

**Education Management Information System (EMIS)**  
**Project completion Report**

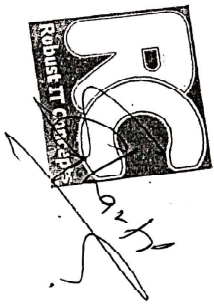
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Submitted To:  
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#### A: Project Profile

Project Name : Development and Implementation of EMIS (Education Management Information System)

Project URL: emis.pusob.edu.np

Project Time Period: 6 Weeks

Date Submitted: 2076/2/20

#### Section 3: Project Report and Reflection

##### Project Description:

The project was to develop and implement the EMIS (Education Management Information System) for the digitization of the educational operation of School of Business. Major objective of the project is to record all the education related information in digital format that help in quick retrieval and summary.

The EMIS Software was designed and developed from scratch to suit the academic philosophy and operation of SOB. Development and Implementation of the software was conducted with close interaction with members of SOB. Agile methodology was adapted in the development of the system where multiple interaction was made to design and develop that system for best outcome.

##### Functionality

- a. **Student Admission.**  
EMIS has a function for managing new admission for all the programs under SOB. It is capable of handling admission process. This function of EMIS will upgrade the current operation in handling storage, management and creating student id card process.
- b. **Student History**  
EMIS has enabled the ability to keep history of student regarding their academic and discipline details through there period in SOB. SOB is able to get information of any student within a single click.
- c. **Faculty Management**  
EMIS has enabled in digital recording of faculty information.
- d. **Session Management**  
This function of the system will keep track of all the session, along with student enrollment, subject, faculty and many more related with session.
- e. **Internal Evaluation Management**  
Keeping track of the inter evaluation of student during the session is a critical and import process academic evaluation. This module help faculty to keep track of the internal marks of the students in easy way.
- f. **Retake Exam Management**  
Retake exam scheduling and management is the major operation in the management of academic process of student. This module in EMIS will help manage the retake exam tracking of any student.

### g. Exam Form Management

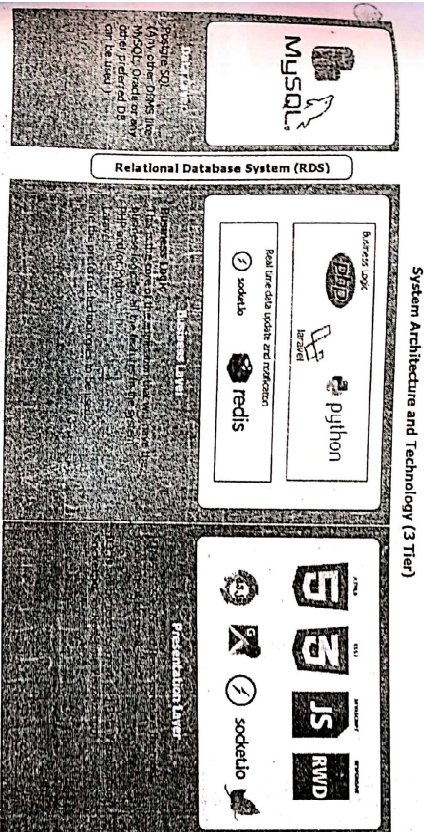
This module enables the management of the exam form filling process in Sob it will ensure that the students submit the exam form and the forms are submitted to the university quick and easy.

### h. GRP Management

GRP management modules help to keep track of the research process of the graduate students.

### Architecture and Technology

The system is built in 3 tier architecture using open source web technologies like PHP, Laravel, HTML, CSS and more. This ensure the quality and upgradability of the system will little or minimal cost.



### System Architecture and Technology Design - 3 Tier

#### a. Data Layer

Data Layer refers to the layer where the data of the system is stored. MySQL has been used for the storage of data. It is an open source platform for data storage. The EMS system can have any database system is specifically required by School of Business.

#### b. Business Layer

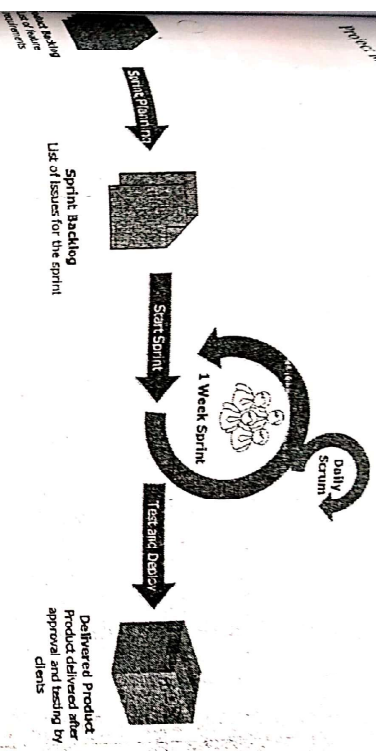
Business layer is the core for the application that will have all the processing of data and logic for all the features in the system. Laravel framework build with PHP programming language.

