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Lecturer's evaluation system

**This research was presented to the Council of the College of Science -
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الاهداء

إلى النور الذي ينير لي درب النجاح (أبي)

ويا من علمتني الصمود مهما تبدلت الظروف (أمي)

إلى من يضيئون لي الطريق ويساندوني ويتنازلون عن حقوقهم لإرضائي والعيش في هناء
(أخوتي)

إلى من أنار لي الطريق وأمسك لي مشعل النور أستاذي الفاضل

م. حازم نومان عبد وجميع اساتذة قسم علوم الحاسبات،

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إلى كل من أضاء بعلمه عقل غيره،

أو هدى بالجواب الصحيح حيره سائله

فأظهر بسماحته تواضع العلماء

وبرحابته سماحه العارفين.

شكر وتقدير

اشكر الله العلي القدير الذي أنعم عليّ بنعمة العقل والدين. القائل في محكم التنزيل "وَفَوْقَ كُلِّ ذِي عِلْمٍ عَلِيمٌ" سورة يوسف آية 76.... صدق الله العظيم .

وقال رسول الله (صلي الله عليه وسلم): "من صنع إليكم معروفاً فكافئوه, فإن لم تجدوا ما تكافئونه به فادعوا له حتى تروا أنكم كافأتموه" (رواه أبو داوود) .

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Supervisors' Certificate

I certify that project entitle " Lecturers evaluation online system" was prepared under my supervision to computer science department to science collage by (**Ali Faiq Hussein , Teeba Mustafa Taha**) as a partial fulfillment of the requirements for the degree of B.Sc.in computer science Department.

Signature:

Name:- Hazim Noman Abed

Date:-30/05/2019

Certification of the examining

We certify that we have read the project titled Design a "Lecturers evaluation system";

And as examining committee, examined the student in its contents and in what is concerned with it and that in our opinion it meets the standards of project for the degree of B.Sc. Computer Science.

Signature:

Signature:

Name:

Name:

(Chairman)

(Member)

Date: / /2019

Date: / / 2019

Signature:

Name: Assistant lecturer Hazim Noman Abed

(Supervisor)

Date: / /2019

Approval for the Computer Science Department

Signature:

Name: Professor Dr. Ziyad Tariq Mustafa

(Head of Computer science Department-College of science)

Date: / /2019

Table of Contents

	Subject	page
Chapter one	INTRODUCTION	
1.1	Introduction	1
1.2	What is ICT and Why	1
1.3	Problem Statement	2
1.4	Research Objective	2
1.5	Research Scope	3
1.6	Expected Contribution / Benefit	3
Chapter two	LITERATURE REVIEW	
2.1	REVIEW OF RELATED LITERATURE	4
2.2	Why go online	4
2.3	Present Situation	6
2.4	Types of Evaluation	8
2.5	Clinical Supervision	9
2.6	Evaluator Qualifications	10
2.7	Expectations	11
2.8	Professional versus Technician	13
2.9	Due Process	14
2.10	Rationale for a New Evaluation Criteria	15
2.11	Angular 7, PHP and MY-SQL	16
Chapter Three	System Implementation	
3.1	Design of project	18
3.1.1	Development Environment	18
3.1.2	Site Map	19
3.1.3	Home page	19
3.1.4	Supervisors Page	21

3.1.5	Lecturer Evaluation Page	25
Chapter four	Conclusions and suggestions	
4.1	Conclusions	28
4.2	Suggestions	28
	References	29

List of Figures

Figure	Title	Page
3.1	Web Site Map	18
3.2	Home Page	19
3.3	Home page when user select department and stage and enter correct password number	20
3.4	select department, stage and enter wrong password	20
3.5	Supervisors access page	21
3.6	Admin control page	22
3.7	Evaluation control panel.	23
3.8	Add, Delete and Modify lecturer staff	24
3.9	Add, Delete and modify Questions	24
3.10	Random password generation page	25
3.11	Lecturer evaluation page	26

ABSTRACT

The world is living now in a new world revolution, information revolution which is connecting with technology information age and the center of the world moved from revolution in to knowledge. Today, the human society's base on knowledge on ton wealth, then the knowledge became the center of progress and extensive information dos not mean anything if society cannot use this information wisely.

A lecturer evaluation system is a system designed using Angular 7 framework as front end with PHP Programming language as back end and has been linked to the MY-SQL database to store the results of the evaluation. The system contains several pages are indicated as follows consists, Home page and contain: (a) Login for student, (b) Login for supervisors.

Process of login students for evaluation start by selecting the department and the stage and then enter the password of the student. While login of supervisors contains a two filed one for supervisor user name and another for password. When the supervisor enters to the control page of the website, the menu bar will appear and its contents a links to the following pages:

Evaluation control panel: is used to show the results of the evaluation for each lecturer with possibility to print the evaluation.

Lecturers control panel: is used to add, delete, edit the lecturers that student are going to evaluate, as well as the possibility to add excel file of the lecturer's.

Questions control panel: is used to add, edit and delete the question of evaluation, as well as the possibility to add excel file of the question.

Random access number generation control panel: Used to generate random numbers according to academic stages which will be used later as a password distributed to students in order to start the evaluation process.

CHAPTER 1

INTRODUCTION

1.1 Introduction

The world is living now in a new world revolution, information revolution which is connecting with technology information age and the center of the world moved from revolution in to knowledge. Today, The human societies base on knowledge on ton wealth, then the knowledge became the center of progress and extensive information dos not mean anything if society cannot used these information wisely [1].

The gap between advanced countries and developing or growing countries become a knowledge men gap because of huge information in revolution information technology and telecoms. The information became an important resource to the person and society; the electronic chips begin to play a basic role such a coal which is a basic thing in the past when the industrial revolution was so important. A technology gap approach to why growth rates differ [2].

