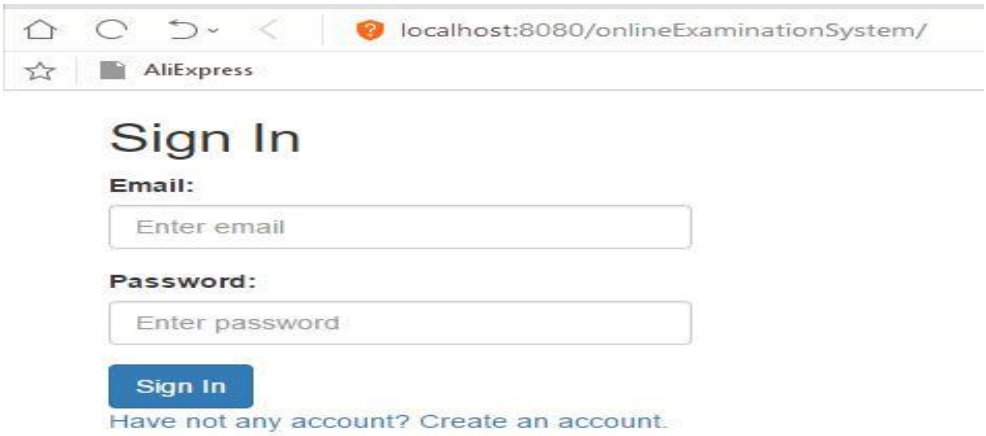

Figure7.5.1

7.7 Start Exam

- Clicking start exam. A user select question mark from many option and click on start exam button

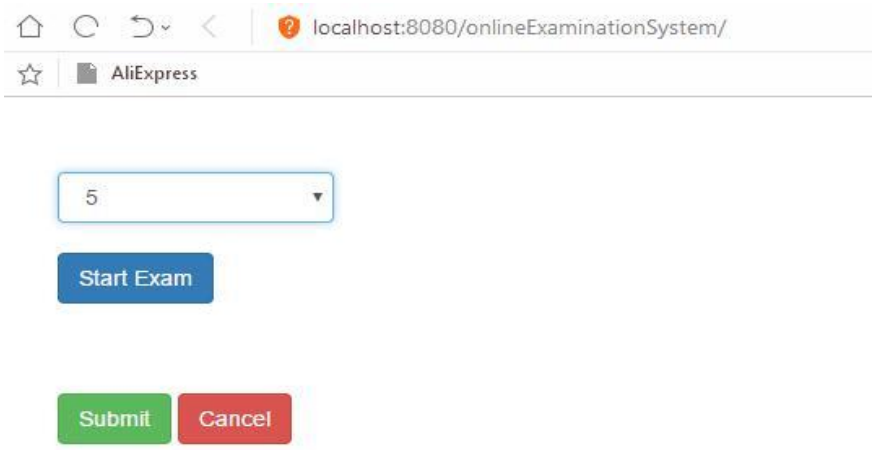

Figure:7.6

- Student can insert questions and option a,b,c,d and the correct answer which is stored in the database

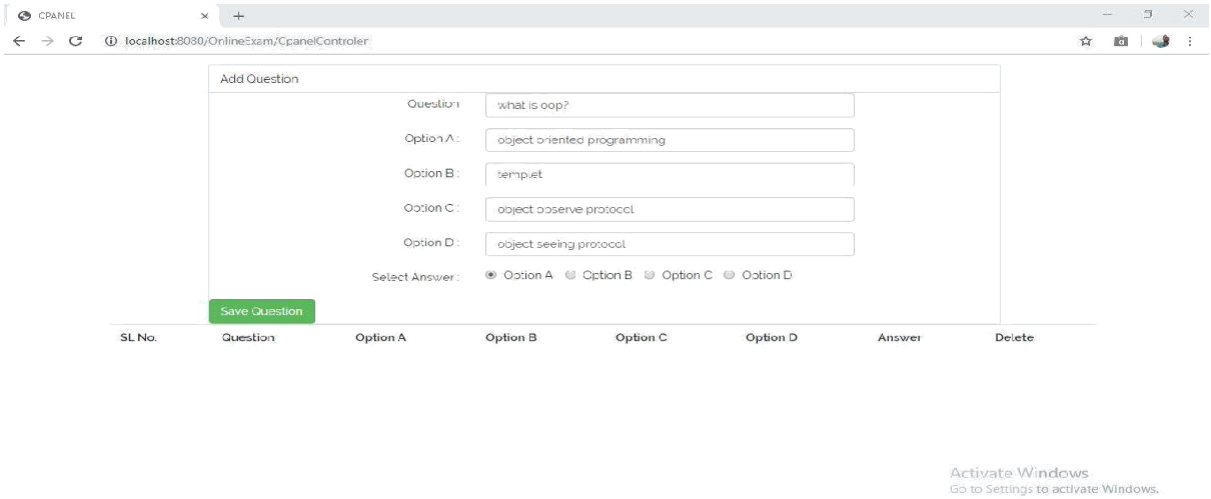

Figure:7.6.1

- After clicking on the save Question button, then it will save in the database. The question and option can see the question paper and other things preserved in the control panel

