

Name:	John Mathew D. Diño	Scholarship Program:	S&T Undergraduate Scholarship (RA 7687)
Course:	Bachelor of Science in Information Technology	School:	Sorsogon State University – Bulan Campus
Year of Award:	2018		

<div>Cloud-Based Web Application System for Capstone Project Monitoring, Managing, and Evaluating with Plagiarism Checker</div> <div>Capstone Project Title</div>
<div>Introduction</div> <p>Capstone Project is a partial requirement undertaken by student taking Computer Studies degree programs like BSIT and BSIS. Students and faculty members face problems in submitting, managing deliverables, and monitoring progresses when using manual or semi-computerized method. With the rise of technologies, students are expected to be knowledgeable and be able to experience the benefits of new technologies. Sorsogon State University – Bulan Campus, specifically the ICT Department, experiences these problems and does not have an online centralized system for the various activities involved in completing capstone projects.</p>
<div>Statement of the Objectives</div> <p>This proposed capstone project aims to design and develop a cloud-based web application for monitoring, managing, and evaluating capstone projects with an external integrated plagiarism checker. Specifically, it seeks to (1) carry out and deliver the following features and modules related to monitoring, managing, and evaluating capstone projects electronically: (1.1) project progress monitoring, (1.2) topic/title proposal, (1.3) adviser and panelists selection, (1.4) task and activities management, (1.5) deliverable’s submission, monitoring, and management, (1.6) defense scheduler and manuscript evaluation, (1.7) user’s management, (1.8) grades management, (1.9) student management, (1.10) capstone project guide and formatting, and (1.11) discussion forum; (2) integrate an existing plagiarism checker that will check the manuscript for plagiarism, locate it, and report via the percentage of the amount of plagiarized content; and (3) Test and evaluate the proposed project, based on ISO/IEC 25010 Software Product Quality, in terms of: (3.1) functional stability, (3.2) performance efficiency, (3.3) compatibility, (3.4) usability, (3.5) reliability, (3.6) security, (3.7) maintainability; and (3.8) portability of the system.</p>
<div>Significance of the Study</div> <p>The purpose of this study was to develop a cloud-based web application system for a capstone project monitoring, managing, and evaluating with plagiarism checker to help students and faculty members of Sorsogon State University – Bulan Campus under Information and Communication Technology Department.</p> <p>The features and advantages that the system can provide can be beneficial the following:</p> <p>Students. They can quickly generate and organize their capstone project using this system. They’ll be able to select the topic or title they want to work in,</p>

their preferred adviser and panelist, submit deliverables, monitor their progress, and view their grades.

Capstone Professors. This system can act as a single venue for monitoring, management, and evaluation of capstone projects which can benefit Capstone Professor by having one system that can assist him/her from the start of the project (grouping the students) up to the end (manuscript evaluation).

Faculty. The faculty, regardless of their role (adviser/panelist), can benefit from this system by being able to monitor and manage their advisory group/s easily and/or comment and evaluate their manuscript.

Department Dean. The system can help the dean of the department easily manage the faculty eligible to advise and/or become an evaluator of capstone projects. This system also enables the dean to select the faculty who will become the Capstone Professor, granting him/her additional privileges and control in the Capstone Project Management.

Future system developers. This project can help prospective developers who will conduct studies related to this system. They can make the present system their reference in improving monitoring, managing, and evaluating capstone projects

Brief Review of Relevant Literature

Capstone Project, as defined by [9], is a required terminal project in courses like Bachelor of Science in Information Technology. It is equivalent to the Thesis of other programs. With this project, students will be able to demonstrate their knowledge acquired during their studies under their area of studies and in research methodologies. It also allows them to apply the concept and methods to a specific problem in their area of specialization.

The purpose of a monitoring system in a project-based activities is to track and monitor the activities and tasks to ensure efficiency and effectiveness of the project [7]. A project management system contains subsystems that can facilitate the organization, has a project planning, control capability, includes an information subsystem and the techniques and methodology to accomplish the project [2]. On the other hand, a project evaluation system is a system that can systematically and objectively assess an ongoing or completed project [10].

Colleges and Universities around the world uses a different management, monitoring, and evaluation system to handle their thesis or Capstone Projects. The systems are usually a web system that can automates the capstone thesis or project process. They include the ability to store data, read, mark and comment on the project which includes a progress monitoring, and a messaging capability between the student and their advisers [1, 3, 4, 5, 6, 8, 11, 12, 13, 14, 15]

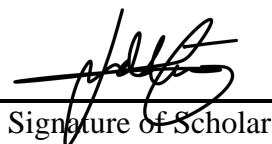
Methodology

In the span of two semesters, the proponents will develop the system using Iterative approach for the development life cycle where the flow of development focuses on an initial, simplified implementation, which then progressively gains more complexity and a broader feature set until the final system is complete; Object-Oriented for the analysis and design applying object-oriented programming; and Bottom-up as the development approach. The system will be verified, validated, and tested using client and users survey and interview, functional and non-functional validation, and positive and negative testing.

Schedule of Activities

- June 3, 2021 – Capstone Project Proposal Defense

- September 7-10 and 13-15, 2021 – 1st Prototype Checking
- October 4-8, 2021 – 2nd Prototype Checking
- November 2-5, 2021 – 3rd Prototype Checking
- November 15-19, 2021 – Alpha Testing of the Project
- November 22-26, 2021 – Capstone Project Final Oral Defense
- December 13-17, 2021 – Submission of hardbound copies of the manuscript

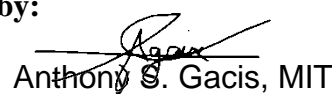


Signature of Scholar

30 October 2021

Date

Noted by:



Anthony S. Gacis, MIT

Printed Name and Signature of
Capstone Project Adviser

30 October 2021

Date

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