The modern technology contains the digital technology in twenty-first century. This advanced shorten the time between any two area on the earth because of using electronic network. The information revolutions are connecting with information technology through using computer system and telecom system [1].

1.2 What is ICT and Why

ICT (information and communications technology - or technologies) is an umbrella term that includes any communication device or application, encompassing: radio, television, cellular phones, computer and network hardware and software, satellite systems and so on, as well as the various services and applications associated with them, such as videoconferencing and distance learning. In general there are some important things as the requirements for the implementation of ICT, there are [3]:

1. The availability of tutor support services that can help students when learning difficulties.
2. The existence of government officials / managers of ICT.
3. The existence of the positive attitude of students and educators on computer technology.
4. Availability of learning system design that can be learned / known by every student
5. A system of evaluation of students' progress and feedback mechanisms developed by the organizers.

1.3 Problem Statement

Currently a paper-based system usually creates a lot of administrative workload. Before administering a questionnaire, involves the printing, packaging and distributing of a large quantity of questionnaire and answer sheet. All these materials have to be returned to a central location for processing, which involves sorting and scanning the answer sheets. If the questionnaire also contains free-response questions, it often proves difficult to process them properly because the lack of manpower. With a web-based system, data collection involves only the inputting of student and instructor data into the system and in putting them into the report system, once the system is set up, students can access the questionnaire using a computer which is connected to the university network at any time they choose within a specified period. Their responses will be transmitted back via the internet and stored in a server.

1.4 Research Objective

The objective of this study is to development on-line lectures evaluation system to support of evaluation process of lecturers at College of Science- Diyala University.

1.5 Research Scope

The research work focuses on enhancing the evaluation process of lecturers for College of Science that is one of the more established Colleges in Diyala University. It is chosen as a case study, to explore its current evaluation system, as well as to develop on line lectures evaluation system that can be used to increase efficiency of the evaluation process of college of science.

1.6 Expected Contribution / Benefit

The contributions of this study are to provide support to College of Science in Diyala University to implement modernized techniques of College management especially in lectures evaluation system. The current evaluation system in College of Science needs to change it from traditional or manual system to technical or automated system. Finally, this study is specific to assist College of Science to achieve their goals and strategy in reducing the time and efforts to provide unique products or services for their customers.

CHAPTER 2

LITERATURE REVIEW

2.1 Review of Related Literature

"Evaluation is a judgment regarding the worth or value of something" Jolliffe [4]. There exists a multitude of literature dealing with the notion of teacher evaluation. To date, there is very little published research dealing specifically with the formative evaluation of web-based instruction. This chapter presents a review of the literature related to formative evaluation of online instruction. In light of the comparatively minimal literature dealing specifically with the formative evaluation of online instruction, the chapter also provides a review of the literature dealing with teacher evaluation in broader terms. It begins with a presentation of several definitions and explanations of the term evaluation. Also provided is a rationale for developing new evaluation criteria, targeted specifically towards online instruction. Why formative evaluation is the method of choice and what factors may require examination during such processes is also included.

2.2 Why Go Online

There are a number of advantages to using an on-line system to collect students' feedback on teaching.

1. Increase in Efficiency in the Data Collection Process

A paper-based system usually creates a lot of administrative workload. Before administering a questionnaire, a lot of preparatory work has to be done. For example, the existing course evaluation system at HKUST, which is not unlike those used in other local HEIs, involves the printing, packaging, and distributing of a large quantity of questionnaire and answer sheets (over 30,000 pages). All these materials have to be returned to a central location for processing, which involves sorting and scanning the answer sheets. If the questionnaire also contains free-response questions, as does the one used in HKUST, it often proves difficult to process them properly because the lack of manpower Ha [28].

With a Web-based system, data collection involves only the inputting of student and instructor data into the system. Such data, enormous in size though they may be, are already in electronic format and inputting them into the report system involves merely the conversion of a data file from one format into another. Once the system is set up, students can access the questionnaire using a computer which is connected to the university network at any time they choose within a specified period. Their responses will be transmitted back via the Internet and stored in a server. Even the answers students make to the free-response questions can be easily captured electronically Ha [28].

2. Increase in Flexibility

An on-line system with the processing power of its host computer allows much greater flexibility in a number of aspects. It supports complex questionnaire designs and has other benefits.

3. No Need to Schedule Time for Teaching Evaluation:

Since students can do the evaluation anywhere, anytime, where and when they have access to a computer with connection to the university network, there is no need to schedule a time slot for the course evaluation. At the moment, most evaluations are done in class time.

4. Flexibility in Questionnaire Design:

Like all computer-based testing systems, an on-line system to capture students' responses allows great flexibility in questionnaire design. A practical example is the evaluation of courses with more than one instructor. With a paper-based system, because the questionnaire is of a fixed length, it would be difficult to respond satisfactorily to requests for nonstandard formats. With an on-line system, questionnaires can always and easily be modified to contain additional sections to evaluate any number of instructors in the course.

An on-line system can also support complex branching. Unlike in paper based systems, respondents will not notice when they are directed to a different set of questions based on their specific answers to some previous questions because the system simply chooses and presents only the next question needing to be answered. In a paper questionnaire, such branching will often confuse the respondents. In an on-line system questionnaires can also be customized in accordance with the needs of the individual course or instructor. Each course or instructor can have a different set of questions, in addition to the core set

An on-line system also makes sampling of students in a questionnaire survey a viable option. As students in HEIs are asked more and more frequently to provide feedback on teaching, courses and activities, or participation in research activities, there is a genuine risk of “questionnaire burnout”. With an on-line system, it is possible to sample only a fraction of the students in a group for their feedback, instead of doing a full survey. Statistically speaking, such probability sampling has the advantage that the margins of error of the survey results are estimable. At the moment, with the paper-based system, the students doing an evaluation are often a self-selected group. With such a sample, it would not be possible to estimate the margin of error in the survey results. Another advantage is that students have to do less evaluations. If on average only half of the students in each course are asked to evaluate, then each student on average will only have to evaluate half of the courses he/she attends. With less evaluations to do, hopefully students will spend more time on each evaluation Ha [28].