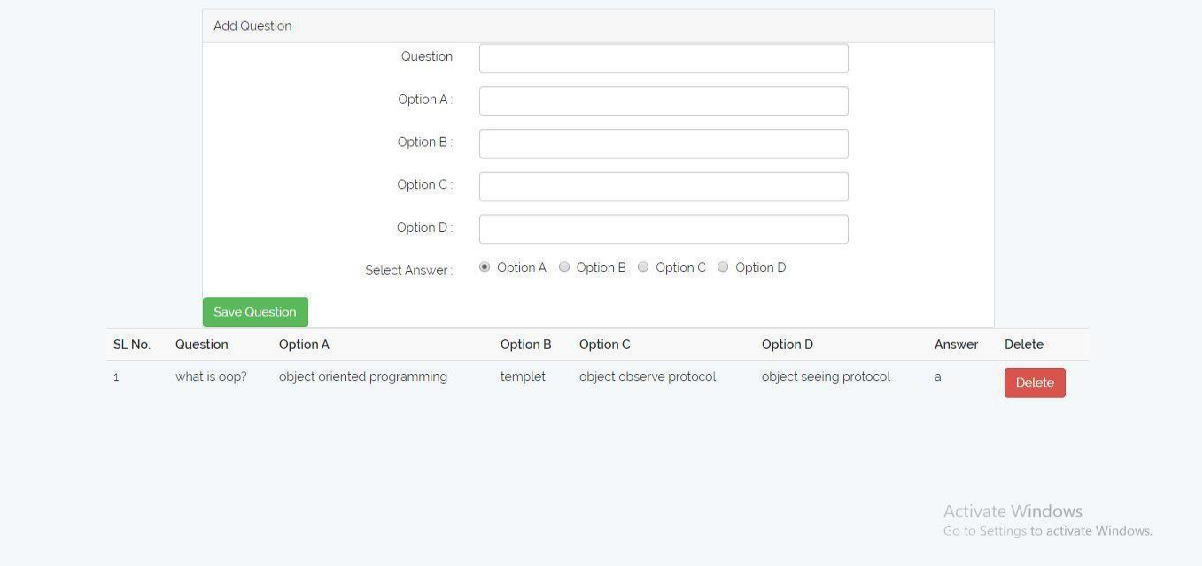

Figure:7.6.2

7.8 Result

- We can store the result into system database into two ways :File InputSingle user input. We can publish the result by using single user input method .In this process result would be uploaded by single user
- Then he gets the ques. paper and option of the ques. where he chose his desirable option and submit it by completing all the answers and he will notify for that no. of correct and incorrect answer

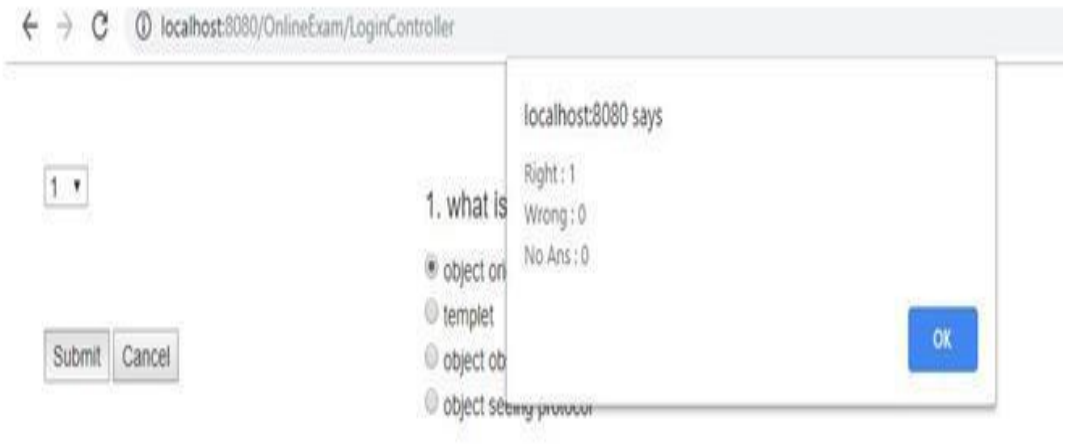

Figure:7.7

7.9 Conclusion

There are some more feature which pictures are not included in this chapter. Some of them are less important and some are dependable with another templates. But here discussed most of the major feature of the proposed online result publication system. The next chapter will conclude the total projects work with some evaluation and future works.

CHAPTER 08 DISCUSSION & CONCLUSION

8.1 Introduction

After implementing the project, it is now necessary to analysis the project's achievement and limitations. On the other hand, it is also essential to set some future goals to make the systems better. There are another parameter to analysis, comparing with the other existing system to understand the level of proposed system. So this chapter will discuss all of them.

8.2 Achievement from this projects

The proposed projects was an idea of advanced thinking and for the majority of the students who use internet. Online quiz system is not available in all of the universities in our country. In fact, it is hard to find a reliable Online quiz system.

The proposed online system focus on reducing the time of finding a student's all academic results by storing all academic results in a single database. The searching feature helps a student to find his/her current quiz as well as other exam results.

The system offers students to make their profile with necessary information. They can update their password and also can recover their profile through mail verification.

8.3 Limitations

Like every initial application, this application also has some limitations too. Such as-

The system does not provide any payment method. This system only focus on giving the quiz test of a student in a secure way.

Only a specific department's students can see their result, as the system is not developed for all over the academy

- The course teachers can only show the result of their respective courses, they cannot see the full result. Only admin can add , delete or correct a single user's information as well as the user.

- The system cannot give the notification messages to the user's cell number or mail.

8.4 Compare to the existing system

There are many related online system all over the world with different features but in our country it is hard to find any reliable system. The proposed online system can fill up that gap and with proper updates time to time it is possible to provide a professional service.

8.5 Future Work

There are no limits of efficiency and developing. Every system can be more and more developed day by day. A modern system today is a backdated system tomorrow. So to keep updated with time, our proposed projects have some future plans.

- A SMS notification system when a result published.
- We will provide more user friendly interface in future.
- To enhance security using QR-code verification.
- Email to each student individually.

8.6 Conclusion

We are confident that this online quiz system website will be helpful to students in real life also developing our skill. And we hope we will make it better to use in future.

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