CS1048-INDUSTRIAL TRAINING II REPORT

Online Examination System

Submitted by

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to *the faculty incharge*

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in

FACULTY OF ENGINEERING AND TECHNOLOGY

S.R.M. Nagar, Kattankulathur, Kancheepuram District

NOV 2016

SRM UNIVERSITY

(Under Section 3 of UGC Act, 1956)

BONAFIDE CERTIFICATE

This is to certify that thestudent **RAJAN KUMAR [1031310587]** of SRM UNIVERSITY has completed Training under mentorship of my firm during the month of June 2016.

SIGNATURE

Ms D.Vathana
FACULTY INCHARGE
Assistant Professor Dept. of Computer science and Engineering

SIGNATURE

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Dated: 23/06/2016

TO WHOM IT MAY CONCERN

This is to certify that **Mr. Rajan Kumar**, register no **1031310587**, pursuing his B. Tech in Computer Science and Engineering from SRM University, Chennai has undergone Industrial Training at **Softel Revolution Technologies Pvt Ltd.,** Patna from **June 1st, 2016** to **June 20th, 2016**.

He has developed a module using PHP during his training period. We wish him all the best in his entire future endeavors.

Zakir Ham

Authorized Signatory

ABSTRACT

Online Examination System forms the lifeline of the Educational Institutes to the functioning of the Examination. It is very essential for an Institute to handle the Examinations and their results. It is very useful for an Institute to test its students continuously for their mutual development. This system is helpful for conducting (M . C)

Multiple Choice Examinations which can be conducted regularly as well as for surprise tests and provides immediate results saving the precious time of faculties to check the papers and prepare mark sheets.The IT initiatives have encouraged various Organizations to develop systems to facilitate their day to day operations. The Online Examination System will include various Courses (IT, Commerce,Science, etc) and subjects for conducting examinations. This system helps in conducting examinations quickly and can thus help in saving time and the operations will be carried out efficiently.With the effective use, any Institute can apply the Online Examination System for conducting quick examinations and getting better results in less time.

ACKNOWLEDGEMENTS

I would like to take this opportunity to thank the Director of ET, Dr.Muthamizchelvan and Head of Department of Computer Science and Engineering, Dr.B.Amutha, for making the industrial training a part of the Curriculum and possible for the students. I would also like to thank A.NithyaKalyani, Class-In-Charge, and D.Vathana, Industrial Training Mentor, who has been a supporting pillar throughout the project. She has not only helped me in my particular project but has also been a great mentor to me. The internship opportunity I had with Softel Revolution was a great chance for learning and professional development. Therefore, I consider myself as a very lucky individual as I was provided with an opportunity to be a part of it. I am also grateful for having a chance to meet so many wonderful people and professionals who led me though this internship period.

I express my deepest thanks to Mr. Zkair Alam, Founder for taking part in useful decision giving necessary advices and guidance and arranged all facilities to make life easier. I choose this moment to acknowledge his contribution gratefully.

I perceive as this opportunity as a big milestone in my career development. I will strive to use gained skills and knowledge in the best possible way, and I will continue to work on their improvement, in order to attain desired career objectives. Hope to continue cooperation with all of you in the future.

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ABBREVIATIONS

HTML -> Hypertext Markup Language

SQL -> Structured Query Language

PHP -> Hypertext Preprocessor

LIST OF SYMBOLS

$\%$	A substitute for zero or more characters
_	A substitute for a single character
$[charlist]$	Sets and ranges of characters to match
$[charlist]$	Matches only a character NOT specified within the brackets

CHAPTER 1

COMPANY PROFILE

1.1 ABOUT COMPANY

Softel Revolution Technologies Pvt. Ltd. is a dynamic company operating as an off-shore programming and IT solutions provider. We attend to complete customer needs from understanding their requirements to developing state of the art,IT solutions that best suit them.

The key principle of our work with clients is speaking the same language as them. We are able to translate our client's requirements into software solution adroitly, the end result is that we deliver optimal solutions within the stipulated time frame.

Softel Revolution Technologies Pvt. Ltd. provides assistance ranging from Enterprise-wide web solutions to customized web-design and database-oriented projects, aimed at fetching clients the maximum benefit the Internet has to offer. The objective of Softel Revolution Technologies Pvt. Ltd. is to fulfill the documented expectations of our client's requirement using the most appropriate technology that will suit the client's needs.

