Moodle Based Skill Development Survey Module Implementation

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Abstract: Moodle is one of the leading web based learning management system with various plugins available for different functionalities. Open source background of Moodle enables us to look and add our own plugins for specific functionalities. This paper proposes the methods to add customized survey modules in Moodle. Currently Moodle has predetermined survey modules for teaching and learning efficiency feedback for students enrolled in courses. There is no functionality of creating your own survey in Moodle. With this method we tested the functionality of some soft skills based surveys and their outputs, integrated in Moodle.
Key words: E-leaning**,** Moodle, Plugin, Survey,

1. INTRODUCTION

Moodle stands for Modular Object-Oriented Dynamic Learning Environment, is a free software e-learning platform, also known as a Learning Management System, or Virtual Learning Environment (VLE). Moodle is a GPL licensed cloud based management system. The development community is led by Moodle HQ, based in Perth, Australia. Moodle HQ is funded by a global network of certified Moodle Partners who provide Moodle services [7].It helps educators to create online courses with a focus on interaction and collaborative construction of content, and is in continual evolution. Moodle is a course management system (CMS) - a software package designed to help educators create quality online courses and manage learner outcomes. Such e-learning systems are sometimes also called Learning Management Systems (LMS), Virtual Learning Environments (VLE) and Learning Content Management Systems (LCMS). Students need only a browser (e.g., IE, Firefox, Safari) to participate in a Moodle course [11].Moodle is Open Source software, which means you are free to download it, use it, modify it and even distribute it (under the terms of the GNU General Public License). Moodle runs without modification on UNIX, Linux, Windows, Mac OS X, Netware and any other system that supportsPHP, including most web host providers. Data is stored in a single database: MySQL and PostgreSQL are best supported, but it can also be used with Oracle, Access, Interbase, ODBC and others [16].Moodle has several features considered typical of an e-learning platform, in addition to some original innovations like its filtering system. Moodle can be used in many types of environments such as in education, training and development, and business settings [14].Some typical features of Moodle are Assignment submission, Discussion forum, Files download, Grading, Moodle instant messages, online calendar, online news and announcement (College and course level), online quiz, Wiki. Developers can extend Moodle's modular construction by creating plugins for specific new functionality. Moodle's infrastructure supports many types of plug-ins activities (including word and math games), resource types, question types (multiple choice, true and false, fill in the blank, etc.), data field types (for the database activity), graphical themes, authentication methods (can require username and password

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accessibility), enrollment methods, content filters.

Many freely available third-party Moodle plugins make use of this infrastructure. Moodle users can use PHP to write and contribute new modules. Moodle's development has been assisted by the work of open source programmers. This has contributed towards its rapid development and rapid bug fixes [13].

2. MOODLE: CONTRIBUTION IN OPEN SOURCE AND LEARNING

OSS is a combined name for software code that is freely open and spread. In contrast to proprietary or commercial software, any person can copy, change, and share open source code without giving royalties or fees. Learning and personal development systems offers provision for people and organizations who are looking to take additional organized methodology for managing individual improvement, and moreover facilitate the delivery and oversight of training. Together with the rapid rising fame of the Internet in present years, there is a growing persists for methodologies and technologies for e-learning [4]. E-learning is an interactive learning in which the education content is easy to get to online and recommends routine feedback to the student's education

Moodle is one of the Open Source learning platforms aimed to offer teachers, administrators and students with a particular strong, safe and incorporated system to build personalized learning atmospheres [8]. Therefore Moodle is one of the biggest contribution for Open Source and learning environment .Therefore more and more organizations are adopting Moodle because it provide lower cost,higer security ,greater flexibility, technical support and many more facilities. As a further analysis, it was studied the specific involvement of Catalyst, a Moodle partner which has so far provided a large number of modifications to the core Moodle, by deploying several of its own developers who became active contributors within the community [6]. Moodle has a feature that captures and stores in the database the log-on history of all participants. The professor as soon as granted a system administration rights can manage the log-in of registered users, monitor learner activities and results. It provides report such as User's Activity Report per Log and User Activity Outline. Then, he Can analyze the IP Address used, the lessons opened, learner's frequency of viewing and downloading the course contents. In addition, he can keep an eye on the participant's online activities and his actions, the date, the time and the duration he explored them. For this reason, it will be easy for the professor to closely monitor the individual performance of each student and give him timely feedback on how to improve his learning experience. There are many benefits when we use a Learning Management Systems (LMS) such as Moodle, to support the lectures in higher education. We also will consider its implications for student support and online interaction, leading educational agents to a collaborating of different learning environments, where they can combine face-to-face instruction with computer-mediated instruction, blended-learning, and increases the possibilities for better quality and quantity of human communication in a learning background [4].Therfore Learning management systems (LMS) have solved many issues with transferring traditionally taught courses to an online environment [1].