2.3 Present Situation

"Traditionally, local school systems have emphasized the accountability or summative function of teacher evaluation" McGreal [5] Wise [6] use the idiom teacher evaluation in terms of the compilation and subsequent use of information in order to judge a teacher. This is but one of many interpretations of what teacher evaluation could mean, depending upon purpose and context Alkin [7]. feels that

evaluation is used to report summary data which is useful to decision makers when selecting alternatives. Sometimes evaluation is viewed as an examination of the effectiveness of teaching methods or materials being used Brenna[26].claims that more importantly, evaluation should be about obtaining the necessary knowledge to improve upon these areas Gorton [8].view evaluation as a process whereby the strengths and limitations of an individual or group are identified and defined. The center of attention for teacher evaluation has been evolving over the years. With this adjustment has come an accompanying desire to produce discernible positive effects for actual instruction.

All teachers are evaluated at least once in their career (on entry to the profession) but by the use of criteria and acceptable standards of achievement which are never formally defined. They [the evaluation criteria] do, however, seem to relate closely to classroom performance. Clearly such an arrangement is unsatisfactory Dennison[9]. A common theme is that teacher evaluation should serve a role in the provision of outcomes that can result positively, in having significant effect upon the actual instruction that students receive Wise[6] By in large, teachers tend to agree with the notion that as an all-purpose function, evaluation should improve the quality of instruction Barrett[10].Teachers will, however, rail against a process that is perceived as being extraneous and or disciplinary Darling-Hammond [11]. Effective teacher evaluation utilizes a mixed methodology when implemented McConney [12]. found that employing a variety of techniques when conducting evaluations provides the best results.

"To move beyond the narrow confines of one's own teaching, multiple perspectives are necessary" .This differs from the common notion that teacher evaluation is a process that portrays the teacher as a supervised employee who can only benefit from a process that is top down in nature and process Sawyer[13]. examined a school district where the top down summative process had resulted in extensive frustration with the one-way nature of the process. When the district adopted and implemented an evaluation process that allowed for teacher

participation, satisfaction levels increased. "The greatest obstacle to teacher sense of efficacy, ironically, is lack of feedback about their performance — credible information about how well they are carrying out their responsibilities" McLaughlin [14]. "Evaluation needs to be participatory and reflective in order to be meaningful for teachers" Weiss[15]. The present system in Rocky Mountain School District is either lacking or void in these areas. The proposed new criteria shall provide for feedback, reflection and participation.

2.4 Types of Evaluation

"Two evaluation types exist: formative and summative. Formative evaluation is a tool used to improve instruction. Summative evaluation is a tool used to make personnel decisions" Barrett [10]. "Formative means improving and developing while summative means evaluating" Hazi [16]. "The main purpose of formative or professional supervision is to identify needs for teacher improvement; whereas, the primary purpose of summative evaluation is to reach a determination on whether staff, particularly new members, should be retained, non-renewed, or dismissed" Gorton [8]. Stiggins [17] conducted a survey leading them to propose that there were a number of indispensable circumstances for the teacher growth model of teacher evaluation to succeed. One of these was that any summative approaches to teacher evaluation remain largely independent of the formative approach. Both summative and formative require time, observation, conferencing and competence of the examiner. Regrettably, the time taken to perform the evaluation is often rushed. Taking the time to perform a formative evaluation is however justified, based upon the potential outcomes and decreased tensions between the participants Barber[18]. "Teachers complain that the principal, or whoever is conducting the evaluation, does not have the time to gather quality information and provide useful feedback". When combined with examiner incompetence, attitude towards the

process is often unenthusiastic. This robs the evaluator of the credibility needed to carry out an effective evaluation Body[19].

2.5 Clinical Supervision

Inclusive and integral to these forms of evaluation is the notion of clinical supervision. Clinical supervision concerns itself with the improvement of professional practice by way of refinements in teaching and learning ."Clinical supervision is an intensive process designed to improve instruction by conferring with a teacher on lesson planning, observing the lesson, analyzing the observational data, and giving the teacher feedback about the observation" Glatterhorn [25].The use of the word clinical indicates a face-to-face interaction between the educator and evaluator Gold hammer [27].Clinical supervision performed in a formative manner places emphasis on feedback and training. The focal point is on assisting a teacher to do a better job, rather than disciplining them for what they might do improperly through the eyes of the evaluator Gorton[8].indicate that there are five major characteristics of proper clinical supervision:

1. Observations are related to the teacher's goals.
2. Observations and conferences are cyclical and part of a continuous process.
3. A database of information is developed from the observation process.
4. The teacher and supervisor jointly form final interpretations.
5. Subsequent teaching and observation sessions are based on hypothesis generation and testing.

Brennan[26]outlines five phases of clinical supervision:

1. The reason and purpose for the observation.

2. The focus of the observation.
3. The method and form of observation to be used.
4. The time of observation.
5. The time for post-conference.

Arguably the most important aspect of the clinical supervision is the post-conference. It would be at this time that the teacher and evaluator would be able to scrutinize the collected data and prepare for future sessions and adjustments. However, the success of the follow-up conference depends in large part on the extent to which the teacher feels secure with and trustful of the supervisor, and the amount of planning invested by the supervisor in preparation for the meeting. A teacher who does not feel comfortable with the supervisor and does not believe that the supervisor has his or her best interest at heart is unlikely to be cooperative Gorton [8]. If there is not a minimum of trust and mutual respect achieved between both parties, then the success of the process becomes tenuous.

