The monitoring subsystem of assessing students on a point-rating technology

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Abstract[1]

The subsystem information support point-rating assessment technology students capture the main advantages and novelty of the technology.

Continuous monitoring of knowledge encourages students to timely and high-quality academic work, both in the classroom and on their own (most importantly) encourages students to form an objective motivation productive learning activity (motivational component) [1].

The introduction of point-rating assessment technology creates new dimensions in learning activities of students and the teaching. Point-rating technology is component of the education system, which is based on competence model of the formation of knowledge, skills and abilities. Therefore, the object of evaluation in point-rating system is formed competencies or learning outcomes, which results in the connection between teaching, evaluation and learning outcomes. In terms of teaching and learning, there is a balance between teaching strategies, on the one hand, and the learning outcomes and assessment, on the other.

The most important part of effective learning are clearly defined expectations of what students should achieve and how it will demonstrate this knowledge. The best way to help students understand how they can meet the established learning outcomes - as if to explain the methods and evaluation criteria, detailing their point-rating map discipline.

With the system down "problem stress, "which a student during the session because he is given the possibility of evaluation -" automatic "(valeological component) [2]. Using a 100-point scale provides a higher degree of differentiation of student assessment. This is especially true for disciplines whose study concludes impersonal "credited"(qualitative component) [3].100-point system to assess success of training makes a clear and understandable to students the process of evaluation. It allows you to rank the assessment of students on a more sensitive scale, which increases their objectivity (objective component) [4].

Interim control by using this technology is based on the practice of feedback:

- Encourage the development of reflection in learning;
- Encouraging dialogue with the teacher on education and training topics;
- Helps determine objectives, criteria, expected results;
- Provides an opportunity to bridge the gap between current and desired outcomes;
- Pprovides students with accurate information about their learning;
- Stimulates positive motivation self-esteem and self-expression;
- Provides information to teachers, who if necessary can be used to correct the learning process.

Thus, the requirement to the final assessment consists of the following:

- Objectivity;
- Reliability;
- Consideration of stakeholder interests;
- Efficiency, effectiveness of administration;
- Acceptability to employers and other stakeholders.

Undoubtedly, the use of this technology cannot confine ourselves to a simple "grading in the log," and requires visualization and at the level of a subsystem. On speaking about the slit, a certain Web resource (Fig.1).

Fig. 1. Subsystem Home

In the development of this subsystem has been selected freely available, open-architecture database MySQL, which is being a good solution for small and medium-sized applications, is used as a client-server system.

With PHP and MySQL developed subsystem information support demonstration point-rating assessment technology students, directed, first of all, to demonstrate student as the overall statistics for the group (Fig. 2) and the selection of individual performance with the current estimate (Fig.3).

ФИО	Баллы за Л.Р.	Баллы за П.Р.
Биканасов Альберт	22	6
Вакишина Гюзель	54	6
Гурдюмов Алексей	29	16
Кадырова Лилия	53	7
Клишина Ксения	34	7
Крузите Юлия	28	10
Курбанова Лилия	54	17
Мавлиханова Эльвина	20	5
Мугнурова Айваз	54	7
Насыров Айдар	28	9
Павлов Кирилл	54	9
Рахматуллина Айгуль	54	6
Романова Елена	53	8
Салихаева Виктория	54	6
Сафина Альбина	24	6
Ситдикова Алина	54	7
Степанова Галина	28	7
Тихонова Анжела	29	5
Туктамышева Диана	23	6
Федорова Ольга	54	8

Fig. 2. Collective ballroom statistics

Fig. 3. Individual Stats

In operation, the subsystem can view student earned points on each type activities (labs, workshops, course work, test results, etc.) and click the appropriate link navigation panel (Fig.4).

