

Assignment Writing Using Iwrite On The Cloud

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Abstract— Managing writing activities and providing feedback to students is very labor intensive and academics often opt out of including such learning experiences in their teaching. For Example: Some times in college's students have to create single

document having different modules collaboratively. We describe the architecture for a new collaborative writing support environment used to embed such collaborative learning activities in engineering courses. iWrite provides tools for managing collaborative and individual writing assignments in large cohorts. We can do this by collaborative writing tools also using cloud. The overall aim of the paper is to demonstrate how our system, Called iWrite, effectively

Keywords— Cloud , iWrite,Collaborative writing tools.

I. INTRODUCTION

Writing is important in all knowledge-intensive professions. Engineers, for example, spend between 20 percent and 40 percent of their workday writing, a figure that increases with the responsibility of the position. It is often the case that much of the writing is done collaboratively .Collaboration and writing skills are so important that accreditation boards such as the Accreditation Board in Engineering and Technology (ABET) require evidence that graduates have the “ability to communicate effectively. Among the claimed positive effects of writing documents collaboratively are learning, socialization, creation of new ideas, and more understandable if not more effective documents This paper reports on an architecture for supporting CW that was designed with both pedagogical and software engineering principles in mind, and a first evaluation. The overall aim of the paper is to demonstrate how our system, called iWrite, effectively allows researchers and instructors to learn more about the students’ writing activities, particularly about features of individual and group writing activities that correlate with quality outcomes.

However, motivating and helping students to learn to write effectively before they graduate, particularly in collaborative scenarios, poses many challenges, many of which can be overcome by technical means. Over the last 20 years, researchers within universities have been developing technologies for automated feedback in academic writing [4], [5], [6], [7] and for enabling collaborative writing (henceforth, CW) [8], [9], but work combining both automated feedback and CW has been scant.

This is the process to provide Natural Language Processing(NLP) technique , this architecture provides

automated feedback, automatic question generation and process analysis techniques for these all thing next student can easily work out an the same document by getting the metadata of that document. It outsources the writing tools and the storage of student content to third party cloud-computing vendors(i.e., Google). We can describe how using machine learning and NLP techniques, the architecture provides automated feedback and automatic question generation, and process analysis features. This paper reports on an architecture for supporting Collaborative Writing (CW) that was designed with both pedagogical and software engineering principles in mind, and a first evaluation. The overall aim of the paper is to demonstrate how our system, Called iWrite, effectively allows researchers and instructors to learn more about the students’ writing activities, particularly about features of individual and group writing activities that correlate with quality outcomes. The evaluation provides data collected in general classroom activities and writing assignments (individual and collaborative), using mainstream tools yet allowing for new intelligent support tools to be integrated. The paper has focused on the theoretical framework and literature that underpins our project. Although not a complete survey of the extensive literature in the area, it highlights aspects that later supported architectural decisions.

II. LITERATURE SURVEY

All Presents a novel [1] Automatic Question Generation (AQG) approach that generates trigger questions as a form of support for students' learning through writing. The approach first automatically extracts citations from students' compositions together with key content elements. Next, the citations are classified using a rule-based approach and questions are generated based on a set of templates and the content elements. A pilot study using the Bystander Turing Test investigated differences in writers' perception between questions generated by our AQG system and humans. It is found that the human evaluators have moderate difficulties distinguishing questions generated by the proposed system from those produced by human. Moreover, further results show that our system significantly outscores Generic Question on overall quality measures.

Collaboration and particularly[2] collaborative writing is an increasingly essential skill needed in the workplace and education. Until recently most of the focus of research has been the final product of the writing, rather than

the process itself. In this paper, we propose an innovative framework for investigating collaborative writing processes. The Write Proc framework utilizes both process and text mining tools to analyze the process that groups (or individual) writers follow, and how the process correlates to the quality and semantic features of the final product. Furthermore, Write Proc is integrated with existing web 2.0 writing tools, providing full support for writing, reviewing and collaboration. We describe the architecture that integrates tools for analyzing the process and semantics of the writing. We also provide a case study on data collected from a group of undergraduate students writing collaboratively an essay, with peer reviewing and use of an automatic feedback tool.

With the advent of English as a global language, the ability to [3]write well in English across diverse settings and for different audiences has become an imperative in second language education programmes throughout the world. Yet the teaching of second language writing is often hindered by the great amount of time and skill needed to evaluate repeated drafts of student writing. Online Automated Writing Evaluation programmes have been developed as a way to meet this challenge, and the scoring engines driving such programmes have been analyzed in a considerable array of psychometric studies. However, relatively little research has been conducted on how AWE is used in the classroom and the results achieved with such use. In this article, we analyze recent developments in automated writing evaluation, explain the bases on which AWE systems operate, synthesize research with these systems, and propose a multifaceted process/product research programme on the instructional use of AWE. We explore this emerging area of inquiry by proposing a range of potential questions, methodologies and analytical tools that can define such a research agenda.

