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Web Based Distance and Continuing Education Management System

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Introduction

- continuing and distance education has become a cornerstone for providing flexible and accessible learning applications such as:
  - online registration,
  - online uploading and downloading reading materials and
  - updated information thus making the accessing of records centralized.

EXISTING SYSTEM STUDY

The current system is semi-automated, requiring manual intervention.

Students register and enroll through physical forms.

Learning materials are distributed manually at specific locations.

Grades are recorded and shared through offline methods

Administrative tasks are time-consuming and error-prone.

Scalability and accessibility are limited, especially for remote students.

Problem of the existing system

- In current system:
  - Lack of security
  - Time consuming
  - Loss of data
- In general the existing system faces the following problem:
  - **Retrieval:** It becomes difficult to access and filter out documents easily.
  - **Lack of Flexibility:** because any processes are done manually.
  - **Slow Processing:** is slow due to paper work and requirement of staff.
  - **Loss of records:** The chance of loss of records and damages of record is high

Proposed System

- Our proposed system solve the problem of the existing system in the following ways:
  - Facilitate the teaching-learning process by developing online system.
  - Facilitate student-teacher communication.by means of sending and receiving important data

Objective of the project

❑General objective

- The general objective of the project is to develop web based continuing and Distance Education Management System for wolkite university

Specific objectives

- To identity problems of the existing system.
- To collect data based on identified problem of existing system.
- *Design a proposed system that solves the problems in the existing system.*
- *Design user interface that allow user requirements*
- To develop a database that stores all information of Students and Staff members
- *Developing and implementing a new system that meets the goals of the project.*
- Finally testing the system to overcome the system function.

Scope of the project

- There are different activities that performed in the proposed system.
  - Online registration
  - Online grade
  - distributing module and assignment Via internet
  - Manage user account
  - Update the Student information
- Other activities which are related to proposed system is out of our scope.

Significant of the project

- After completion of this project it will provide the following significant for web based continuing and Distance Education Management System for wolkite universityTo the Student
  - To the collage
  - To the employee
  - To the student

Methods

- Data collection method
- Development tools and languages

Data collection method

- To get more information about the organization three data collection methods are used.
  - Observation
  - Interview
  - Questioner

Development tools

❑Software tool

- MySQL database, Wamp server to configure a MySQL database
- Server-side scripting: we will use Node.js
- Client-side scripting: java script, HTML and React.js.
- Power point: for presentation
- MS-word: for documentation
- Static webpage: CSS for page layout

Hard ware tool

- ✓Personal computer(Pc)
- ✓Digital camera
- ✓Pen and paper
- ✓Hard disk with minimum of 512GB
- ✓RAM with minimum of 2GB
- ✓Flash

System development Approach

- We use object oriented programming approach from structured because of
  - It Models the real world more clearly.
  - The Object is reusable in term of inheritance.
- And also we uses an Iterative model Approach. From the software development approach

Functional requirement

- It describes what things are performed by the system.
- It describe user tasks that the system needs to support.
  - REQ1: The system should require login before allowing and providing any function for the user.
  - REQ2: The system should display an error message when Incorrect password or username insert into the system.
  - REQ3: The system should display apply form to the student and validate the application is correct.
  - REQ4: The system should display the correct page if the user inserts the correct user name and password.
  - REQ5: The system shall allow Instructor to upload assignment question
  - REQ6: The system shall allow department head to approve result

