

**ENHANCING PDF ANNOTATION ASSIGNMENT MODULE AND
MANAGE COURSE MODULE IN MOODLE**



By

Brace Dela Cruz

Maria Ludeza Esperanza

Sheena Joyce Robin

SCHOOL OF ARTS AND SCIENCES

ATENEO DE DAVAO UNIVERSITY

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**ENHANCING PDF ANNOTATION ASSIGNMENT MODULE AND
MANAGE COURSE MODULE IN MOODLE**

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By

Brace Dela Cruz

Maria Ludeza Esperanza

Sheena Joyce Robin

SCHOOL OF ARTS AND SCIENCES

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ABSTRACT

The purpose of this study was to minimize the cost of printing documents and to have an interactive way of delivering feedbacks on students' documents. The group found out the ease of printing a lot of document for the reason of getting comments from the teachers. With this as a concern, the group had a research on a possible solution or an alternative way of giving feedbacks on documents.

On the research phase, the group decided to add a document annotator tool in Moodle system. Since Moodle is used as a means of giving activities such as quizzes, assignments, and exams to students, the group will develop a document annotator tool for Moodle. Unfortunately, during the study phase of creating the said tool, the group found out that there is an existing annotator tool in Moodle. By that, the group was advised to add features that are relevant to the tool existing in Moodle.

As a result, the group added a highlight feature, enhancement on the underline tool and dynamic sizes of lines, enhanced comment box in the existing document annotator for Moodle system. Along with this document are the guidelines on how to add the module on Moodle. Aside from the discussion, the framework of Moodle and the said technology is described to have a background or an idea on how to add the features in the existing annotator.

Keywords:

Annotator, Moodle

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

In this present age, e-learning evolves as a method for educating and communicating to students. There are techniques that are being used by educators in order to provide students the need of learning. Using web tools as a way of promoting a more interactive way of educating can keep students' interest to learn. Focusing on research papers, students are required to submit a documentation to their adviser and as well as advisers are to give feedbacks on students' reports. A usual way of giving feedbacks is by putting a mark and writing comments on the hard copied documents. As observed, it gives much expense for the students to print documents because of getting revisions from the advisers. With this as a concern, integrating a document annotator feedback tool in Moodle is another way of giving comments with less expense of printing documents.

One of the most popular content management system used by educators nowadays is Moodle. Ateneo de Davao University, specifically in the Computer Studies Division uses Moodle as a medium in giving activities, quizzes and exams to students. Since, Moodle is an open source course management system, thus integrating an annotator tool is more convenient to students and teachers.

This study aims to integrate the PDF annotation assignment module on Moodle, add features that will enhance the said the said tool and manage course module.

1.2 Technology Application Context

This project focuses on the way of commenting to student's research papers. Giving of comments is done by writing marks, adding of comments or suggestions on the hard copied document. In return, the student produces a revised document to be submitted again to their respective adviser for the approval. By doing so, if there are lots of comments given by the adviser, it will give much expense for the students to print the documents. To minimize this, the group found a PDF annotator tool for Moodle. With the given PDF annotator, the group will add some features that will then be integrated in Moodle. This allows the student to upload files in their Moodle group account and receives the commented document from their adviser and panelist.

Current technologies are being used to annotate documents such as A.nnotate, crocodoc, markup tools, PDF professional and Online PDF Marking/Annotation assignment module in Moodle. This is used to collect, organize and share information online. This project is an enhanced Online PDF/Marking/Annotation assignment module in Moodle. The enhanced project has additional features like; it can highlight a text, improved underline tool, added sizes of lines and a chat style comment box wherein the name of the commenter (teacher) will appear on the comment box. Also, this project aims to manage course module wherein it can group users in a specific course where they can only annotate or can have an access in a specific document.

1.3 Objectives of the Study

The general objective for this study is to design a Moodle module that the adviser and panels can annotate on the document in a specific course.

The specific objectives are:

- To enhance PDF annotation by adding such features: highlight text, dynamic sizes of lines and an enhancement on the underline tool and comment box.
- To manage course module in Moodle system.

1.4 Significance of the Study

The study of document annotation can help teachers collaboratively give feedbacks on student's documents. The project's goal is to alleviate the cost of printing and makes use of uploadpdf plugin available for Moodle. It is significant to all Ateneo de Davao University CS Division students and educators. Since Moodle is being used as a means of giving school activities, enhancing a document annotator feedback tool in Moodle let teachers to view, collaboratively highlight or strikeout texts and add comments or notes. It also provides a more secured way of adding comments to the documents.

1.5 Scope and Limitations of the Study

The study will customize a PDF annotator tool in Moodle. Since it will be integrated in Moodle, Moodle users can use this tool as a way of submitting documents and giving comments as a basis/guide in revising a document. Only the adviser and panelists can

gain access and can comment on the documents uploaded by the student; it is strictly many-to-one session between the adviser, the panelists and the advisee. There will only be one document that can be submitted for every group. Using the annotator tool, the user/s (teacher) can comment where they (student) can view the name of the commentor (teacher), strikeout, highlight and underline texts on documents. The tool can only be used on higher version specifically on Moodle 2.0.1 version. The student can only use Microsoft 2007 or higher version in encoding for him/her to save the document directly as PDF file.

1.6 Definition of Terms

- **Annotator** - to furnish (a literary work) with critical commentary or explanatory notes.
- **Moodle** - is an Open Source Course Management System (CMS), also known as a Learning Management System (LMS) or a Virtual Learning Environment (VLE). It has become very popular among educators around the world as a tool for creating online dynamic web sites for their students.
- **Comment** - is generally a verbal or written remark often related to an added piece of information, or an observation or statement.
- **plug-in** - a small piece of software that supplements a larger program (as a browser). A computer program module or device that interacts with another to add a specific function, or support a specific file format or device.
- **ADODB** - is a database abstraction library for PHP and Python based on the same concept as Microsoft's ActiveX Data Objects. It allows developers to write

applications in a fairly consistent way regardless of the underlying database system storing the information.

- **Ghostscript** - is a suite of software based on an interpreter for Adobe Systems' PostScript and Portable Document Format (PDF) page description languages.
- **JavaScript** - also known as ECMAScript, is a prototype-based object-oriented scripting language that is dynamic, weakly typed and has first-class functions. It is also considered a functional programming language like Scheme and OCaml because it has closures and supports higher-order functions. JavaScript is an implementation of the ECMAScript language standard and is primarily used in the form of client-side JavaScript, implemented as part of a web browser in order to provide enhanced user interfaces and dynamic websites. This enables programmatic access to computational objects within a host environment.