2.6 Evaluator Qualifications

Another contentious aspect of teacher evaluation is that of evaluator qualification. It would be easy to assume that those people who are made supervisors and administrators would be provided with continuous training on how to perform their job efficiently and effectively. "Teachers complain that few evaluators have any special training to help them plan and carry out a successful evaluation. Even worse, many have had little or no recent experience in the classroom" Body[19] Educator evaluation carried out by school principals and other school-based supervisors have been found to lack strong reliability Darling-Hammond [11]. states that this has "been a function of principals' lack of time, inadequate expertise for evaluating all teaching situations, insufficient evaluation training, and

inappropriate instrumentation." Most " teachers believe that when administrators walk into the classroom, they are entering territory in which the teacher knows just as much, if not more, about how to perform effectively" McGreal [5]. The issue of poorly trained supervisors is not unique to education. Positive, useful employment training is rarely offered to business managers and supervisors. It is no small wonder, then, that many supervisors and managers lack confidence in their hiring abilities and that so many "employers" opt to sticking with fixed, traditional ways of recruiting and hiring. They are simply borrowing the methods of the person who preceded them, crossing their fingers and hoping that nothing will go wrong .If the business community has difficulty in securing minimally adequate, if not superior, training for its supervisors, it is not farfetched to assume that the teaching community experiences the same difficulties. Teaching and business are not alone in failing to train those who evaluate personnel. "Traditionally, there has been a lack of formal training for supervisors, a fact that Hoffman described as the mental health profession's 'dirty little secret' (p. 25)". Teacher evaluation is not something most school principals like to do. For one thing, they have little confidence in their ability to carry out fair, consistent, and meaningful evaluation of teachers' classroom performance" McLaughlin [14]. "In most districts, principals receive little if any training related to their teacher evaluation responsibilities" Wise[6].

2.7 Expectations

A corollary to supervision and evaluation is the implied philosophy that teacher evaluation be a fair component in a professional development growth plan. "In most instances the difficulties arise not with the concept or general purpose, but from the way the evaluation is carried out" Barrett [10] In the field of education, teachers are to assign either letter grades or marks in relation to expected learning outcomes. In the Province of British Columbia ,there are specific steps to be followed for the meeting of specific grading outcomes:

1. Learning outcomes for the activity and unit are identified to make clear what the student is expected to know and be able to do.
- 2-Specific criteria for the unit and activity are established. It is helpful for students to be involved in the establishing of criteria. In this way they understand what is expected of them.
3. Different levels of performance or models are developed.
4. Students participate in learning activities to allow them to practice the skills and acquire the required knowledge.
5. Students are given opportunities to demonstrate their learning. Teachers may have students represent their learning in a variety of ways. Assessment data is collected from tests, teacher observations, student self-assessment, written assignments, portfolios, and performance tasks.
6. Students' levels of performance are evaluated in relation to the criteria.
7. The teacher assigns a letter grade for the activity.

Teachers are expected to adhere to these guidelines and to provide adequate proof of established criteria to substantiate the assigned grade. Can we expect no less of the education system to implement a process whereby teachers are equally involved, permitted to fail and thereby grow while demonstrating performance enhancement through a variety of means? "A study conducted by Daniel entitled *Excellent Teachers, Their Qualities and Qualifications* (1994) stressed the need for multiple assessments of a teacher's effectiveness which should be utilized in multidimensional assessments of teacher effectiveness". Just as students are permitted to demonstrate their acquisition of knowledge in a variety of ways, and are not expected to learn or acquire at the same rate, so should educators be granted the same latitude.

2.8 Professional versus Technician

Perhaps the most difficult aspect in teacher evaluation is in deciding whether or not teachers are professionals, and require a process appropriate for a professional, or if they are merely technicians. This debate is not new, but as of yet is still unresolved. "One definition states that a professional is a person who engages in an activity for financial remuneration that other people engage in for recreation. Another is that he is a person who helps other people. It is almost altruism in its purest form" .For example, when dealing with the medical profession or perhaps in needing a plumber, Most readers probably realize that they know too little about either medicine or plumbing to be able to evaluate how well the practitioners know their business or whether they are using the best possible procedures. But the public does not acknowledge similar ignorance when it comes to teaching. Everyone seems to know the best way to teach Coker [23]. "A lawyer can judge success by case outcome; an agronomist can measure achievement by the number and type of new agricultural techniques in place. Teachers, however, have no such unequivocal or unitary measure" McLaughlin [14] Further, "we usually evaluate technicians (e.g. plumbers, auto mechanics) by the results they produce, but we do not judge professionals (e.g. physicians, dentists, lawyers) in this fashion" Coker[23]. It is reasonable to state that the type of problems professionals and technicians are expected to resolve differ in nature. 'We believe that teachers should be evaluated as professionals, not as technicians, because teachers deal with complex problems" Coker [23]. The problems confronted by a technician are likely to be much less complex than those encountered by a professional. Most or all of the technician's problems will have known solutions; thus, if the diagnosis is accurate, the outcome of the treatment can be predicted with a high degree of certainty. It would be manifestly unfair, then, to evaluate an attorney by outcomes alone, since some cases are certain to be more difficult than others to argue successfully. Most people would probably agree that the same thing holds true for teaching: it is harder to succeed in some teaching situations than in others Coker

[23]. postulates that there are six characteristics by which a true professional may be characterized:

1. They provide an essential service for other people.
2. They have a methodology, which is unique and peculiar to that professional group.
3. They make judgments and decisions, which affect the lives and wellbeing of those they serve.
4. They have a code of ethics.
5. Those groups that are truly professional use the power of the professional organization to impose a discipline upon their membership, to insist that every member of the group adhere to the ethical way.