3. PROBLEM STATEMENT

Moodle project does not provide customized survey modules. There are predefined format and survey given in Moodle project for analysis of e learning teaching methodologies and their efficiency. For a soft skills course structure where we need to assess participants of their skills and reassess their skill development during the course, we require various soft skill survey modules in Moodle, which are taken by corresponding participants and the analysis of same can be interpreted time to time for checking various skill developments and improvement.

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4. MOODLE BASED SKILL DEVELOPMENT SURVEY FOR STUDENTS

Geography inhabits an idiosyncratic place in the domain of learning, presenting a unified study of the difficult reciprocal associations among human societies and the physical modules of the Earth. The geographer's canvas is colored by place, space and time, identifying the countless differences and changing aspects in cultures, political systems, economies, landscapes and environments across the world, and the links between them.School, colleges in India needs to enhance the range of knowledge and experience available through the taught Schemes which will help the students to develop skills to produce competent professional graduates with [6]:

- A sound knowledge of their own abilities, strengths, weaknesses.
- The methods and techniques available to answer questions within their discipline.
- The skills to advance the study of their discipline.
- Distinguish between objective and subjective material.
- Communicate ideas and work effectively with others as individuals and in teams.

E-Learning professionals are constantly looking for new ideas and for successful online learning solutions, especially cost-effective ones. The open source software community claims to have a great, low-cost system for learning management or course management. It is called Moodle, and it may be well worth your consideration. We a developed a plugin for PDP (Personality Development Program)

functionality that would benefit users by letting them know about their skills. PDP survey module included the sub-modules like.

- Leadership
- Communication
- Decision making

The utmost essential aim of instigating the PDP survey module in Moodle is to boost active learning among students [7]. This is done by screening them in what way the survey answers that they themselves had delivered are closely associated to specific superficially remote models in Communication world [3]. It should be noted that this type of survey, also can be called a living-communication exercise, could have been utilized in PDP department as a "learning by doing" surveys even though the specific field and the ways in which they are administered may vary. As the detachment between inner knowledge and an individual may be a reason behind students' disinterest, such surveys may help to fill such a gap: it is necessary to implement meaningful courses to help students acquire new skills .in Moodle we have studies that there are surveys but those surveys are not relevant for students . This assessment is aimed to identify important personal strengths as well as areas where improvement is looked-for students, they will only be able to improve when they know where they are lacking, therefore these type of survey not only helpful for the students but also help the schools and colleges to know their student so
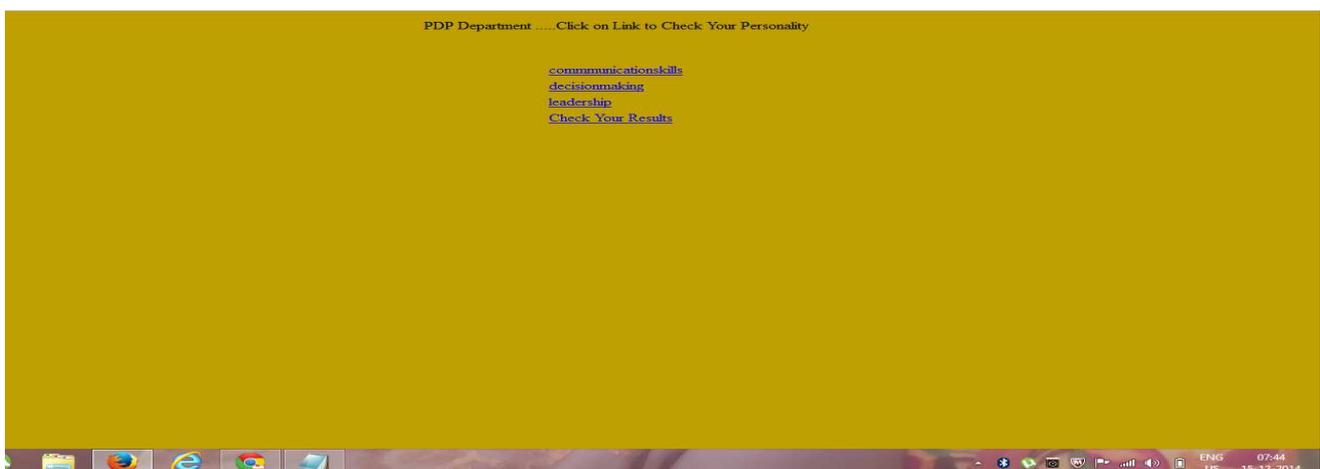
Fig 1.1: Main page showing list of