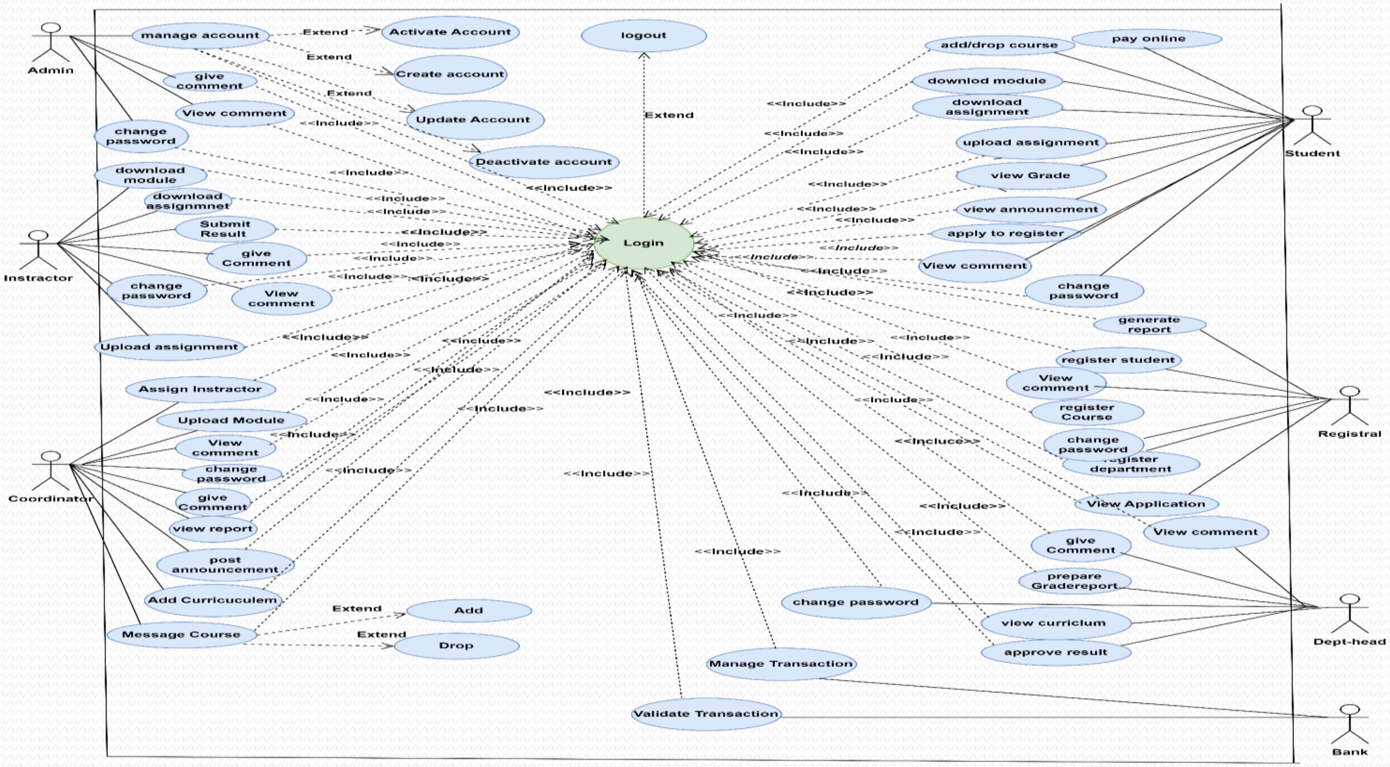
Non functional requirement

- Non-Functional requirement explains and describes the user visible aspects of the system.
  - **Security**:- It is designed to be very secure by providing a login feature which authenticates the user by means of a user name and password.
  - **Usability**:-The system is easy to learn.
  - **Availability**:-our system is available in everywhere (where internet/intranet service reach) and at all time
  - **Performance**:-The system will have good performance i.e. fast response time and optimal workload.
  - **Accuracy:** The system should give correct output for the users when they want to get services.

