University of Rwanda

College of Science and Technology

School of ICT

Department of Computer and Software Engineering

PROJECT : STUDENT SUSPENSION SYSTEM

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Date: 6 Dec 2022

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PURPOSE OF SYSTEM

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This system is made with the purpose of outlining the design of the Student Suspension System in detail. The document will provide developers an insight in meeting client's needs efficiently and effectively. Moreover the document facilitates communication and understanding of the system by providing several views of the system.

SCOPE

The system design document would demonstrate how the design will accomplish the functional and non- functional requirements captured in the Software Requirement specification (SRS). The document will provide a framework to the programmers through describing the high level components user interfaces and database design. This is achieved through the use of design patterns, sequence diagrams, relational models and user interfaces.

DOCUMENT OVERVIEW

The next paragraphs of the document has described structure of the Student suspension System. The high level components and their interactions, physical arrangement of components and design decisions applied to the whole system. Others of the System is on Component and detailed design. Includes database design in detail and user interface design with screen shots of the interfaces.

Chapter 1. Introduction

1.1 Historical background of case study

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The suspension process was done by face to face suspension, the suspension is based on university students where they can suspend their studies for different reasons. Now the system for suspension it will be doing online. The students as undergraduate or postgraduate they suspend studies and when you are suspended you are also out-of school but you are known as student of university of Rwanda.

1.2 Problem statement

In university of Rwanda the suspension was done by filling the forms and it can be done by physically where it takes more time get services on side of student. You must require to come and meet with your director of studies (Head of Department, Dean of Study or Register of your Department.

1.3 Objective of project

Student suspension System is software which is helpful for students as well as the school authorities. In the current system all the activities are done manually. It is very time consuming and costly. Our Student suspension System deals with the various activities related to the students.
There are mainly 2 modules in this software.

- User module
  - In the Software we can register as a user and user has of two types, student and administrator.
  - Administrator has the power to add new user and can edit and delete a user. A student can

register as user and can add edit and delete his profile.

- Student module

In this student module Administrator will register the details of the student.

- ❖ Administrator can view the details of the student by giving admission number.
- ❖ Administrator can also edit the details of the student by giving admission number
- ❖ Administrator can also delete the details of the student by giving admission number

In the Software we can register as a user and user has of two types, student and administrator.
Administrator has the power to add new user and can edit and delete a user. A student can register as user and can add edit and delete his profile
In the Software we can register as a user and user has of two types, student and administrator.
Administrator has the power to add new user and can edit and delete a user. A student
Can not add edit and delete his profile.

FEASIBILITY ANALYSIS

Whatever we think need not be feasible. It is wise to think about the feasibility of any problem

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We undertake. Feasibility is the study of impact, which happens in the organization by the development of a system. The impact can be either positive or negative. When the positives nominate the negatives, then the system is considered feasible. Here the feasibility study can be performed in two ways such as technical feasibility and Economical Feasibility

TECHNICAL FEASIBILITY:

We can strongly say's that it is technically feasible, since there will not be much difficulty in getting required resources for the development and maintaining the system as well. All the resources needed for the development of the software as well as the maintenance of the same is available in the organization here we are utilizing the resources which are available already.

ECONOMICAL FEASIBILITY:

Development of this application is highly economically feasible. The organization needed not spend much money for the development of the system already available. The only thing is to be done is making an environment for the development with an effective supervision. I f we are doing so, we can attain the maximum usability of the corresponding resources. Even after the development, the organization will not be in condition to invest more in the organization. Therefore, the system is economically feasible.

CONFIGURATION

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HARDWARE CONFIGURATION:

Processor :
RAM : 1GB
Hard Disk : 50GB
Monitor :
Key Board :

SOFTWARE CONFIGURATION:

Operating System: Windows , Linux
Language: HTML, CSS, PHP, JavaScript
Database: MySQL

Chapter 2. System Analysis and Design

2.1 System Analysis

2.1.1 Functional requirement of project

Requirement Definition

Requirement is simply a statement of what a system must door what characteristics it needs to have during a system development project requirement s will be created that describe what the business needs(business requirement) what users need do (user requirement) what software should do (function requirement) . Characteristics the system should have (nonfunctional requirement) and how the system should be built (system requirement).

1. **User requirement**

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The user have to first to be registered in system with their username and password.

The student has to login to system in order to apply for the suspension.