Fig. 4. Navigation panel

All assessment criteria, both occupations, and in general on the subject are set out in point-rating map discipline and available for download. Functioning of the administrative part of the subsystem by using the package PhpMyAdmin (Fig.5). The application is licensed under the GNU General Public License, and that led to its integration into the newly created subsystem.
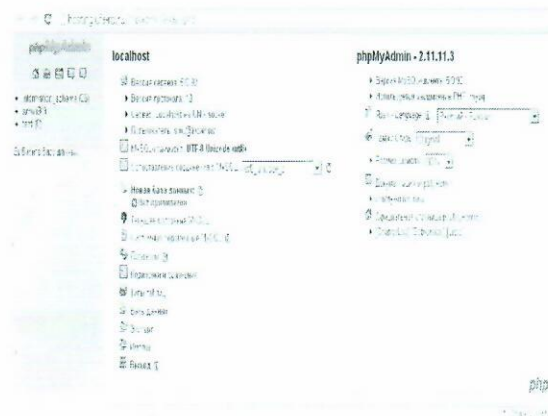

Fig. 5. Administration navigation panel

PhpMyAdmin - is a program written in PHP and is designed for server management MySQL through a network.

PhpMyAdmin supports a wide range of operations on MySQL. The most frequently used operations are supported by the user interface (managing databases, tables, fields, relations, indexes, users, permissions, etc), while you can directly execute any SQL query (Fig.6).
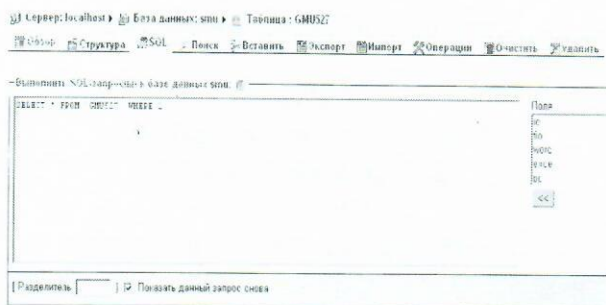

Fig. 6. Example query

For convenience the points that earned the student at this point in time, sums up to a total number of points. Then, the result is compared with the checksum and is the resulting output estimates. All calculations are done with a script, a fragment of which is shown in Figure 7.

```
while ($row=mysql_fetch_array($res)) :
$sum=$row[   ]+$row[   ]+$row[   ]+$row[   ]+$row[   ];
$sum1=$row[   ]+$row[   ]+$row[   ]+$row[   ]+$row[   ];
$sum2=$row[   ]+$row[   ]+$row[   ]+$row[   ];
$all=($sum+$sum1+$sum2+$row[      ])-$row[      ];
$ocenka="";

switch(true)

case ($all>=   && $all<=   ):
    $ocenka="                    "; $color="red"; break;
case ($all>=   && $all<=   ):
    $ocenka="                  "; $color="gray"; break;
case ($all>=   && $all<=   ):
    $ocenka="        "; $color="blue"; break;
case ($all>=   && $all<=   ):
    $ocenka="        "; $color="green"; break;
```

Fig. 7. Script fragment calculation of the grade

Submitted script also allows you to identify each student's final grade in different colors. For example: "unsatisfactory" - red, "satisfactory" - gray, "good" - blue, "excellent" - green (Figure 8).

№	ФИО	Баллы за Д.Р.	Баллы за П.Р.	Баллы за К.Р.	Бонус	Штраф	Суммарный балл	Оценка на 7 ноября 2012
1	Быканов Альберт	22	6	0	0	0	28	неудовлетворительно
2	Вагашина Гюзель	54					61	удовлетворительно
3	Гузденов Алексей	29	16	1	0	0	46	неудовлетворительно
4	Кадырова Лилия	53	7	0	0	0	60	неудовлетворительно
5	Клишина Ксения	34	7	1	0	0	42	неудовлетворительно
6	Крунятс Юлия	28	10	2	0	0	40	неудовлетворительно
7	Курбанова Лилия	54	17	5	0	0	76	хорошо

Fig. 8. Final grades

The implementation of this subsystem point-rating technology has allowed not only to minimize the time spent on routine thumbmaker when calculating final grades and balls, but also visualize the technology - to make an assessment of its use of the available wide range of students and teachers.

References

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