Company consists of experts who develop web applications, window applications and content management system in an effort to maintain updated websites for targeted audiences.

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CHAPTER 2

IMPLEMENTATION

2.1 HTML

HyperText Markup Language, commonly referred to as HTML, is the standard markup language used to create pages. Web can read HTML files and render them into visible or audible web pages. HTML describes the structure of a website semantically along with cues for presentation, making it a markup language, rather than a programming language.

HTML elements form the building blocks of all websites. HTML allows images and objects to be embedded and can be used to create interactive forms. It provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. The language is written in the form of HTML elements consisting of tags enclosed in angle brackets (like <html>). Browsers do not display the HTML tags and scripts, but use them to interpret the content of the page.

HTML can embed scripts written in languages such as JavaScript which affect the behavior of HTML web pages. Web browsers can also refer to Cascading Style Sheets (CSS) to define the look and layout of text and other material. HTML markup consists of several key components, including those called tags (and their attributes), character-based data types, character references and entity references. HTML tags most commonly come in pairs like <h1> and </h1>, although some represent empty elements and so are unpaired, for example <img>. The first tag in such a pair is the start tag, and the second is the end tag (they are also called opening tags and closing tags).

HTML defines several data types for element content, such as script data and style sheet data, and a plethora of types for attribute values, including IDs, names, URIs, numbers, units of length, languages, media descriptors, colors, character encodings, dates and times, and so on. All of these data types are specializations of character data.

HTML documents imply a structure of nested HTML elements. These are indicated in the document by HTML tags, enclosed in angle brackets thus: In the simple, general case, the extent of an element is indicated by a pair of tags: a "start tag" and "end tag" . The text content of the element, if any, is placed between these tags.

Tags may also enclose further tag markup between the start and end, including a mixture of tags and text. This indicates further (nested) elements, as children of the parent element.

The start tag may also include attributes within the tag. These indicate other information, such as identifiers for sections within the document, identifiers used to bind style information to the presentation of the document, and for some tags such as the <img> used to embed images, the reference to the image resource. Some elements, such as the line break
, do not permit any embedded content, either text or further tags. These require only a single empty tag (akin to a start tag) and do not use an end tag. Header of the HTML document :<head>...</head>. The title is included in the head, for example:

<head>

<title>The Title</title>

</head>

Headings: HTML headings are defined with the <h1> to <h6> tags:

<h1>Heading level 1</h1>

<h2>Heading level 2</h2>

<h3>Heading level 3</h3>

<h4>Heading level 4</h4>

<h5>Heading level 5</h5>

<h6>Heading level 6</h6>

Paragraphs:

Paragraph 1 Paragraph 2

Line breaks:
. The difference between
 and is that "br" breaks a line without altering the semantic structure of the page, whereas "p" sections the page into paragraphs. Note also that "br" is an empty element in that, although it may have attributes, it can take no content and it may not have an end tag. This
 is a paragraph
 with
 line breaks Header of the HTML document:<head>...</head>. The title is included in the head, for example:

<head>

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<h4>Heading level 4</h4>

<h5>Heading level 5</h5>

<h6>Heading level 6</h6>

Paragraphs:

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 and is that "br" breaks a line without altering the semantic structure of the page, whereas "p" sections the page intotoparagraphs. Note also that "br" is an empty element in that, although it may have attributes, it can take no content and it may not have an end tag.

This
 is a paragraph
 with
 line breaks

This is a link in HTML. To create a link the <a> tag is used. The href= attribute holds the URL address of the link.

A link to Wikipedia!

This is a link in HTML. To create a link the <a> tag is used. The href= attribute holds the URL address of the link.

A link to Wikipedia!

