

## **Essignments -- A step toward the paperless classroom**

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**Abstract/Summary:**

Currently, there are many processes employed by different instructors to handle students' submission of assignments and the eventual return of the graded work to the students. Implementation of electronic submission systems can greatly simplify the transactional process of assignment submissions; serve students, instructors, and office staff better; reduce costs and overhead in terms of time and manpower; and enhance course delivery. There are several types of electronic assignment submission systems, but very few have been found that are web-based. The primary benefit of a web-based system is that students and instructors alike may access the system to submit or retrieve assignments anywhere there is access to the Internet. Participants in this session will learn about the motivation that led to the development of a web-based assignment submission system named Essignments.com.

Essignments is a general-purpose electronic submission system that gives instructors the ability to accept completely paperless assignments. Students use the system to submit assignment materials to course instructors via the Internet, and instructors use the system to retrieve the files, and to provide feedback on graded assignments to the students. It was originally developed to solve the problems associated with collecting assignments for large courses, but can be used for any size course and is ideal for distance learning initiatives. Statistical use began in April, 2001 and since then, over 4,000 student accounts have been created, and over 100,000 files have been submitted.

Essignments has two types of users: students and instructors. Instructors create accounts with at least one course and one assignment. Students also create their own accounts. When a student is ready to submit an assignment, he or she logs into Essignments, selects the correct assignment, and uploads the file(s) to be submitted. Once the submission deadline has passed, the instructor retrieves a single file containing all of the student submissions for that assignment. This file is then extracted into a set of student named folders containing the appropriate student's work. Grade sheets can be copied into each folder, and the grading can be done entirely electronically; i.e., no paper copies are ever needed. Once the grading is complete, the instructor compresses the organized folders into a single file and returns it to Essignments. Students can then log back in to retrieve their graded work.

A web-based, automated system like this has many benefits including the following:

- It is accessible from anywhere there is an Internet connection.
- The web interface for students and instructors makes it more attractive and easier to use than a comparable email-based system.
- It supports an unlimited number of students and instructors.
- Instructors can define multiple courses and multiple assignments for each course.
- Instructors can define date and time ranges of when files for each assignment can be submitted.
- Its integrated archive program allows instructors to retrieve all student files with a few mouse-clicks for off-line grading.

- Instructors can easily keep an electronic archive of all student work as it was submitted and after it has been graded.
- It supports any file format from any PC platform.
- Minimal network administration is required, since instructors and students create and maintain their own accounts.
- It maintains an audit log file of all system activity.
- It eliminates bulky stacks of paper.
- It reduces the likelihood of lost assignments.
- It can be easily searched for comparing student submissions.

The presenters will describe the system and demonstrate how it works. They will also explain how several different types of classes have used it to help reduce the amount of paperwork traditional assignment handling involves. The system has even been applied to the administration of computer programming lab exams. The combination of these applications of Essignments is an important step for facilitating the transition of a traditional course to a distance-learning course. For the educator who strives to create the paperless classroom for traditional or distance delivery, Essignments serves as a valuable support tool to achieve a majority of the paperless classroom goal.