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that they can give them better environment to learn and improve their-self.it is very difficult for the teachers to give attention to each and every students in the class, therefore this survey let the teachers to assess the students and get the information to work upon in which area the students is lacking. This way each and every students will get proper attention.
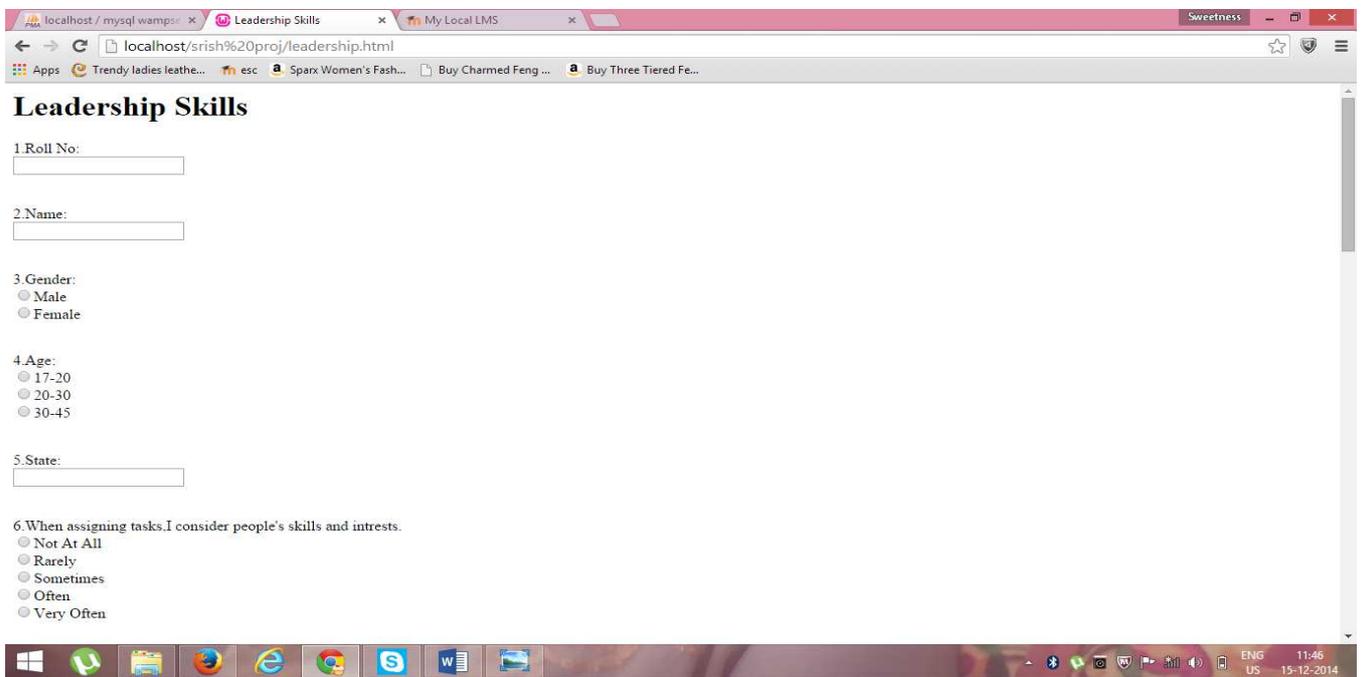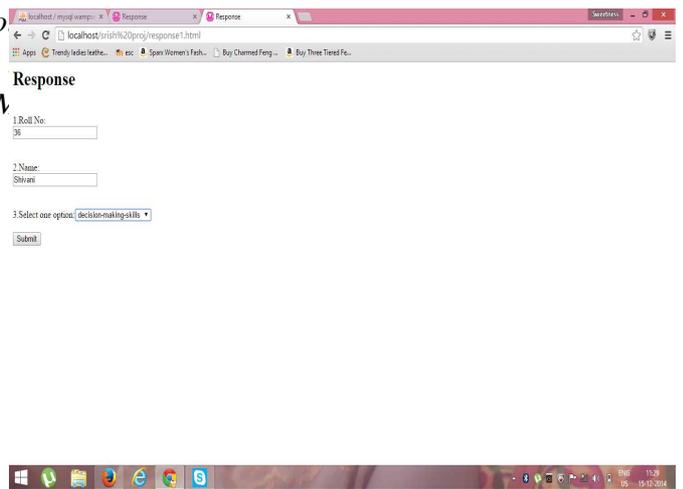
Fig 1.2: Survey questionnaire form