The HOD, Dean, finance and even registrar have to login in order to analyses the student application or request.

2. Functional requirement

Student shall be able to login in system using his/her registration number and password

Student should be able to fill the form requesting a suspension.

Student should be able to see if his / her request was approved or denied.

DEAN, HOD registrar and finance should be able to login by using their Username (email) and password.

2.1.1 Functional requirement of project

. Student

Student required to enter her or his information detail.

2 REG No
3 PIN
4 First-name
5 Last-Name
6 Gender
7 Email

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. Login

Here there is to login as Administrator, staff or student

As student you are required REG-no and pin

As admin requires Username (email) and password

As staff requires Username (Email) and password

.Reasons for suspension which are:

Academic reasons

Family difficulties

Immigration reasons

Health difficulties

Financial difficulties

2.1.2 Intended users of project

- Student
- Head of Department
- Dean of study
- Register

2.1.3 Intended system partners of project

University of Rwanda

2.2 System design

2.2.1 UI design (sketch of UI model)

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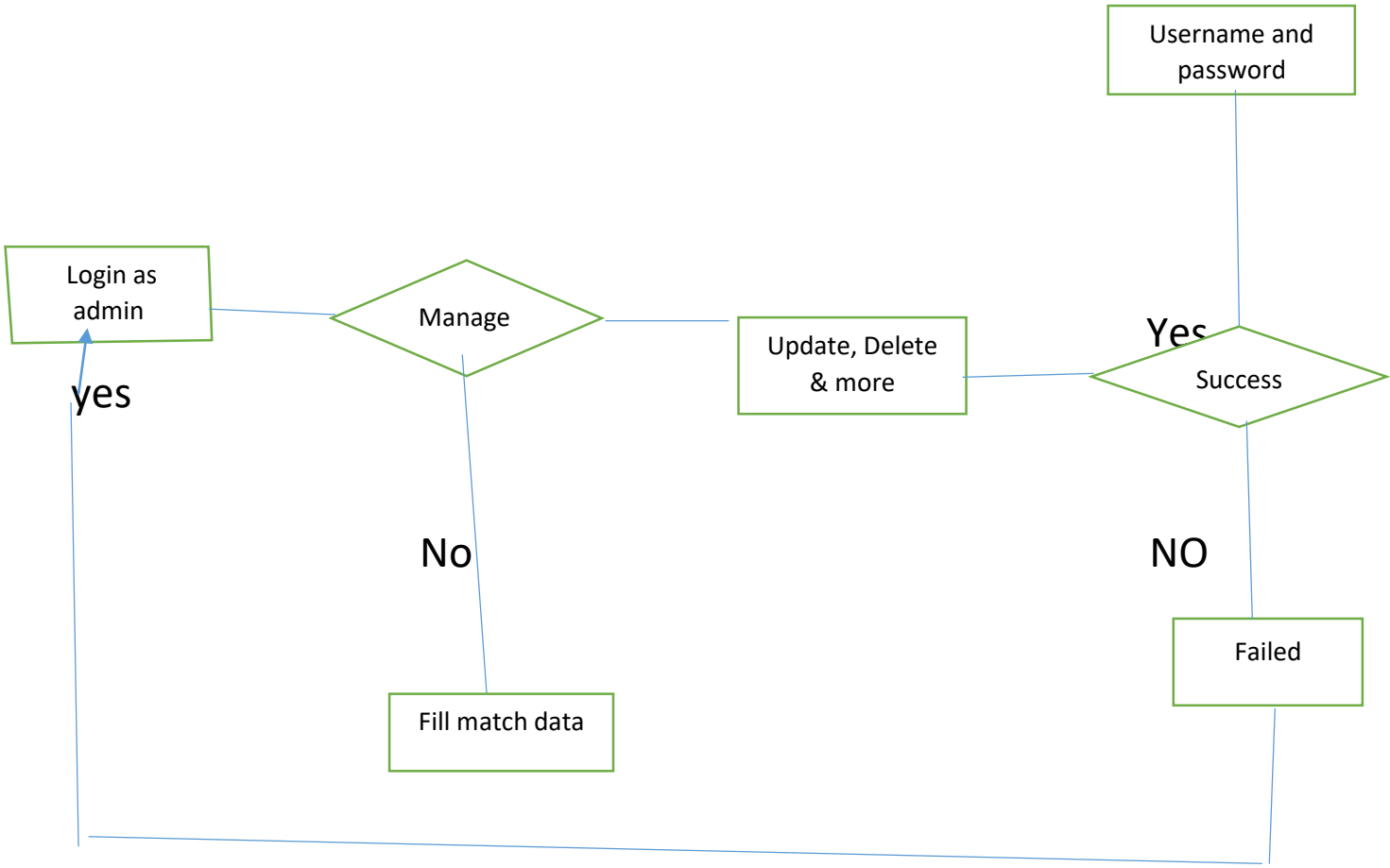

