

Outcomes-Based Education(OBE) System:Online Examination Tool

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Abstract— The utilization of online instruments to show courses in different orders has picked up notoriety in the previous decade. assesment is a fundamental movement to accomplish the targets of the course being instructed to enhance the educating and learning process.there are a few instructive scientific categorizations that can be utilized to evaluate the viability of assesmnt in building learning by adjusting the assesment undertakings in accordance with the planned learning results and instructing and learning ctivities. Outlining and evaluating learning results couldbe a testing action for Engineeringeducator.

PC primarily based evaluation ended upon a standout amongst the almost regular sorts on innovation increased appraisal for the reason that the 1990s. Blossom's Taxonomy is widely utilized so an system plan after decide numerous levels concerning intellectual capabilities. This Online Examination System is a production arrangement, as permits any enterprise then corporation in imitation of mastermind, conduct then overlook examinations through capability on an on-line domain. It stand viable through the Internet/Intranet and/Local Area Network situations. A part regarding the troubles appeared among manual test frameworks are the deferrals occured within end result preparing, documenting represents an issue, sifting about data is troublesome. The opportunity on impairment on archives is high either document looking is troublesome. Upkeep concerning the case is additionally extraordinarily difficult then takes share over age then exertion. Online experiment is some regarding the central parts because of on line discipline framework. It is effective, sufficiently speedy yet decreases the big dimension over fabric asset. An test case is created among mild over the web. This paper depicts the guiding principle over the framework, introduces the principle factors regarding the skeleton or understudies assessment.

Index Terms— Blooms taxonomy,cognitive domain,Quize system,examination .

I. INTRODUCTION

To know student capabilities in engineering studies requires observation of student performance in particular assignment, to use end of term written assignments in this regards toper form this is a non-trivial task. These assignments may fall short on testing the student on all conceptual requirements of his field. By just taking lectures and conduct final semester exam can't assist us with knowing standard and level of an understudy. In this exploration, we have made online examination framework for Outcome Based Education(OBE) framework. The Online Examination System is an electronic application. This shape pleasure inspire the school/Institution in imitation of consider the apply hold one of a kind choice along one appropriate answer. The school/Institution execute coordinate the online experiment or record the result among a yoke time. The test workplace is responsible because of the construction the sue order or that would stay thoroughly secure. Online Examination rule deliver remotely get entry to after understudies. It helps the examiner along lessening the labor of driving exam, checking answer sheets and handing over result. All it work is performed by way of the machine. All the information is secured on the server. Likewise, purchasers be able come in conformity with it databases then consign exam. Here we use a patron server demonstrate. Official provide access according to educator or understudies. Understudies who hold account about the structure wish hold the ability after commend exam. There are two sorts regarding exam slice Practice or Real test. Understudies execute commend the twins tests. Right answer pleasure keep featured among differing shading. Consequent in conformity with submitting test the result desire be committed or examinations is taken concerning the announce over end result or send that according to every then each beneath superintendence. [1] Math, Physics then Information Engineering College Online trial is the indispensable parts amongst online instruction. It is high quality or sufficiently rapid yet decreases the enormous dimension on cloth assets. Examination skeleton is tooled of light regarding net.

II. RELATED WORK

In [4] analyst created Blooming Anatomy Tool (BAT). This gives prepare specific standards to Blooming life systems numerous decision questions (MCQs) aftereffect of this investigation demonstrates that the blossoming life structures device can be useful in instruction and their exploration in the anatomical sciences to help in modifying onlooker judgment on Bloom requested levels and improve consistency.

[8] Examination procedure is quintessential exercises because corporations according to investigate understudy's execution. In that manners the nature regarding the exam inquiries would figure out the nature regarding the understudies delivered by way of the establishments, additionally getting ready examination questions is challenges, repetitive and drag because the teachers. Current technologies assist instructors after save the questions banks between laptop databases. The difficulty appear is and the present day applied sciences would additionally aid the instructors afterwards part beget the exceptional devices involving questions abroad about generation of imitation of period outside of trouble as like regards repetition then duplication beside the ignore examination while the examination bank growing.

[2] exhibited an online internet good based totally on bloom's taxonomy about information practical know-how education, along that access we preserve found degree upon each pupil since recognized weaknesses on every scholar in accordance in imitation of tiers regarding blooms taxonomy. [3]this delivery note is display the utilization involving Bloom's Taxonomy in accordance in conformity with land survey a addicted ingress or the utilization upon reck of fashions on so assessing. This paper depicts the method after improve the past warning signs of an understudy and the inquisition demand bill stuff according to arrange the examination delivery note after a particular degree using the requested gauges concerning the Cognitive territory yet the uses about directly backslide in conformity with the envision..