III. PROBLEM DEFINITION

The “iWrite” website provides students with information about their writing activities, tools for writing and submitting their assignments, and a complete solution for scaffolding the write-review-feedback cycle of a writing activity. iWrite, effectively allows researchers and instructors to learn more about the students’ writing activities, particularly about features of individual and group writing activities that correlate with quality outcomes. The recognition speed of the system is faster such that it should provide efficient output. Reliability should be achieved by lower error recognition rate.

IV. ARCHITECTURE

The “iWrite” website provides students with information about their writing activities, tools for writing and submitting their assignments, and a complete solution for scaffolding the write-review-feedback cycle of a writing activity. Fig. 1 shows its three sections, two of which (“For Students” and “For Academics”) consist of content and interactive tutorials on developing students’ understanding of different concepts and genres of writing. These consist of

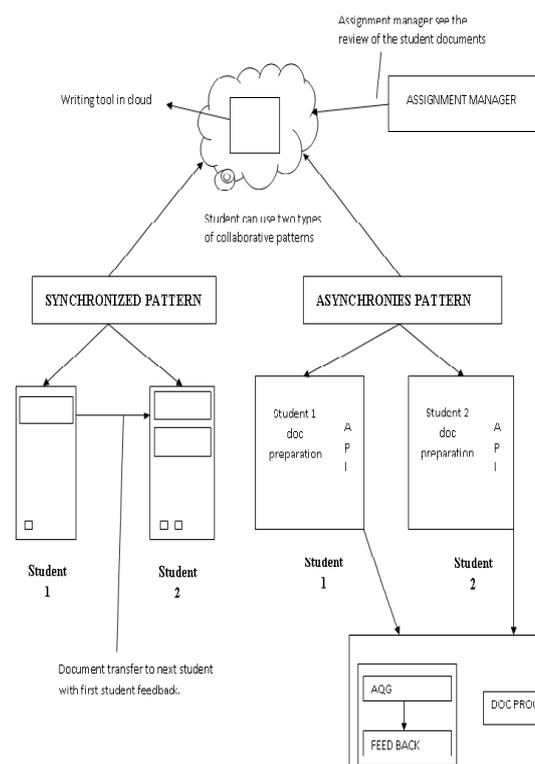


Fig. 1 Architecture of Collaborative Writing

discipline specific tutorial exercises where students are introduced to writing concepts through examples written by others. Only the “Assignments” section—which supports students to contextualize these writing concepts in their own compositions

A. Assignment Manager

The Assignment Manager is designed to use cloud computing applications and their APIs. This means that the writing tool and the documents themselves are managed by a third party. This significantly reduces the cost of managing a system with large number of students, and a Service Level Agreement (SLA) ensures that assignment documents are always available. The architecture of the system is illustrated in Fig. 2. The writing tools and activities, on the left-hand side, are implemented with Google Docs, a cloud-based office suite for editing documents, presentations, and spreadsheets. The API provides programmatic access to the documents

The API provides programmatic access to the documents. The right-hand side of Fig. 2 shows the Assignment Manager, Glosser, and WriteProc. Assignment Manager deals with the administration and scheduling of courses and writing activities.

Writing Tasks				
Course	Activity file	Due date	Submitted	Feedback
ELEC3610	Project Presentation	31 Mar 12:00 PM		
	PSD	Draft: 12 Feb 12:00 PM Final: 12 Feb 12:00 PM	Draft-SNAPSHOT Final	Automatic Feedback

Reviewing Tasks			
Course	Document to review	Your review	Due date
ELEC3610	Draft-SNAPSHOT	PSD Review	12 Feb 12:00 PM

Instructor Panel			
Course	Activity	Submitted	Due date
ELEC3610	Project Presentation		31 Mar 12:00 PM
	PSD	Download all drafts Download all reviews Download all assignments	Draft: 12 Feb 12:00 PM Review: 12 Feb 12:00 PM Final: 12 Feb 12:00 PM

Fig 2: A screenshot of the Assignment Manager: the student UI displays the writing and reviewing tasks, while the academic UI also displays the instructor panels

V. CONCLUSION

The architecture for iWrite, a CSCL system for supporting academic writing skills has been described. The system provides features for managing assignments, group and peer-reviewing activities. It also provides the infrastructure for automatic mirroring feedback including different forms of document visualization, group activity, and automatic question generation.

The paper has focused on the theoretical framework and literature that underpins our project. Although not a complete survey of the extensive literature in the area, it highlights aspects that later supported architectural decisions.

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