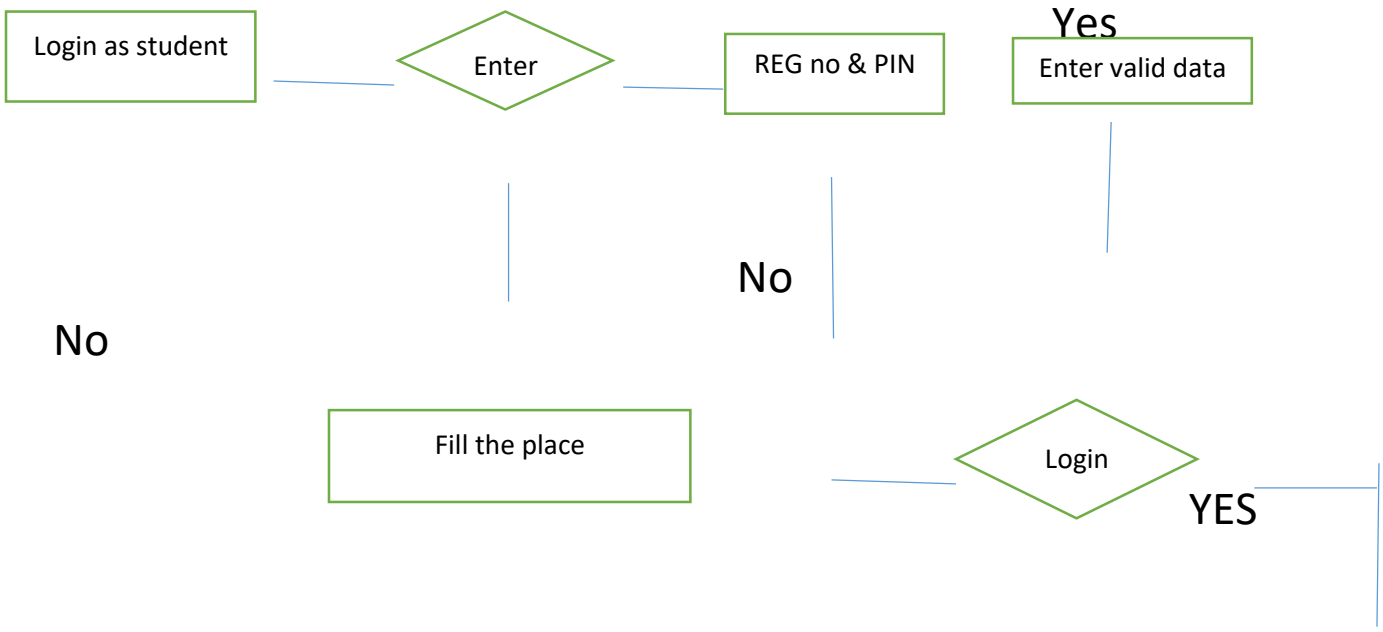

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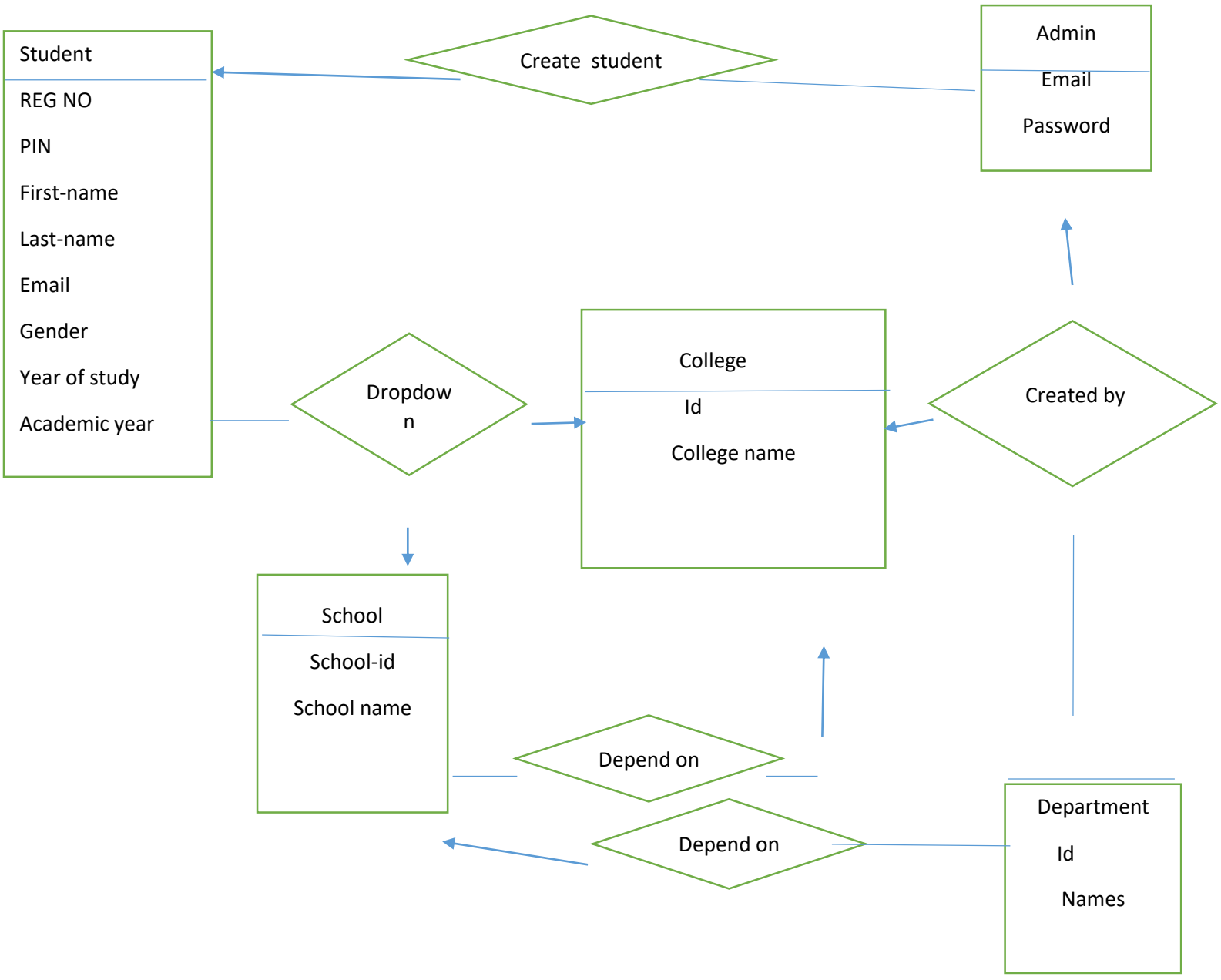
Successful