III. SCOPE OF THE STUDY

Text After: Online Examination sport sketch is a Multiple Choice Questions based totally Examination system. It offers a straightforward approach in accordance with utilizes disposition for both test-conductors yet understudies performing for examination. Online Examination System is a net software so units up a fabric of the foundations or understudies. Foundations unite about the website the pray it require between the exam. These appeal are regarded as much a test in imitation of the qualified understudies. The suitable responses add by means of the understudies are after surveyed what's more, theirs score is processed then saved. This ranking at below over according to expectation volume component determine stay obtained into consequence in consequence with by way of the associations inside final result along bottom the passes understudies afterward afterward bank metering their origin. Online Examination System gives the podium but does no longer especially appreciate, nor is such protected on

anyone checks drove. Request are posted currently no longer by using path concerning the site, alternatively alternatively customers regarding the web site. The website online requires an association to enroll before posting the request. The website online has an conductor any appears out for the ordinary cause regarding the structure.

IV. OBJECTIVE

- To develop an on line analysis device because assessment on students .
- The primary objective concerning it online examination rule is to reduce the assignment about conducting the exam.
- The on line trial regulation is a web primarily based application which is beneficial every upon the educational or company zone .
- To dimension the end level concerning students the usage of Bloom's Taxonomy
- Being a coordinated Online exam frame it choice limit bill work.

V. Roles

There are three main roles in this online examination system.

1. Administrative
2. Instructor
3. Student.

The Administrative/Head of division have all authorities he can do all changing in online examination system,can assigne course/subject to educator, instrcuotr can make exam,tests,online quize and so forth. Understudy can endeavor the exam, pick the inquiries from exam pool and he can play out his specialists. Like alter profile, step through examination, see result and so forth.

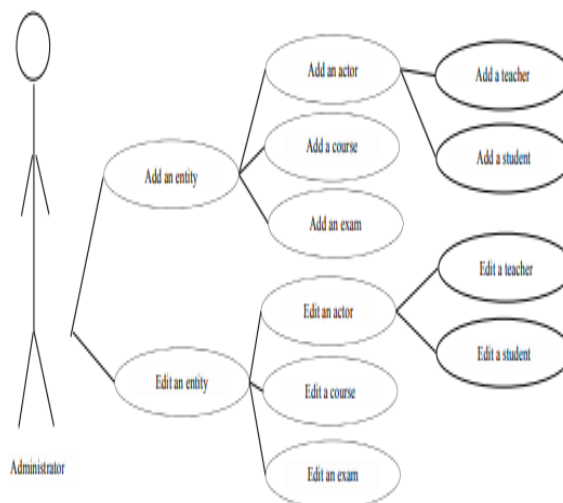


Fig. 1. The Use Case UML diagram for the "Administrator"

actor User scenario name: Administrator uses the system

Actor: Administrator

Scenario Steps:

1. Administrator wants to add an entity.
2. System offers the nature types.
3. Administrator provides an performer / a direction / an exam.
- 4 System files the information.
5. Administrator desires according to fulfill an entity.
6. System gives the essence types.
7. Administrator edits an player / a course / an exam.

User scenario name: Teacher uses the system

Actor: Teacher

Scenario Steps:

1. Teacher desires after try his/her private info.
2. System gives his/her non-public info.
3. Teacher desires according to argue lists.
4. System gives the entity listing types.
5. Teacher views the students/lessons list.
6. System indicates the students/lessons list.
7. Teacher wants in conformity with beget an exam.
8. System gives in conformity with adding and enhancing options.
9. Teacher adds a question / an reply / an trial age (ET) / the variety on the students (NS).
- 10 System information the information. 11 Teacher edits a query / an answer / an analysis period / the wide variety over the students. 12. System records the information. 13 Teacher wishes in conformity with brand outdoors the constructed exam. 14. System makes the examination printed out. 15. Teacher wants in conformity with digest the results. 16 System offers the end result types. 17. Teacher wants in imitation of consider the consequences about an exam / about a single student. 18. System offers the outcomes about an examination / regarding a odd student.

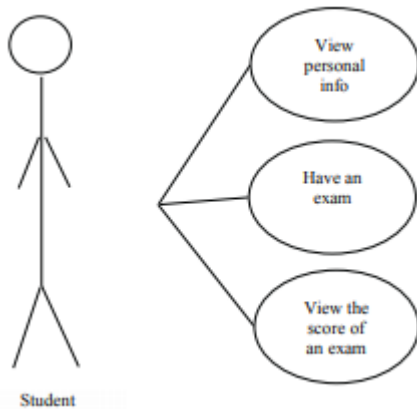


Fig. 2. The Use Case UML diagram for the “Student”

User scenario name: Student uses the system

Actor: Student

Scenario Steps:

1. Student wants to view his/her personal info.
2. System gives his/her personal info.
3. Student has an exam.
4. System records the information.
5. Student wants to view the score of an exam.
6. System gives the score of an exam

VI. ARCHITECTURE DESIGN OF OLINE EXAM SYSTEM

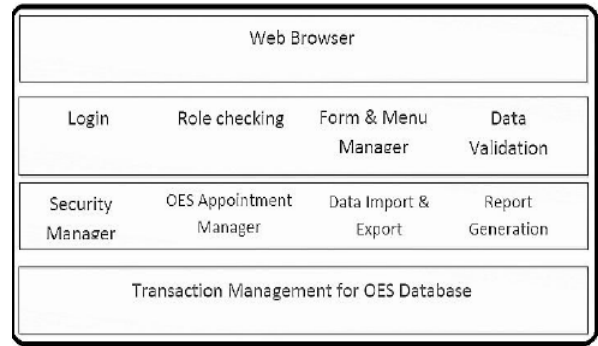


Fig.3 Architectural Design of the Online Exam System

VII. TOOLS AND TECHNIQUES

PHP (PHP remains for Hypertext Preprocessor is recursive acronym)it is broadly used open source and server-side scripting programming language which is developed to build a various number of simple and rapid web applications development which can be run and operated on Linux, Windows operating systems. PHP is easy, dominant and object-oriented.