2.2 SQL

SQL (Structured Query Language) is a special-purpose programming language designed for managing data held in a relational database management system (RDBMS), or for stream processing in a relational data stream management system (RDSMS).
Originally based upon relational algebra and tuple relational calculus, SQL consists of a data definition language, data manipulation language, and a data control language. The scope of SQL includes data insert, query, update and delete, schema creation and modification, and data access control. Although SQL is often described as, and to a great extent is, a declarative language (4GL), it also includes procedural elements.
SQL deviates in several ways from its theoretical foundation, the relational model and its tuple calculus. In that model, a table is a set of tuples, while in SQL, tables and query results are lists of rows: the same row may occur multiple times, and the order of rows can be employed in queries (e.g. in the LIMIT clause). Whether this is a practical concern is a subject of debate. Furthermore, additional features (such as NULL and views) were introduced without founding them directly on the relational model, which makes them more difficult to interpret.
The SQL language is subdivided into several language elements, including:
1.Clauses, which are constituent components of statements and queries. (In some cases, these are optional.)
2.Expressions, which can produce either scalar values, or tables consisting of columns and rows of data
3.Predicates, which specify conditions that can be evaluated to SQL three-valued logic (3VL)(true/false/unknown) or Boolean truth values and are used to limit the effects of statements and queries, or to change program flow.
4.Queries, which retrieve the data based on specific criteria. This is an important element of SQL.
5.Statements, which may have a persistent effect on schemata and data, or may control transactions, program flow, connections, sessions, or diagnostics.
6.SQL statements also include the semicolon (";") statement terminator. Though not required on every platform, it is defined as a standard part of the SQL grammar.
7.Insignificant whitespace is generally ignored in SQL statements and queries, making

it easier to format SQL code for readability.

The most common operation in SQL is the query, which is performed with the declarative SELECT statement. SELECT retrieves data from one or more tables, or expressions. Standard SELECT statements have no persistent effects on the database. Some non-standard implementations of SELECT can have persistent effects, such as the SELECT INTO syntax that exists in some databases.

Queries allow the user to describe desired data, leaving the database management system (DBMS) responsible for planning, optimizing, and performing the physical operations necessary to produce that result as it chooses.

A query includes a list of columns to include in the final result, immediately following the SELECT keyword. An asterisk ("*") can also be used to specify that the query should return all columns of the queried tables. SELECT is the most complex statement in SQL, with optional keywords and clauses that include:

1.The FROM clause, which indicates the table(s) to retrieve data from. The FROM clause can include optional JOIN sub clauses to specify the rules for joining tables.

2.The WHERE clause includes a comparison predicate, which restricts the rows returned by the query. The WHERE clause eliminates all rows from the result set where the comparison predicate does not evaluate to True.

3.The GROUP BY clause is used to project rows having common values into a smaller set of rows. GROUP BY is often used in conjunction with SQL aggregation functions or to eliminate duplicate rows from a result set. The WHERE clause is applied before the GROUP BY clause.

4.The HAVING clause includes a predicate used to filter rows resulting from the GROUP BY clause. Because it acts on the results of the GROUP BY clause, aggregation functions can be used in the HAVING clause predicate.

5.The ORDER BY clause identifies which columns to use to sort the resulting data, and in which direction to sort them (ascending or descending). Without an ORDER BY clause, the order of rows returned by an SQL query is undefined.

2.3 PHP

PHP (Hypertext Preprocessor) is a server-side scripting language designed for web development but also used as a general-purpose programming language. PHP code can be simply mixed with HTML code, or it can be used in combination with various templating engines and web frameworks. PHP code is usually processed by a PHP interpreter, which is usually implemented as a web server's native module or a Common Gateway Interface (CGI) executable. After the PHP code is interpreted and executed, the web server sends the resulting output to its client, usually in the form of a part of the generated web page; for example, PHP code can generate a web page's HTML code, an image, or some other data. PHP has also evolved to include a command-line interface (CLI) capability and can be used in standalone graphical applications.

The following "Hello, World!" program is written in PHP code embedded in an HTML document:

```
<!DOCTYPE html>
<html>
<head>
<title>PHP Test</title>
</head>
<body>
<?php echo '<p>Hello World</p>'; ?>
</body>
</html>
```

However, as PHP does not need to be embedded in HTML or used with a web server, the simplest version of a "Hello, World!" program can be written like this, with the closing tag omitted as preferred in files containing pure PHP

```
<?='Hello world' ?>
```

The PHP interpreter only executes PHP code within its delimiters. Anything outside its delimiters is not processed by PHP (although non-PHP text is still subject to control structures described in PHP code). The most common delimiters are <?php to open and ?> to close PHP sections. There are also the shortened forms <? or <?= (which is used to echo back a string or variable) and ?>. Short delimiters make script files less

portable, since support for them can be disabled in the local PHP configuration, and they are therefore discouraged. The purpose of all these delimiters is to separate PHP code from non-PHP code, including HTML.
The first form of delimiters, <?php and ?>, in XHTML and other XML documents, creates correctly formed XML "processing instructions". This means that the resulting mixture of PHP code and other markup in the server-side file is itself well-formed XML.
Variables are prefixed with a dollar symbol, and a type does not need to be specified in advance. PHP 5 introduced type hinting that allows functions to force their parameters to be objects of a specific class, arrays, interfaces or callback functions.