2.2.2 Database design with ERD and relationship



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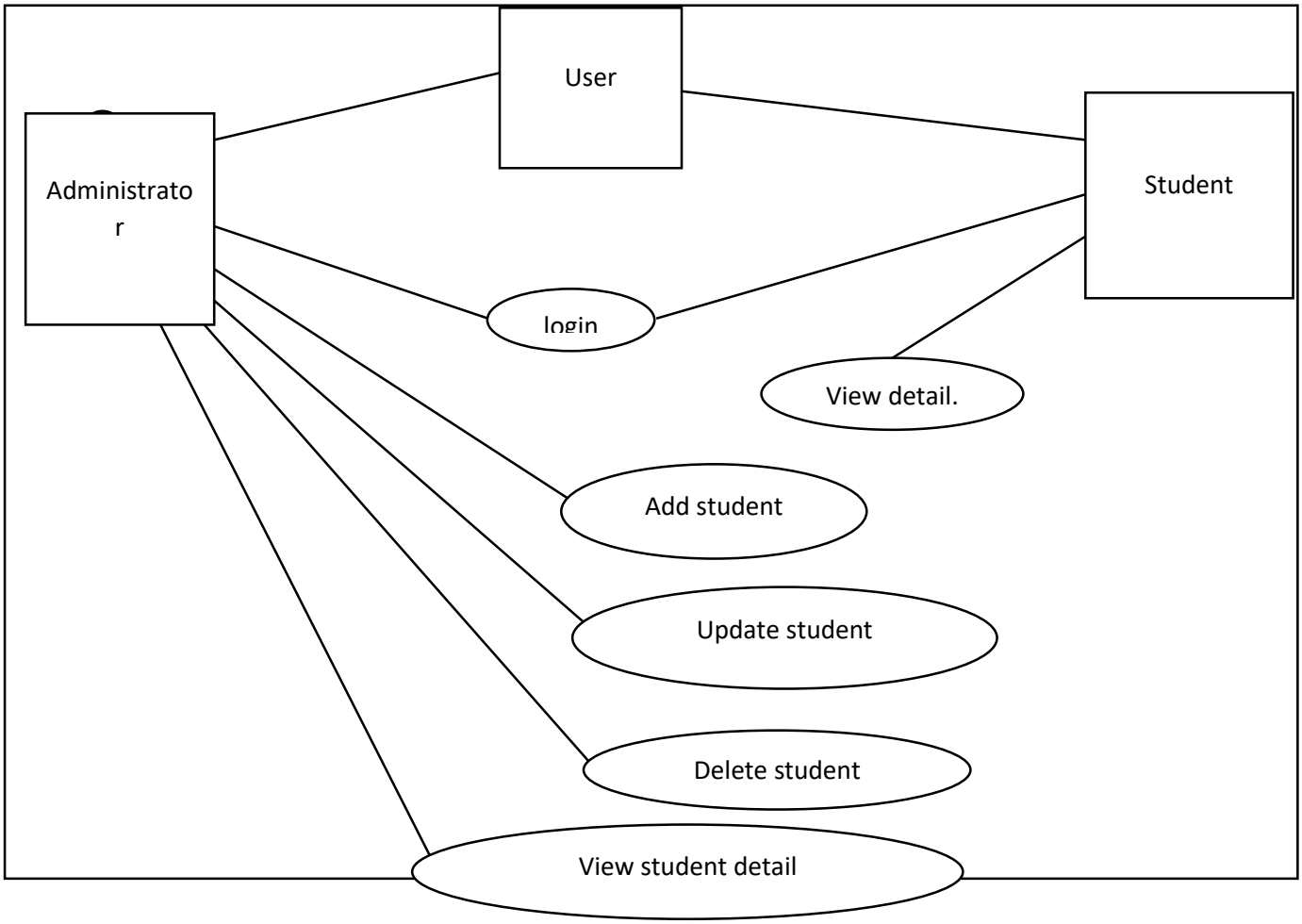
Use case diagram: display relationship among the Student, administrator and user. Is a visual representation of how a user might interact with a program? A use case diagram depicts the system's numerous use cases and different sorts of users. The circles or ellipses are used to depict the use cases.



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Class Diagram: models class structure and contents using design elements such as classes packages and objects. It also displays relationships such as containment, inheritance, associations and others.

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Requirement Definition

Requirement is simply a statement of what a system must door what characteristics it needs to have during a system development project requirement s will be created that describe what the business needs(business requirement) what users need do (user requirement) what software should do (function requirement) . Characteristics the system should have (non functional requirement) and how the system should be built (system requirement).

3. User requirement

The user have to first to be registered in system with their username and password.

The student has to login to system in order to apply for the suspension.

The HOD, Dean, finance and even registrar have to login in order to analyses the student application or request.

4. Functional requirement

Student shall be able to login in system using his/her registration number and password

Student should be able to fill the form requesting suspension.

Student should be able to see if his / her request was approved or denied.

DEAN, HOD registrar and finance should be able to login by using their Username (email) and password.

