How assessment system of an open source learning management system can be integrated to a remote laboratory application? Problems and solutions

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Abstract

Most of the education programs need an assessment system for formative and summative evaluation purposes. Similarly, in the ERRL* project which is a distance remote radio frequency laboratory application, assessment system is required. However, developing an assessment system cost is very high and requires some extra time for testing and development purposes. Open source systems provide these services in a standard way. Since the source is open, it is possible to make some modifications to better adapt these systems to the requirements of developed systems. Similarly, in the Moodle part of the system we need to integrate the test and the experiment platforms. In order to better guide the learners in the system, they should take some tests about the devices and the theoretical content included in the system. It is important to prevent users Who do not have the enough knowledge directed to the experiments platform. These testing requirements should be integrated into the remote laboratory system, so that, the learners should not need to jump between different systems and interfaces. This article presents implementation process of open source Learning Management System software's assessment module to a remote laboratory application and it also discusses the advantages, disadvantages of using an open source Web based assessment system.