2.9 Due Process

An essential consideration in the process of evaluation is the concept of due process. Due process ensures that an individual receives a fair and just decision with regards to dismissal. "In staff evaluation this means that the criteria must be legitimate, the individual must be informed of shortcomings, must be given sufficient opportunity to correct them, and must be provided with adequate supervision and assistance to do so" Gorton [8]. Also, In the case of a less than satisfactory report, any major deficiencies identified by the evaluator will be discussed with the teacher. A plan for improving performance will be developed jointly with the local Association, the teacher and the Board and shall be made available to the teacher. This plan will contain a time frame for improvement and the commencement of subsequent summative evaluation (Collective Agreement, School District #6, Rocky Mountain). Fairness demands that those teachers in need of more specific professional growth be given a chance before they are dismissed.

In the application of due process, allowances must be made for teaching style. Just as students learn through a variety of styles, so do teachers tend to teach with a variety of styles, while trying to accommodate the particular learning styles of their students. When evaluating, supervisors should consider that while the available process may suit some teaching styles, it might not suit all. It is also common practice to rate teachers on some type of scale. "For example, a teacher may be rated as outstanding in 'organization'. Although this appears straightforward, 'organization' is a high inference term that may be interpreted in as many ways as there are observers Peterson [24].

2.10 Rationale for New Evaluation Criteria

Web-Based Instruction is in the process of changing the conventional interaction between teachers and students. No longer do teachers and students always find themselves in the same physical space at the same time. "mentions that methods of assessing the teaching and learning experience in online education are in high demand but short supply. No measurement yet exists that would adequately evaluate how well a faculty member performs in a virtual classroom" Hazi [16]. "Instructors involved in web-based course design and delivery require competencies that have not necessarily been considered important in a face-to-face and print-based distance education context" Curda [21]. indicate that formative evaluation conducted parallel to the execution of an online course is perhaps the best method that a teacher can use to receive important information in order to make improvements. Day (2000) suggests that for those involved with technology-based instruction, alteration of existing evaluation criteria or drafting of new criteria is essential while paying attention to the ways in which the current evaluative structures may fail them Nichols [22]. calls to attention the extra complications faced by on-line teachers who seek to implement formative evaluation in order to ensure the effectiveness of instruction. Using conventional evaluation methods can present a considerable degree of impracticality Nichols [22]. Judgments made concerning effective teaching vary according to particular

circumstances Koon [20]. Recently, numerous publications have been intent on selling particular evaluation models ,While these and other(models are potentially sound and functional, it would be inappropriate to “buy” a particular model and attempt to put it in place in a local setting without taking into account local contextual factors. Even though the above-mentioned authors may not have had the wholesale adoption of their particular system I mind when they proposed it, this is a disturbingly frequent occurrence McGreal [5]. Therefore, it is fundamental that the evaluation method utilized be appropriate for a given situation. Having an evaluation model designed for the use of teachers involved with web-based instruction within Rocky Mountain School District is necessary. There is no template for success that teachers can lay beside their performance and assess the extent to which they have achieved their personal and professional goals. And long-term outcomes may never be evident to teachers. Consequently, teachers must rely on the reflection and feedback of others to gauge their effectiveness and support professional pride. For this feedback to be credible, it must come from individuals who teachers believe can make authoritative judgments about their performance McLaughlin [14].

2.11 Angular 7 Framework and PHP with MY-SQL

Angular Is a TypeScript-based open-source web application framework led by the Angular Team at Google and by a community of individuals and corporations. Angular is a complete rewrite from the same team that built AngularJS

- Version 7

Angular 7 was released on October 18, 2018. Updates regarding Application Performance, Angular Material & CDK, Virtual Scrolling, Improved Accessibility of Selects, now support Content Projection using web standard

for custom elements, and dependency updates regarding Typescript 3.1, RxJS 6.3, and Node 10 (still supporting Node 8).

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

MySQL is an open-source relational database management system (RDBMS). Its name is a combination of "My", the name of co-founders Michael Widenius's daughter, and "SQL", the abbreviation for Structured Query Language. 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.

CHAPTER 3

SYSTEM IMPLEMENTATIONS

3.1 Design of project

3.1.1 Development Environment

The environment for the development of the Lecturers evaluation system in this project has been tested by upload it on “GoDaddy” web host in the internet to operate on 30 computers, PC or laptop. The system will operate in a single system environment under Windows operating system using the certain platforms. The stages of implementation are described in Sections below.

3.1.2 Site Map

Below there is a map showing the whole site.