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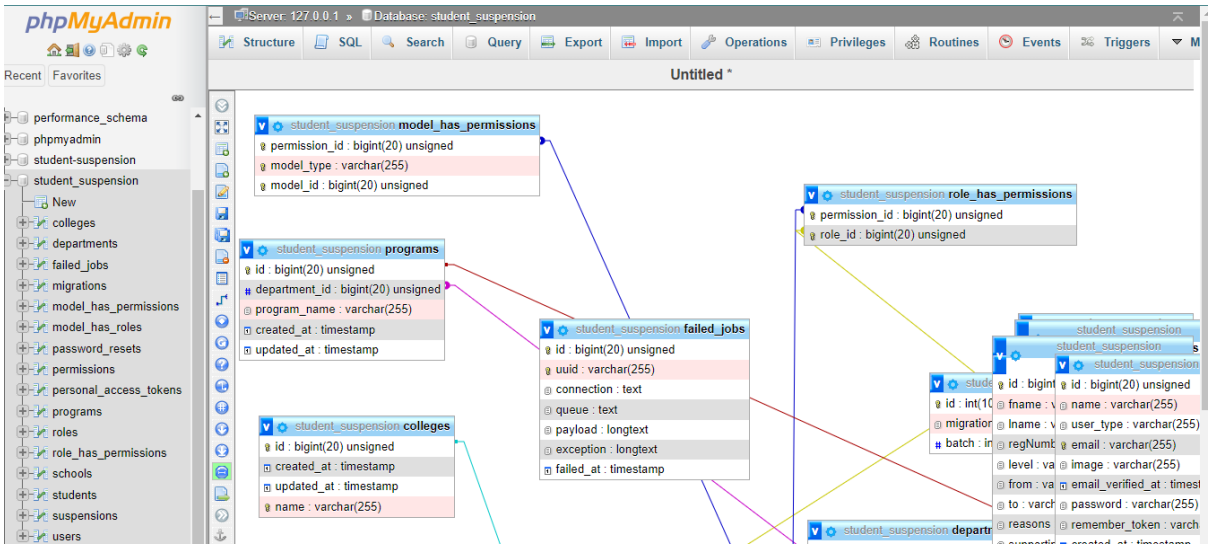