Unlike function and class names, variable names are case sensitive. Both double-quoted (" ") and here doc strings provide the ability to interpolate a variable's value into the string. PHP treats newlines as whitespace in the manner of a free-form language, and statements are terminated by a semicolon. PHP has three types of comment syntax:/* */ marks block and inline comments; // as well as are used for one-line comment. The echo statement is one of several facilities PHP provides to output text, e.g., to a web browser.

In terms of keywords and language syntax, PHP is similar to most high level languages that follow the C style syntax. if conditions, for and while loops, and function returns are similar in syntax to languages such as C, C++, Java and Perl.

2.4 Software Requirements

1.XAMPP SERVER

2.SUBLIME TEXT

3.NOTEPAD

4.MySQL

CHAPTER 3

TRAINING DETAILS

3.1 DESIGNATION

WEB APPLICATION DESIGN AND DEVELOPMENT (INTERN)

3.2 JOB:

The job under the same was to design a web application for the organization. The design ideas was given by the company. The company needed a web application for existing client, so that client uses the web applicaton.

3.3 RESPONSIBILTIES:

Planning and implementing design for the application.

The feasibility study for the application.

Regular changing and maintenance of database.

Analyze User as well as Admin Database

3.4 TECHNOLOGY USED

CLIENT SIDE :- HTML, CSS, PHP, MySQL

SERVER SIDE :- HTML, CSS, PHP, MySQL

CHAPTER 4

IMPLEMENTATION

4.1 PLANNING AND DESIGNING

Planning: To develop an web application which is secure, dynamic and scalable.

Design: The design was done by making Architecture Diagram, Use- Case Diagram and Sequence Diagram.

Develop: Development was done using editors like Sublime Text, and Notepad++.

Testing: Testing of the product was done at the local server before deploying in the server.

Deployment: The final product deployed in Microsoft Azure Server.

4.2 ACTORS

Admin : (Manage Users, Manage Subjects, Manage Test, Manage Result)

Student : (Edit profile, Login, View previous result, Give test, Practice Test, Resume Test)

CHAPTER 5

SAMPLE CODE AND OUTPUT SCREENSHOT

1. Home Page:

```
<?php
if(GLOBALS[’message’])  echo GLOBALS[’message’]."</div>";  ?>
<div id="container">
<div class="header">
<img style="margin:10px 2px 2px 10px;" height="100" width="150" src="images/logo.gif">
<h3 class="headtext"> nbsp; Online Examination System </h3>
<h4 style="color:ffffff;text-align:center;margin:0 0 5px 5px;">
<i>...because Examination Matters</i></h4> </div>
<form id="stdloginform" action="index.php" method="post">
<div class="menubar">
<ul id="menu"> <?php if(isset(SESSION[’stdname’])) ?>
<li> <div class="aclass"><a href="register.php"
title="Click here to Register">Register</a></div> </li> <?php  ?>
</ul></div>
<div class="page">
<table cellpadding="30" cellspacing="10">
<td>User Name</td>
<td><input type="text" tabindex="1" value="" size="16" /></td>
<td>Password</td>
```

```
<td><input type="password" name="password" size="16" /></td>

    <tr>
<td colspan="2">
<input type="submit" value="Log In" name="stdsubmit" class="subbtn" />
</td><td></td>
</tr></table>
<div id="footer">
<p style="font-size:70
</div>

    if (!isset(SESSION['stdname']))
GLOBALS['message'] = "Session Timeout.Click here to <a
href=ïndex.phpÞRe-LogIn</a>";

    else if (isset(REQUEST['logout']))
unset(SESSION['stdname']);
unset(SESSION['stdid']);
header('Location: index.php');

else if (isset(REQUEST['dashboard']))
header('Location: stdwelcome.php');

else if (isset(REQUEST['next']) || isset(REQUEST['fsum']))

    if (isset(REQUEST['markreview']))
SESSION['q1status'] = 'review';
```

```
SESSION[’q1stdans’] = REQUEST[’answer’];
else
SESSION[’q1status’] = ’answered’;
SESSION[’q1stdans’] = REQUEST[’answer’];

SESSION[’curqnid’] = 2;
if (isset(REQUEST[’fsum’]))
REQUEST[’summary’] = "summary";
else if (isset(REQUEST[’viewsummary’]) ||
isset(REQUEST[’summary’]))

    <!– End item-inner –>
```

