Department of Computer Science
BSc (Hons) Project Proposal

*Principal Investigator:* Chikumbutso David
*Supervisor:* Mici Halse

**G REMU**

Project Title: The Educational Value of Integrating a Learning Management System, and a Social Networking Platform

**Grahamstown, South Africa**

**November, 2012**
## Contents

1 Problem Statement  
2 Objective of the Research  
3 History and Background  
4 Approach/Methodology  
5 Requirements  
6 Progression Timeline  

References
1 Problem Statement

Teaching and learning has evolved from a teacher-centred, knowledge-transfer approach to learner-centred approach where the learner is at the centre of the learning [2]. Learning Management Systems (LMSs) (developed to support the management and delivery of learning content and other services to students [6]) are limited in their design to effectively support the different teaching and learning styles. For example, it is difficult or impossible for learners to interact online using a LMS. As suggested by [1], LMSs should be modified to reflect all the training activities of the learners and should facilitate mobility and constructivist learning with no limit on the time of the day or the location of the learner for them to support the emerging understanding of teaching and learning styles including learning through interactions. This can be achieved through extending the LMS by including social networking features or through integrating a LMS with an existing social network site (SNS).

2 Objective of the Research

The objective of the research is to investigate the educational value social networking can bring if used for educational purposes. Specifically, the project will investigate the following:

1. The integration of a LMS and a SNS using Moodle as a LMS and Mahara as a SNS; and

2. The opinions of the students using social networking in a course after
conducting a test run with them.

3 History and Background

LMSs are designed mainly to support formal learning while SNSs mainly support informal interactions. There are however some SNSs (e.g. Elgg and Mahara) which were developed specifically for academic use. By design, LMSs support well the distribution of course materials to students, while SNSs support well users’ online interactions and promote content creation by all users. In a LMS, content creation is mainly limited to a few users who include teachers, system administrators and tutors. LMSs and SNSs support different functions which are complementary and this led to projects integrating the two systems to be able to support both formal and informal learning. Some of the example projects where a SNS and LMS were integrated are: the integration of Moodle and Elgg using the Elgg integration block [4], the integration of Coome LMS and Facebook [5] and the development of Mahara to integrate with Moodle [3]

4 Approach/Methodology

Moodle and Mahara will be integrated using a single-sign-on (SSO) to enable users authenticated by Moodle to access Mahara without being re-authenticated. The integrated system will be tested with students in one of the courses at Rhodes University. A survey approach will be used to collect the views of the students who will use the integrated system.
5 Requirements

To implement the project, the following resources will be required:

1. Moodle software version 1.9
2. Mahara software version 1.5
3. Ubuntu Linux version 11.10
4. Apache web Server version 2
5. MySQL Database version 5
6. PHP version 5
7. Server space (approximately 20 GB) to host the integrated system

All the required software is open source and will be downloaded freely.
## 6 Progression Timeline

<table>
<thead>
<tr>
<th>Start Date</th>
<th>End Date</th>
<th>Duration</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>6th March, 2012</td>
<td>6th March, 2012</td>
<td>1 Day</td>
<td>Presentation of the Project Proposal</td>
</tr>
<tr>
<td>7th March, 2012</td>
<td>9th March, 2012</td>
<td>3 Days</td>
<td>Review the Project Proposal based on the comments made during the presentation</td>
</tr>
<tr>
<td>12th March, 2012</td>
<td>30th March, 2012</td>
<td>3 Weeks</td>
<td>Learn and modify the functionalities of Moodle if required</td>
</tr>
<tr>
<td>2nd April, 2012</td>
<td>5th April, 2012</td>
<td>1 Week</td>
<td>Development of the Project Website</td>
</tr>
<tr>
<td>9th April, 2012</td>
<td>27th April, 2012</td>
<td>3 Weeks</td>
<td>Learn and modify the functionalities of Mahara if required</td>
</tr>
<tr>
<td>28th May, 2012</td>
<td>28th May, 2012</td>
<td></td>
<td>Submission of Literature Review</td>
</tr>
<tr>
<td>13th August, 2012</td>
<td>17th August, 2012</td>
<td>5 Days</td>
<td>Set up the environment for the system and implement the system</td>
</tr>
<tr>
<td>21st August, 2012</td>
<td>21st September, 2012</td>
<td>5 Weeks</td>
<td>Test the system with students</td>
</tr>
<tr>
<td>24th September, 2012</td>
<td>4th October, 2012</td>
<td>11 Days</td>
<td>Data collection using the questionnaire</td>
</tr>
<tr>
<td>5th October, 2012</td>
<td>1st November, 2012</td>
<td>1 Month</td>
<td>Report Writing</td>
</tr>
<tr>
<td>29th October, 2012</td>
<td>29th November, 2012</td>
<td>1 Day</td>
<td>Final Presentations</td>
</tr>
<tr>
<td>2nd November,</td>
<td>2nd November</td>
<td></td>
<td>Thesis and Short Paper submission</td>
</tr>
</tbody>
</table>

Table 1: Progression Timeline
References