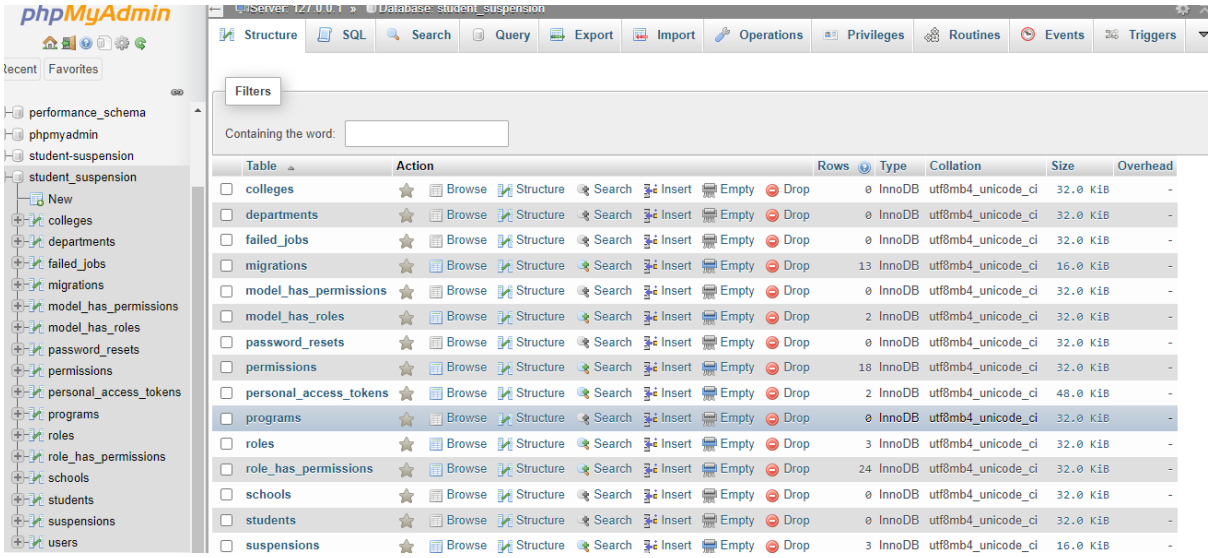

Chapter 4. Implementation

4.1 Introduction of section

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