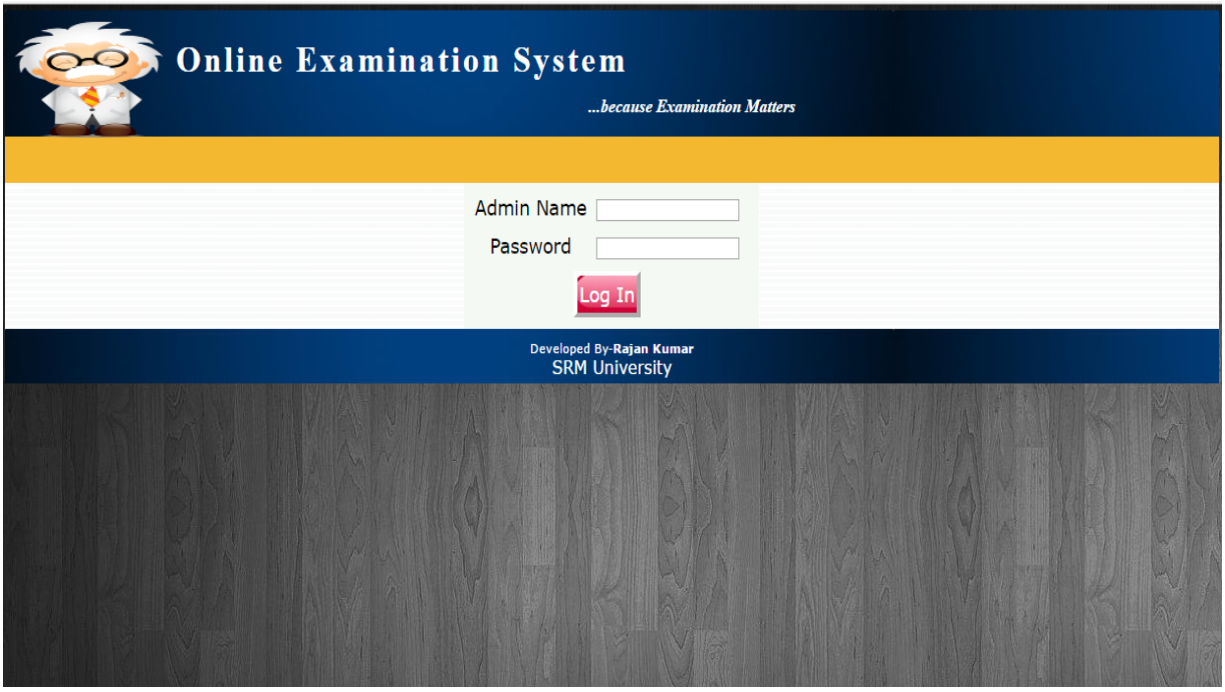

Figure 5.1

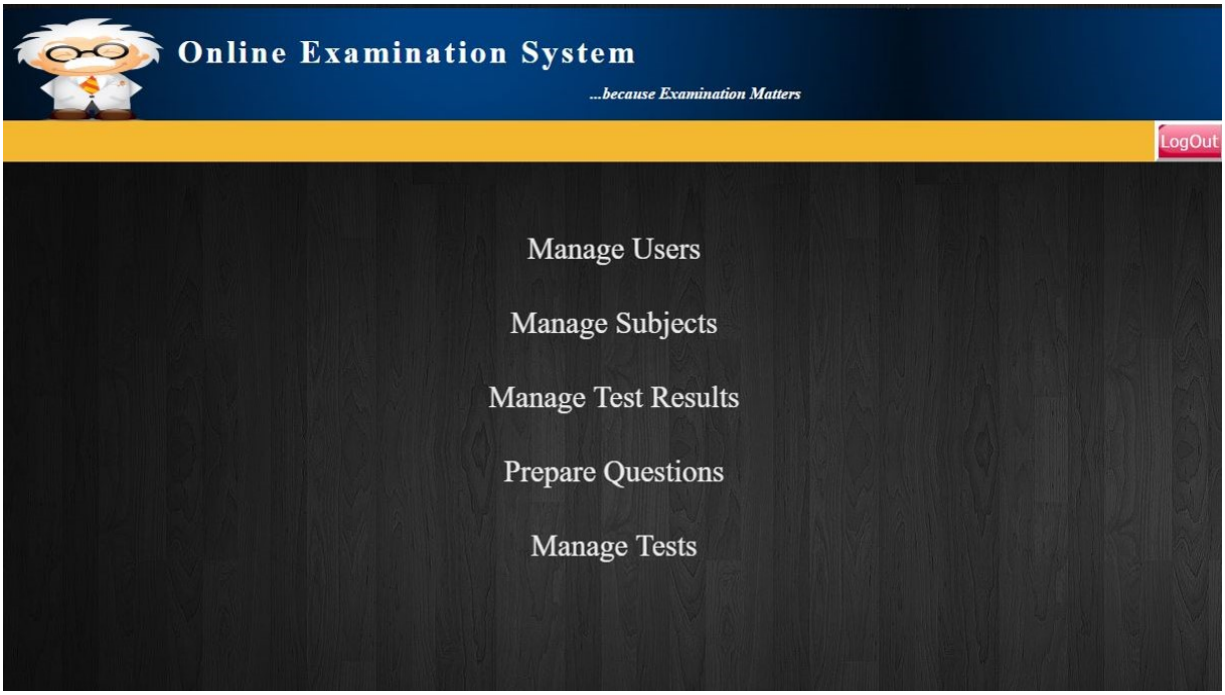

Figure 5.2

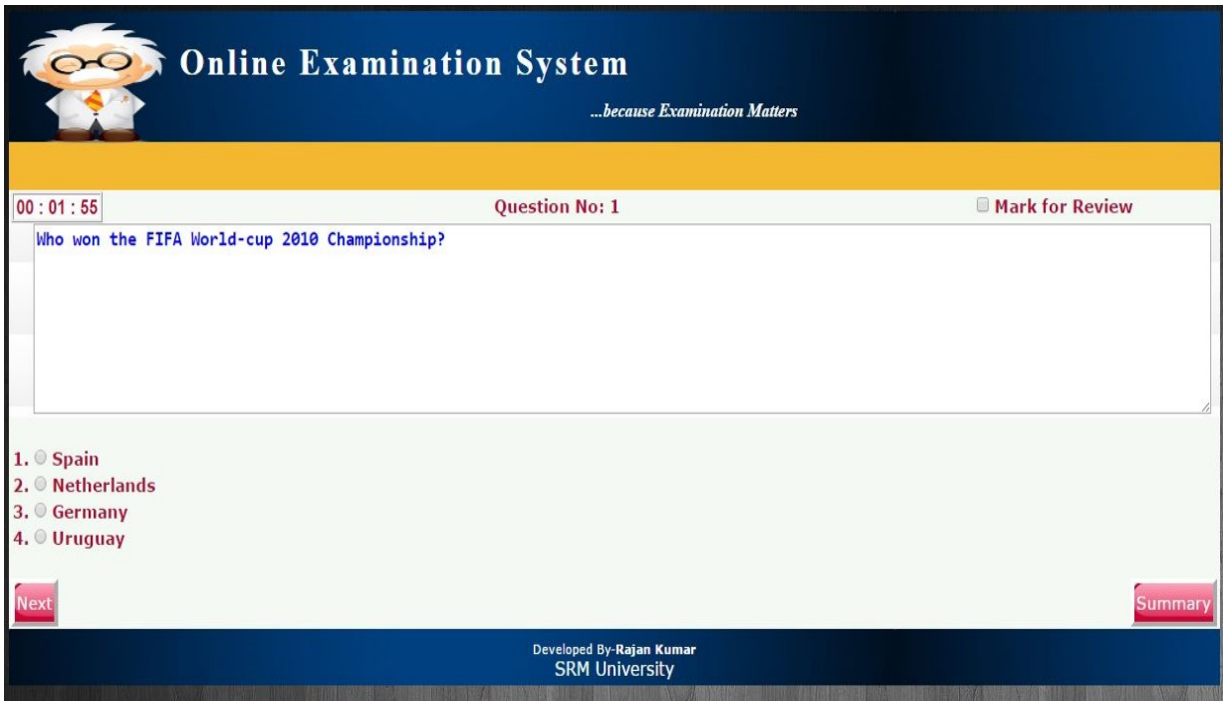

Figure 5.3

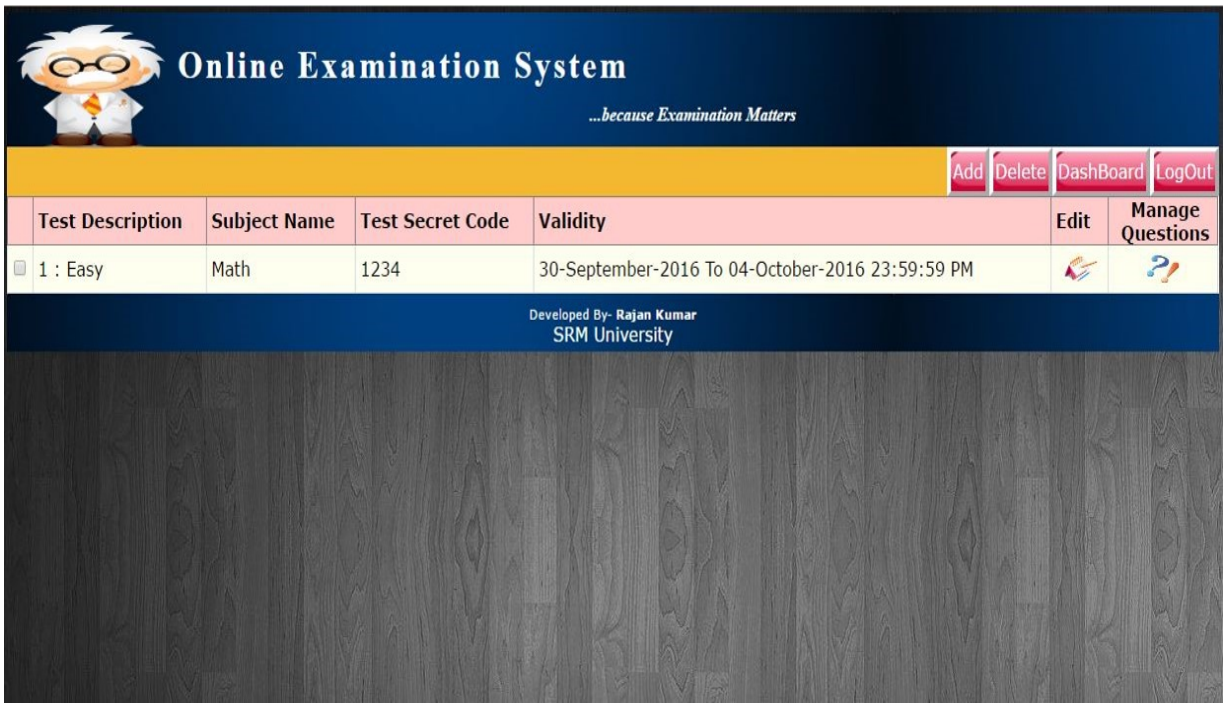

Figure 5.4

CHAPTER 6

CONCLUSION

In review this internship has been an excellent and rewarding experience. I have been able to meet and network with many people that I am sure will be able to help me with opportunities in the future.

Although, I have learned through this internship is time management skills, team management skills as well as self-motivation. Once I realized what I had to do I organized my day and worked and completed all task under stipulated time. I learned that I needed to be organized and have questions ready for when it was the correct time to get feedback. I came up with various proposals and ideas that the company is still looking into using.

Softel Revolution gave the field to express yourself and learn new technology avail under the current domain. Learning PHP and XAMPP was an exciting journey. The field doesn't end just in Web application Development, the experience with servers and other IT resources was overwhelming.

I am going to continue to work for Softel Revolution although I am still keeping my options open for new opportunities. I enjoy this line of work. I will continue to work hard in my position and hope to continue to learn about the industry and meet new people. This was an excellent experience and I hope that other interns got as much out of it as I did!

REFERENCES

[1] Google

[2] Tutorialspoint

[3] Stackoverflow

[4] Code academy