UML diagram

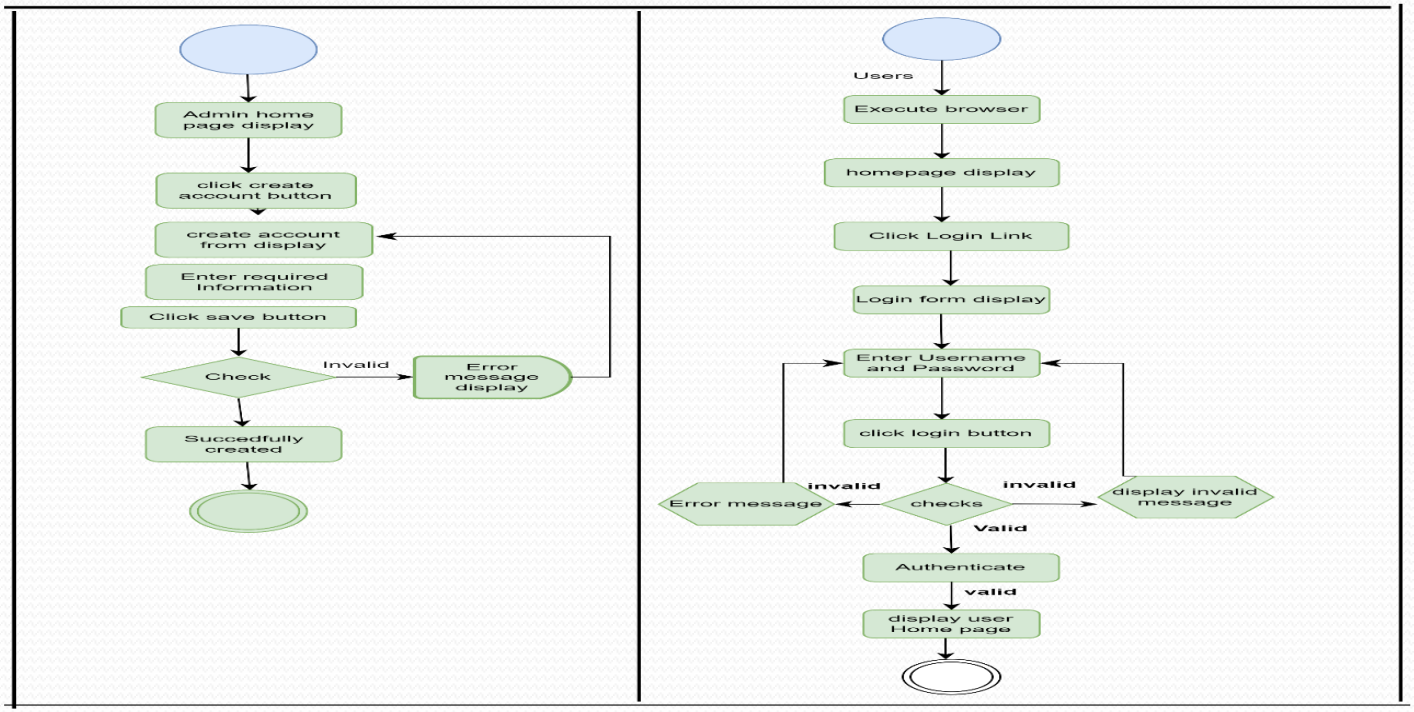
❑Use case diagram

- It describes the overall activity of the system
- It describes the relationship between the user and use case with in the system.



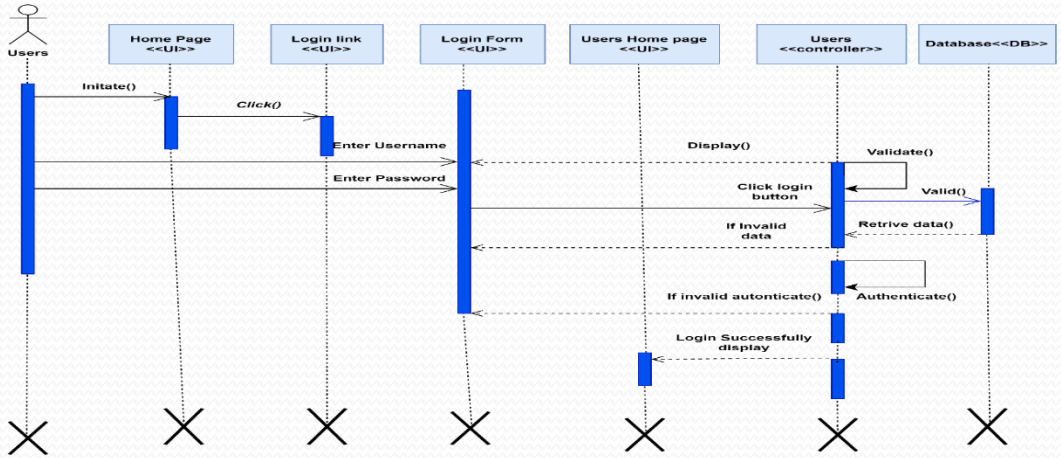
Activity diagram

- Activity diagrams are used to illustrate activities.
- Activity diagrams allow users to think functionally of the system.



Sequence diagram

- It links user and objects.
- It shows the interaction between the participating object in a given use case.