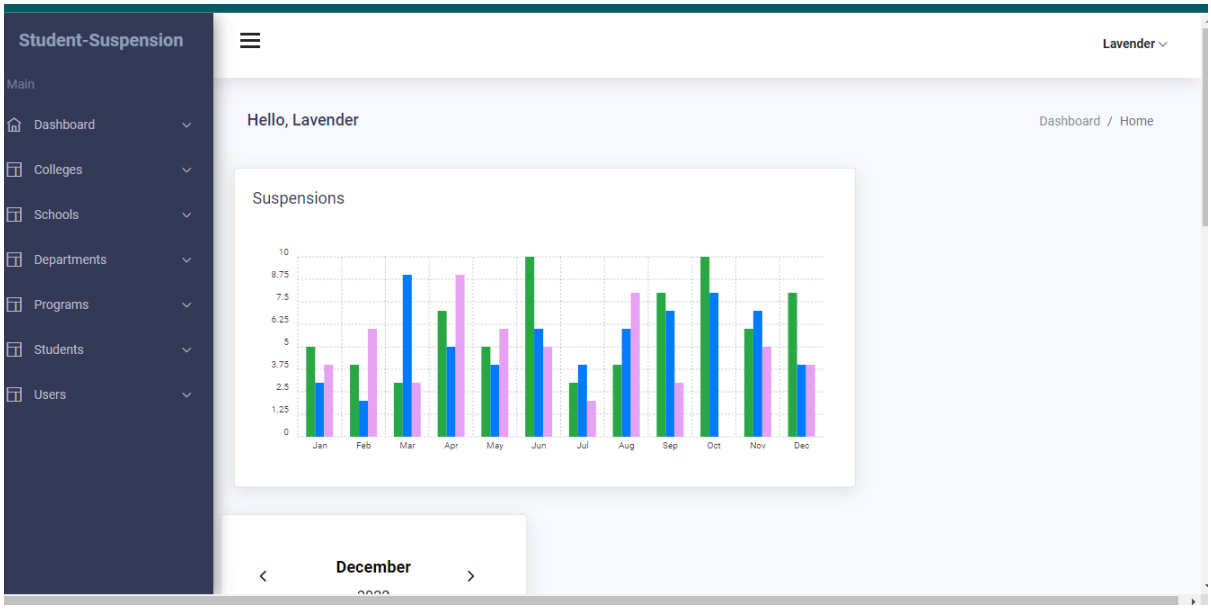
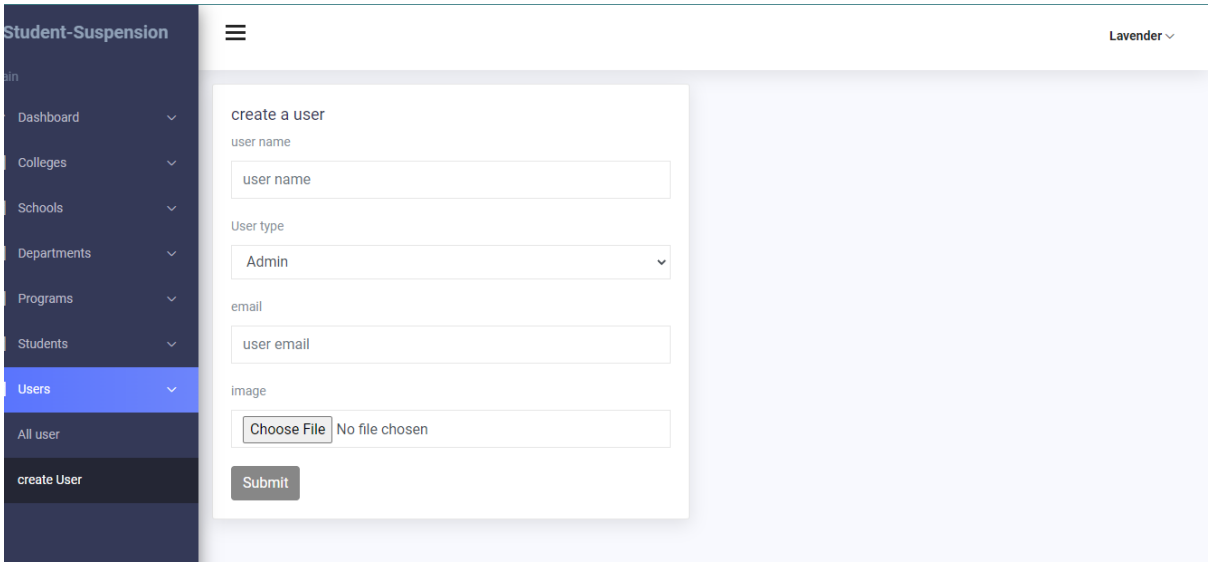
Bellow there are all screenshot of interfaces of project