#### c. Presentation Layer



presentation layer is the tier that is used to interact with the user. This layer for the system is built using generic web technology like HTML, CSS and other technologies. This ensures that the user interaction layer of the system is similar to general web surfing user do in day to day basic.

### Generic Agile Approach



### Project management approach

Project management has been adapted during the development and process of project management. The process of project management is the organization of the software.

### on impacts

Implementation of the EMIS system requires some adaptation and changes in the current operation of the SOB.

- a. Admission Process – Implementation of EMIS will result in some adaptation and changes in the admission process of the student to SOB. Student information shall be entered into the system during the admission process of the student.
- b. Exam form Submission – EMIS will upgrade the process of collecting exam form for the preparation of board exam. The process requires to use the EMIS for the submission of the forms.
- c. Course Plan submission- EMIS required faculty members to submit course plan for the assigned subject to be submitted through online process.
- d. Internal Marks Submission – Internal marks calculation and submission is the most affected operation of all that will be impacted along with the implementation of the EMIS system. Faculties are required to plan and record the evaluation criteria for each subject assigned and the marks obtained by the students to be uploaded as soon as the marks are assigned to the students. This process will require faculties to add marks directly to the EMIS system.

Document preparation - Creation and submission of documents like Triplicate, Registration list, UGC report and many more will be upgraded to be printed through single click system using EMIS.

#### Effectiveness

Implementation of EMIS system will bring multiple level of effectiveness and efficiency in the quality of academic management in SoB.

Cost Error - This system will reduce the error that has been seen and occurred in manual management of student data relating to admission, internal marks, grades, registration, general data of student with track record of academic and disciplinary event will minimize error to almost none.

Time Management - This system will improve the latency experience currently in the manual process of preparing internal marks, Grades, Triplicate, Registration list, and many more.

Tracking - Implementation of EMIS system in SoB help tracking the error as all the process of academic management will be processed through digital process.

Increased Confidence - Moreover the implementation of EMIS system will increase the confidence of all the faculties, Staffs and Management.

Mobile

	Duration	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
System Designing	3 Days						
Software Setup	2 Days						
System Application Development	7 Days						
System for Examination Module	12 Days						
System Development	10 Days						
System Development	2 Days						

System Development Schedule

Implementation of Web Based EMIS system results in some level of risk and consideration. Digital technologies are likely to have some risk of hacking, cracking and physical damage. Software itself has been added to have its data backed up periodically. However, all the user and stakeholder of the EMIS requires to manage general information while using the system. i.e Not Sharing the login password with other.

difficulty/rejection to adaptation implementation of EMIS requires some changes in the operation of the organization. This may result in the increase work load among the user of the system. Difficulty to use the technology and increase work load may lead to rejection of the adaptation.

#### Effort and Accomplishment

The process has been adapted to insure the quality Design, Development, Implementation and completion of the EMIS.

- a. Appointment of the Point of contact to ensure the sharing of information.
- b. Team of administrative staff and Faculty has been assigned to ensure the system best fits to the operation and philosophy of the SOB.
- c. Training and Feedback session conducted before the implementation of the system.
- d. Team of specialist from the SOB has checked and assured the quality before providing the closure and accomplishment of the project.

#### Recommendation

1. Future upgrade
2. Detailed implementation of Course plan - Week by Week
- Student Portal for Assignment Submission, Course material Download and many more
- Live attendance System
- Mobile App
- Entrance Module

#### Conclusion and Appendix

Author:

project for designing, Development and Implementation of the Education Management System has a major objective to digitize the academic management process in SOB. The system has been built from scratch using latest open source web based technologies with close involvement of administrative and academic staffs of SOB. This helped in development of system that fits the requirement of SOB and adaptation in digitization process of SOB. The EMIS system will increase the efficiency and effectiveness in processing the data and academic operations that will eventually benefit SOB, Faculty, Student, Staff, and University.

With some difficulties and risk for the adaptation, development of the system will continue in the days that will incorporate the student, staff, and Faculties into the system.



study of the government organizations working procedures before contract. Consultants are encouraged to come up with their suggestion as well in the workshop. The software within 6 weeks of the contract. The software within 2 weeks after completion of development stage.

Months of piloting services shall be offered by the consultant shall not bear the financial liability for fixing the problems arise during these six months after deployment of the software. There be any realization for modification or addition of some other features SoB will there to the contractor and contractor shall modify or add as per SoB's request in respect to the software. The system and administration documents should be handed to School of Business with admin access.