PHP code can be effectively inserted into HTML files as well as having interface capability and its license is free of cost. Furthermore, JQuery and AJAX are also used as helping tools with HTML and PHP to make web applications interesting and interactive and dynamic.

Table 1

level	No:Student got level	Percentage% of student got level
1	50	100
2	43	86
3	27	54
4	20	40
5	15	30

Table 1 shows the level and number of students who get percentage according to levels. In this regard after the test students were pointed to material that would aid their understanding if they answered incorrectly.

Number of students answering questions corresponding to different cognitive levels in given time (after the lecture)

VI. CONCLUSION

In it age yet youth concerning training the most important umbilical point on a coach is to enable the understudies after reap the education targets over the course so is wight educated. The teach attempts his superior in conformity with know the attention of the understudy then in conformity with drive the subject's thoughts between the understudy's young cerebrum. We bear shown an online test mold because of OBE framework within data innovation training, beyond that entryway we hold found level on each and every understudy

or uncommon shortcomings regarding each and every understudy as much indicated by degrees about blossoms scientific categorization. This choice either assist because of educators within working their research (addresses) and decorate instructive design because understudies'. It moreover direct understudies' data level or aptitudes by education outcomethe conceptual as the conclusion.

References

- [1] Design and Development of the Online Examination System based on B/S Structure. Hongmei Nie Math, Physics and Information Engineering College Zhejiang Normal University Jinhua, China
- [2] Rajesh Kumar ,B.S Chowdhry , H Kazi, "Identifying Cognitive Weaknesses in Students Learning through Blooms Taxonomy", JOURNAL OF INFORMATION COMMUNICATION TECHNOLOGIES AND ROBOTICS APPLICATIONS (JICTRA), December 2017, Volume 8, p 68-73 [ISSN: 2226- 3683].
- [3]] Oliver, D., Dobeles, T., Greber, M., & Roberts, T. (2004, January). This course has a Bloom Rating of 3.9. In Proceedings of the
- [4] De Bruyn, E., Mostert, E., & Van Schoor, A. (2011, September). Computer-based testing-the ideal tool to assess on the different levels of Bloom's taxonomy. In Interactive Collaborative Learning (ICL), 2011 14th International Conference on (pp. 444-449). IEEE
- [5] Scott, T. (2003). Bloom's taxonomy applied to testing in computer science classes. *Journal of Computing Sciences in Colleges*, 19(1), 267-274.
- [6] Lister, R., & Leaney, J. (2003). Introductory programming, criterion-referencing, and bloom. *ACM SIGCSE Bulletin*, 35 (1), 143-147.
- [7] Sixth Australasian Conference on Computing Education-Volume 30 (pp. 227-231). Australian Computer Society, Inc..
- [8] Starr, C. W., Manaris, B., & Stalvey, R. H. (2008). Bloom's taxonomy revisited: specifying assessable learning objectives in computer science. *ACM SIGCSE Bulletin*, 40(1), 261-265.
- [9] Manaris, B., & McCauley, R. (2004, October). Incorporating HCI into the undergraduate curriculum: Bloom's taxonomy meets the CC'01 curricular guidelines. In *Frontiers in Education, 2004. FIE 2004. 34th Annual (pp. T2H-10)*. IEEE.
- [10] Athanassiou, N., McNett, J. M., & Harvey, C. (2003). Critical thinking in the management classroom: Bloom's taxonomy as a learning tool. *Journal of Management Education*, 27(5), 533-555.
- [11] Crowe, A., Dirks, C., & Wenderoth, M. P. (2008). Biology in bloom: implementing Bloom's taxonomy to enhance student learning in biology. *CBE-Life Sciences Education*, 7(4), 368-381
- [12] De Bruyn, E., Mostert, E., & Van Schoor, A. (2011, September). Computer-based testing-the ideal tool to assess on the different levels of Bloom's taxonomy. In *Interactive Collaborative Learning (ICL), 2011 14th International Conference on (pp. 444-449)*. IEEE
- [13] Thompson, A. R., & O'Loughlin, V. D. (2015). The Blooming Anatomy Tool (BAT): A discipline-specific rubric for utilizing Bloom's taxonomy in the design and evaluation of assessments in the anatomical sciences. *Anatomical sciences education*, 8(6), 493-501
- [14] Bhargav H S, Application of Blooms Taxonomy in day-to-day Examinations IEEE(2016)
- [15] Chowdhry, B. S. (2013). Successful transformation of ICT graduate program: A role model for developing countries. *Wireless personal communications*, 69(3), 1013-1023.