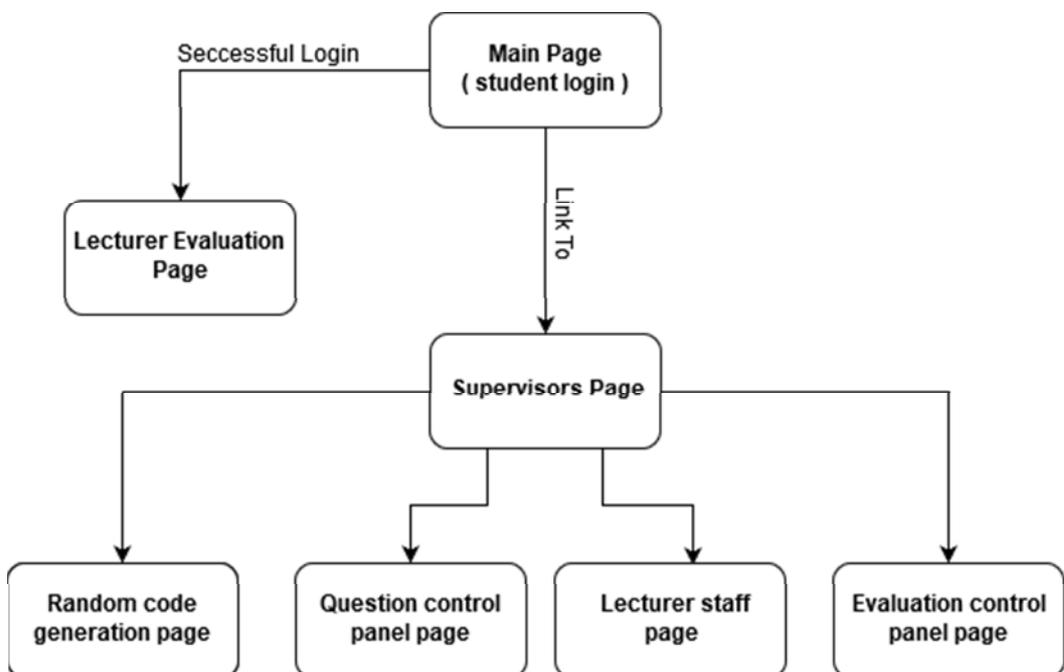


Figure 3.1: Web Site Map

3.1.2 Home page

The home page is the main page for Lecturer Evaluation system which includes the students' entry to the evaluation panel and the supervisor login link to the control panel.

Figure 3.1 show the home page of the Lecturer Evaluation System.

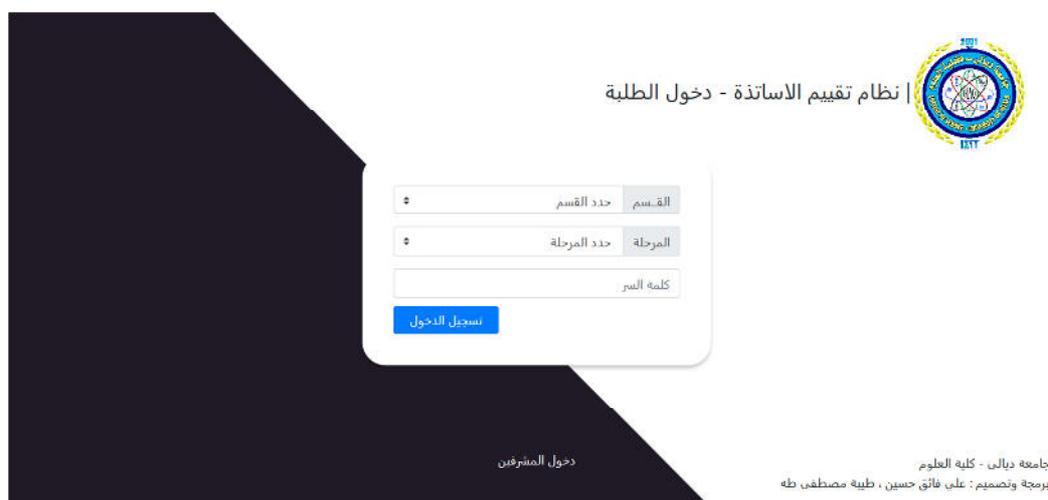


Figure 3.1: Home Page

In order to access the evaluation panel the student will choose the name of the department, the stage and enter his password after it will be verified the password obtained by the student from his department, which was created randomly and cannot be used again after he evaluate all lectures in his stage of department transfer to the evaluation page,

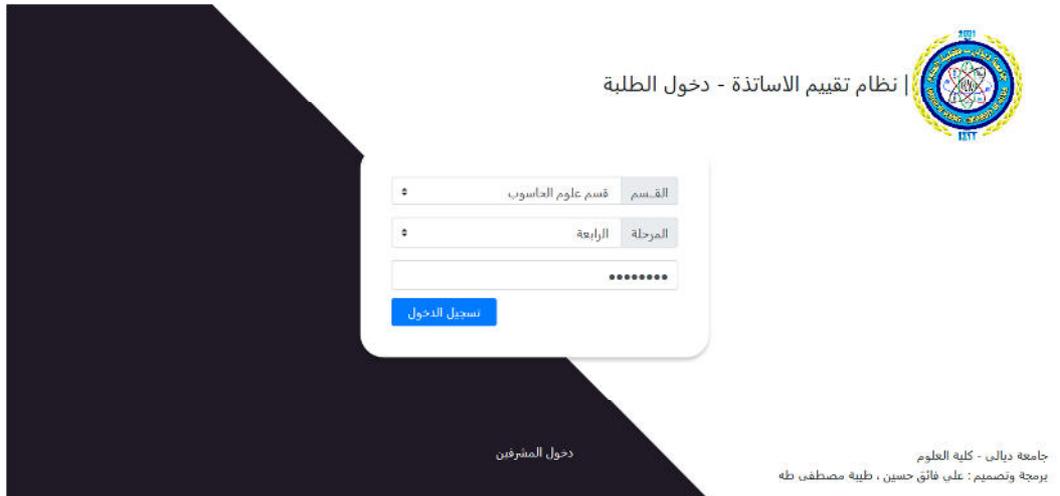


Figure 3.2 illustrate the when user select department and stage and enter correct password number.

Figure 3.3 shows the case when the student select department, Stage and enter the password belong to another stage, department or wrong password, the message will appear to tell the student that the password number is incorrect.