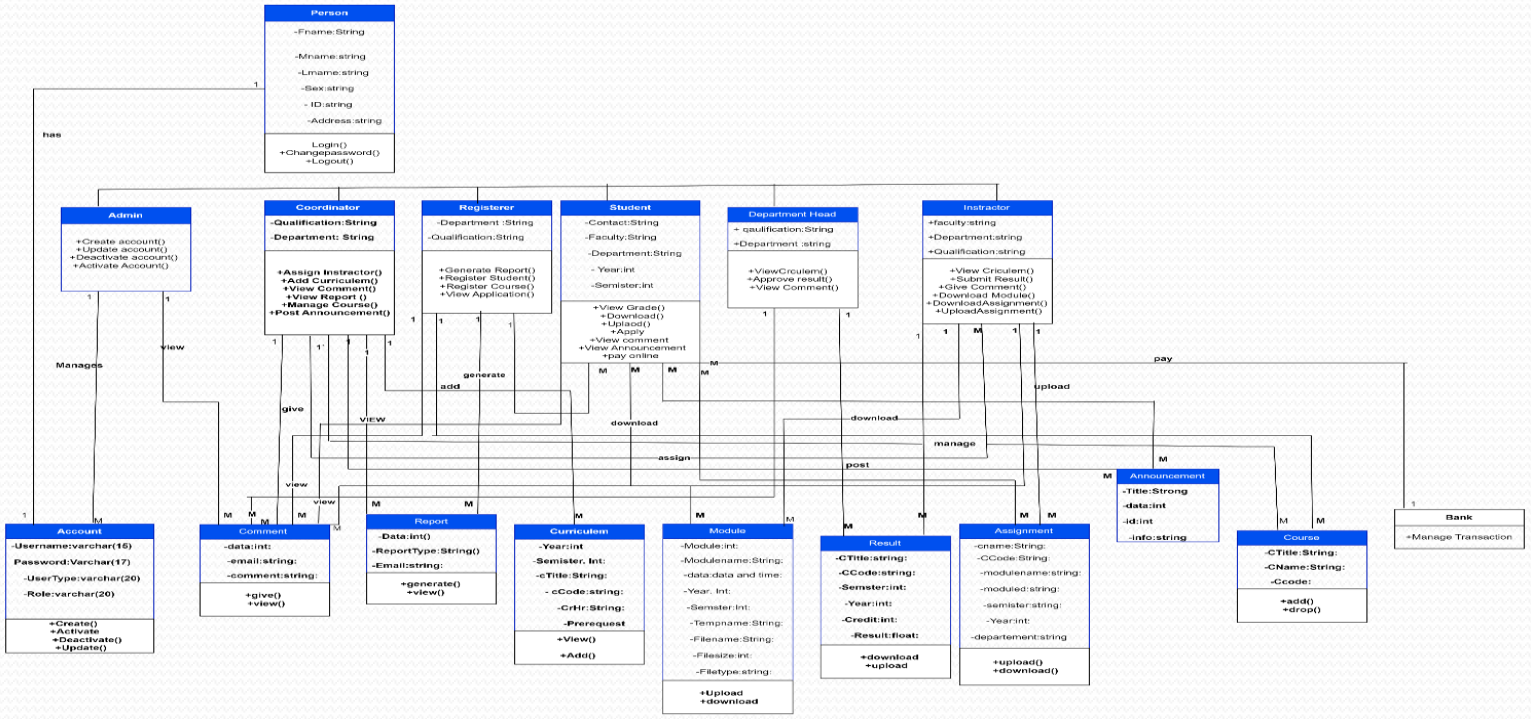


Component diagram

- Components are generally units of computation or operation in the system.
- A component has a name, which is generally chosen to represent the role of the component

❑Design class model

- Class is a description of a set of objects that share the same attributes, operations, relationships.



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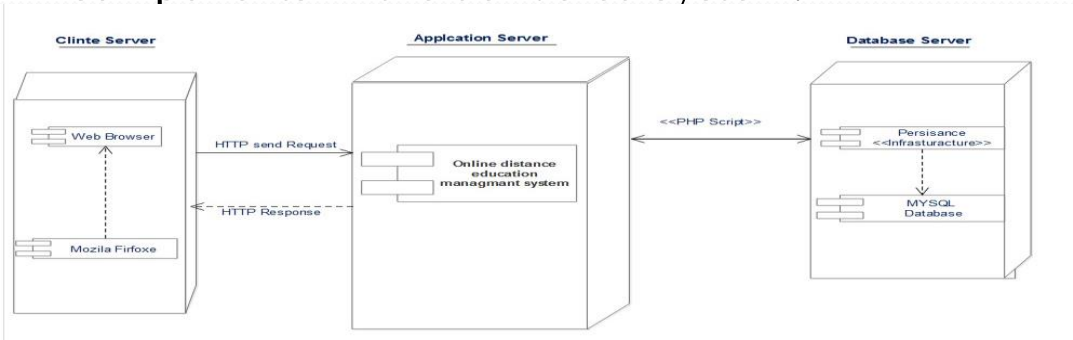
Deployment diagram

- Deployment diagram shows the physical relationship between software and hardware components in the delivered system.



Persistence diagram

- Persistent data management deals with how the system is going to handle the actual data need to be stored on the database of the system.
  - The purpose of persistence modelling is which objects in the system design are required to be stored persistently in a database.

Conclusion

- We observe the work follow of the existing system and identify what type of problems are found in the existing system. then we analysis that problem and find the solution. Use different techniques to solve the problem and change the existing system into proposed system.


Thank
you