When Admin login



User Interface



4.2 All screenshots with captions and discussion

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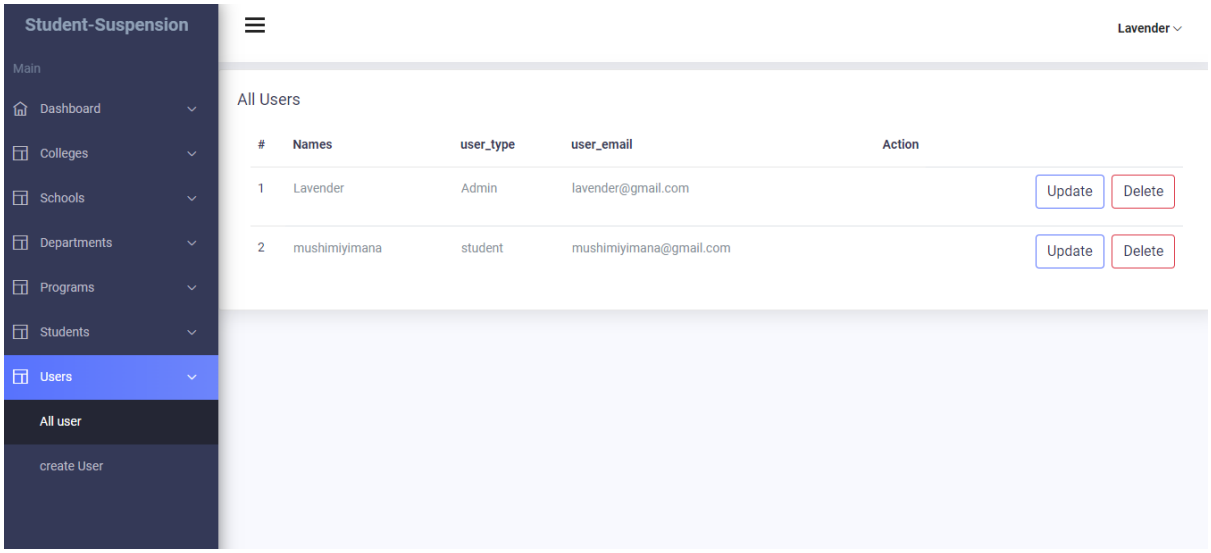

Chapter 5: Recommendation.

5.1 Discuss state of implemented system

Implementation is the stage in the project where the theoretical design is turned into a working system. The implementation phase constructs, installs and operates the new system. The most crucial stage in achieving a new successful system is that it will work efficiently and effectively.

There are several activities involved while implementing a new project. They are

End user training

End user Education

Training on the application software

System Design

Parallel Run and To New System

Post implementation Review

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End user Training:

The successful implementation of the new system will purely upon the involvement of the officers working in that department. The officers will be imparted the necessary training on the new technology

End User Education:

The education of the end user start after the implementation and testing is over. When the system is found to be more difficult to understand and complex, more effort is put to educate the

end used to make them aware of the system, giving them lectures about the new system and providing them necessary documents and materials about how the system can do this.

Training of application software:

After providing the necessary basic training on the computer awareness, the users will have to be trained upon the new system such as the screen flows and screen design type of help on the screen, type of errors while entering the data, the corresponding validation check at each entry and the way to correct the data entered. It should then cover information needed by the specific user or group to use the system.

Post Implementation View:

The department is planning a method to know the states of the past implementation process. For that

regular meeting will be arranged by the concerned officers about the implementation problem and success.

This system will use java script for basic form validations. But for further validations functions we use php. Using php token greatly increases security and usability.

JavaScript will detect empty fields of a form, and PHP will be used to determine whether inputs are met some per-defined rules to insure only desired inputs are stored in the database. Detecting and avoid accepting erroneous inputs before storing in the database, will make system more efficient.

5.2 Recommendations

This system will be concerned to the students with head department. The lecturer will work with intended partner of the system for new change of system like update information of students.

For time constraint on this it is not be considered because of time limit but I promise that it will be correct where time for activation will be set out. And the partner of system will

access the system through internet for increasing working efficiently and effectively, The user of the system as time it will come they will get some improvement of the system where we set our system as part of University of Rwanda where they will access by using UR web site which will reduce the work of Users.

Reference

Internet

Software Requirement Specification