Fig 1.4:Result analysis after executing Response form

Fig 1.3: Response Form (show the result clicking on submit button)
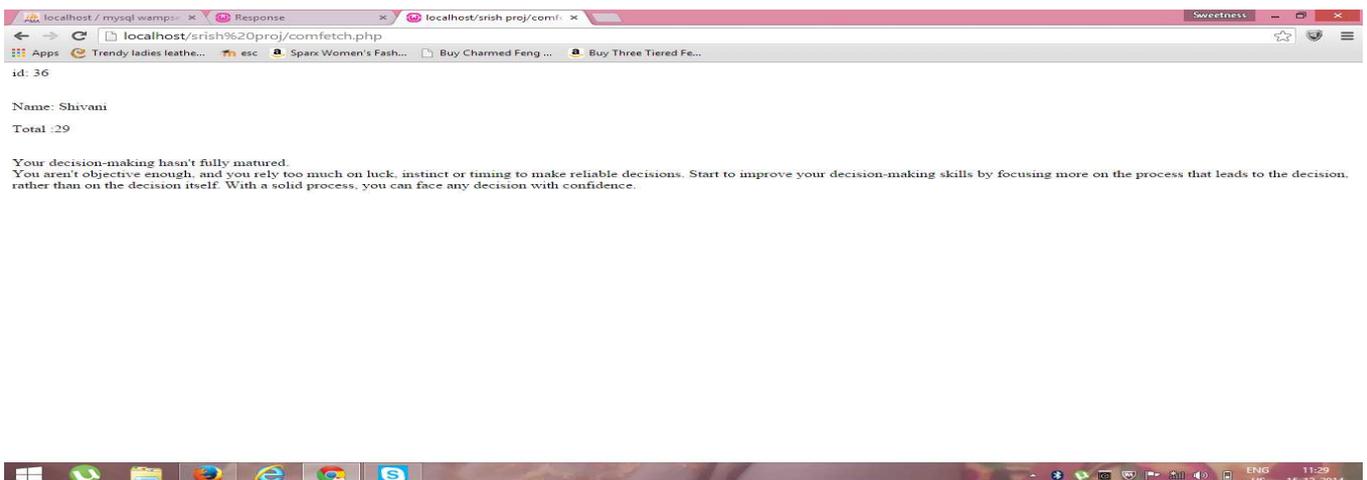
5. IMPLEMENTATION

To implement survey modules in Moodle, PHP based survey forms are implemented. Values of corresponding fields from survey forms are saved in database implemented in Moodle. Response form is also made in PHP where for corresponding participant and survey results can be seen. Survey input values are being analyzed and results are saved in database schema which can be retrieved by participants through response form declaring the participant and survey details. Implementation is done with pre implemented questionnaires for soft skill analysis first by providing link in Moodle or by implementing it as a plug-in for Moodle project. Fig 1.5 shows the process of survey.
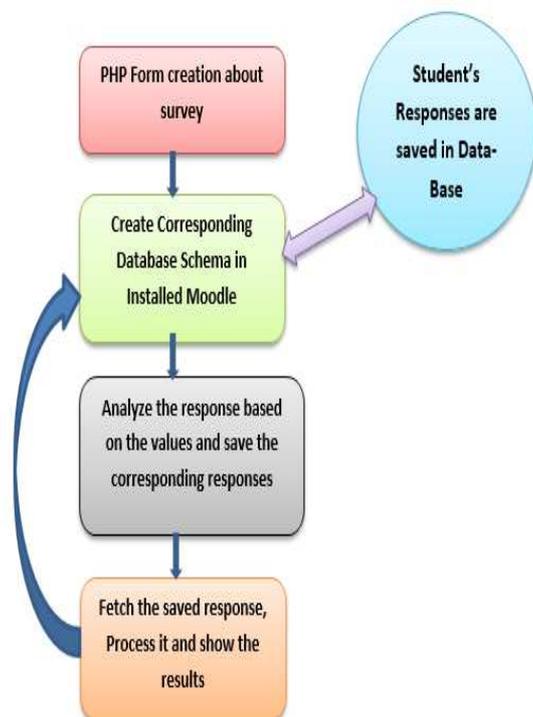
Fig 1.5: Process diagram for survey

6. CONCLUSION

Addition of survey modules in Moodle enabled us to track the development of participants attributes during the progression of course. It functions as a feedback mechanism for participants to know the status of development during their study of course.

7. FUTURE WORK

With the advent in the technology, new evolving strategies are the basis for development. Moodle is one such application that is evolving with time.

A plugin for Projects Management is our next objective. After the implementation of this module, Moodle will have the ability to deal with the projects also. It will help students and teachers, to keep track of the projects going on within an

Institute/organization that is implementing Moodle. It will also help them to get a Pdf file that will contain all the project details including a unique project identification number, to uniquely identify a project. It will also help the Moodle users to know about all the projects and their progress.

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