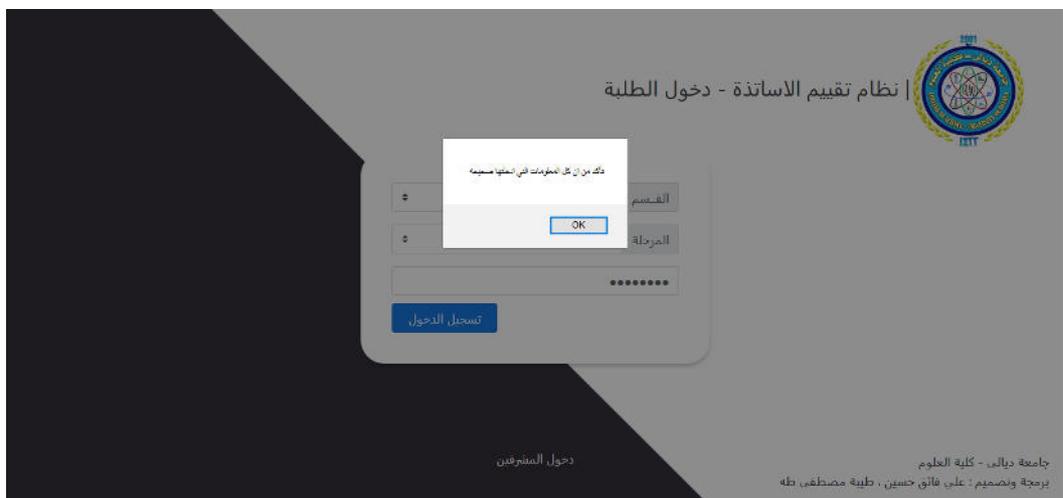


Figure 3.3: select department, stage and enter wrong password.

3.1.3 Supervisors Page

When chose supervisor login link in home page, the new page will appear to ask the admin to enter the user name and access password.

Figure 3.4 show the page of supervisor's access.

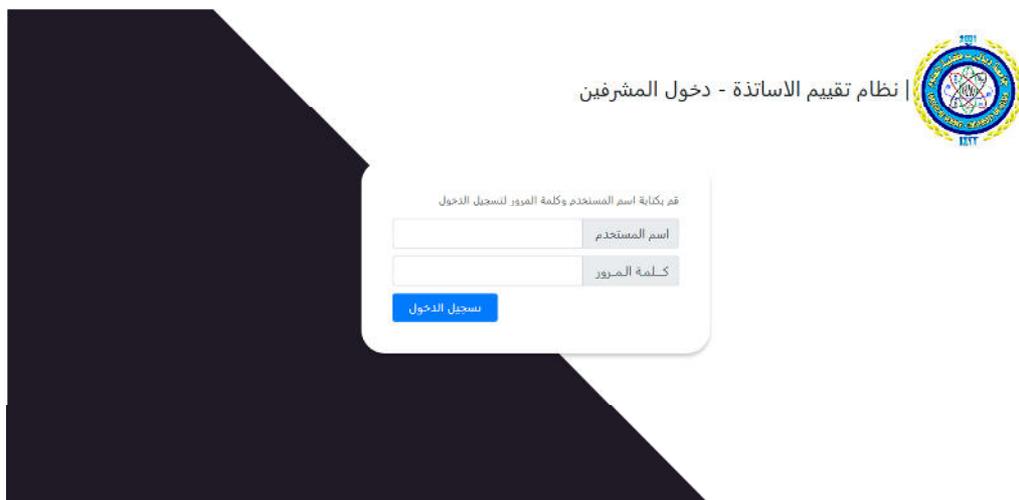


Figure 3.4: Supervisors access page

After right access the new page will coming out which contain five important buttons in header of the page, which are evaluation, lecturer's staff, question and code generator pages. Figure 3.6 illustrate the Supervisor control page.



Figure 3.5 illustrate the admin control page.

1. **Evaluation control panel:** evaluation control page help admin to display the result of evaluation for certain department and certain stage. In order to display the result, first we chose the department name and select stage. After that, the result of evaluation will be display and it content lecturer name, colored lines comparing the number of no, yes and some that lecturer have from student evaluation , each lecture will have a button to display student feedback. Also, the result of the evaluation can be printed on an official paper that can be used later. Figure 3.7 show the evaluation control panel.

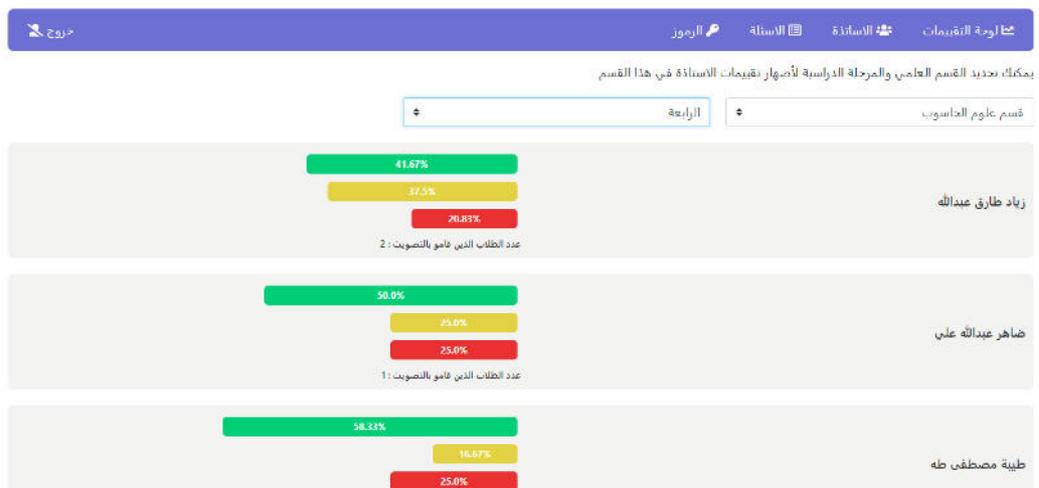


Figure 3.6 Evaluation control panel.

2. Lecturer staff: Lecturer staff page is to help admin to add lecturer for evaluation by enter the name of the lecturer, select department and the stage that he/she taught. After that, we press add button and message will appear to tell the admin that the lecturer was added. In addition, we can delete modify name of the lecturer by pressing on modify or delete button in the left of lecturer name. Figure 3.8 show the add, delete and modify the lecturer staff.

Figure 3.7: Add, Delete and Modify lecturer staff

3. Question control panel: question control button is to help admin to add new question for evaluation by enter the question and press add button and then a message will appear to tell the admin that the question was added. In addition, we can modify and delete the question by pressing on modify or delete option in the left of question. Figure show the add, delete and modify the question.

Figure 3.8: Add, Delete and Modify Questions

4. Random code generation: random code generation page help the admin to produce random password that are distribution to the students to start the evaluation process. The main purpose of generate random access numbers is to prevent the recurrence of evaluating certain lecturer for the same stage more than once.

To generate random codes for students to be used later in the evaluation process the supervisor selects the department, the stage and the number of codes to be generated, then press generate button Figure 3.9 illustrate the random access numbers generation page.

66472330	68697906	81601308	33429048
34112222	97736103	57847256	65409352
61993505	12137684	70465421	89579159
76018528	93700801	31884348	56770381
60994918	27814501	85830693	32845020
77949067	68895808	51776851	10132472
74006460	76670773	84000460	00006477

Figure 3.9: Random password generation page

3.1.4 Lecturer Evaluation Page

Lecturer evaluation page is the most important page in this system. In above of the page it contain list of all lecturers names for student department and stage, we already chosen to evaluate and we must select one lecturer from this list for evaluation. The evaluation page

contains all questions that entered by the supervisor; each question has three weights which limit the evaluation mark. The weights stand for 1- yes, 2- some, 3- no, figure 3.10 shows the lecturer evaluation page.



استمارة تقويم الاساتذة
قم بأختيار التدريسي الذي نود تقييمه ومن بعدها اجب عن الاسئلة الموجودة في الاسفل

اسم التدريسي	زياد طارق عبدالله	
ت	الفقرات	الاجوبة
33	يرحب بالمتأقفة ويتقبل وجهة النظر الاخرى من الطلبة	<input type="radio"/> نعم <input type="radio"/> نوعاً ما <input type="radio"/> لا
32	يراعي الفروق الفردية والخصائص النفسية للطلبة	<input type="radio"/> نعم <input type="radio"/> نوعاً ما <input type="radio"/> لا
34	يناقش اجابات الطلبة الخاطئة بمرونة ويصححها لهم	<input type="radio"/> نعم <input type="radio"/> نوعاً ما <input type="radio"/> لا
35	ينمي عند الطلبة اتجاهات و عادات واحلاق حميدة	<input type="radio"/> نعم <input type="radio"/> نوعاً ما <input type="radio"/> لا
36	يستخدم عدد متنوع من الوسائل التعليمية لشد انتباه الطلبة لموضوع الدرس	<input type="radio"/> نعم <input type="radio"/> نوعاً ما <input type="radio"/> لا
37	يوفر أنشطة تعاونية او تنافسية يتفاعل فيها الطلبة مع بعضهم البعض	<input type="radio"/> نعم <input type="radio"/> نوعاً ما <input type="radio"/> لا
38	يستخدم أساليب تعزيز متنوعه لتحفيز الطلبة	<input type="radio"/> نعم <input type="radio"/> نوعاً ما <input type="radio"/> لا
39	قدرته على ادارة الوقت للمحاضرة والالتزام بالمواعيد	<input type="radio"/> نعم <input type="radio"/> نوعاً ما <input type="radio"/> لا
40	يحفز الطلبة على الاطلاع على مراجع المادة العلمية المختلفة	<input type="radio"/> نعم <input type="radio"/> نوعاً ما <input type="radio"/> لا
41	يشعر الطلاب بالحرص عليهم والرعية في منفتحهم	<input type="radio"/> نعم <input type="radio"/> نوعاً ما <input type="radio"/> لا
42	يتوع الاسئلة ويراعي التوقيت الصحيح في طرحها أثناء المحاضرة	<input type="radio"/> نعم <input type="radio"/> نوعاً ما <input type="radio"/> لا
6/	يعالج مواطن الضعف لدى الطلاب في المادة الدراسية , وتعزز مواطن القوة لديهم	<input type="radio"/> نعم <input type="radio"/> نوعاً ما <input type="radio"/> لا

من فضلك قم باضافة بعض الملاحظات عن الاستاذ (كُن صريحاً و صادقاً في ملاحظتك رجاء)

[ارسال التقييم](#)

Figure 3.10: Lecturer evaluation page

The student can also write a comment about the lecturer being evaluated, telling him about some bad or good aspects in his lecture or in him personally.

Send Evaluation button is to send the result of evaluation to be stored in database for later use, after that the lecturer that already evaluated will removed from lecturer's list, now the student must choose another lecturer to be evaluated. After the student completes the evaluation of all the lecturer's, a message is display to telling him that he has completed the evaluation of all the lecturers of his stage and department and is returned to the main page of the site and delete his password from the database so as not to be able Sign in again

CHAPTER 4

CONCLUSION AND SUGGESTIONS

4.1 Conclusions

In this research we have built system for electronic evaluation for evaluation of the lecturers in college of science by Angular 7 Framework as front end and PHP Programming language as back end, which added high flexibility in the process of storing data. Finally, our project is able to find the final result of evaluation for each lecturer, save the result of evaluation as PDF for later use and reference. Print the result of evaluation, and review the point view of student in order to enhance the performance of lecturer. In the end, it is possible to use the system in College of Science to provide comfortable service to both student and management and save the time and efforts in evaluation process.

4.2 Suggestions

Our suggestions for future work are

- We aspire to add new tools for security.
- We wish to adopt the system to be used in evaluation process at Science College.
- We hope to adopt the system in others college at University of Diyala.

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