



# E-Learn

Guided by,

Presented by,

Group No: 6

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# 1. OBJECTIVE



# OBJECTIVES OF THE PROJECT

- E-Learn web app provides complete academic activities under a single platform.
- It consist of an e-learning system that facilitates learning in a college environment.
- It enhances the quality of learning & teaching and improves efficiency & effectiveness.
- It improve user accessibility and time flexibility.



## 2. INTRODUCTION



# INTRODUCTION

- E-Learning is an emerging methodology of modern education .
- It can deliver more value at very less cost than any other traditional mode of education.
- It makes the process of education more student-centered , creative , and flexible.
- E-Learning web app is an interactive webpage that allows learners to input their data and get expected results through interactions.



# 3. LITERATURE SURVEY





# Byju's App

## Reference:

- <https://www.comparably.com/companies/byju-s/mission>
- <https://aws.amazon.com/solutions/case-studies/byjus>

## Aim:

- Their aim is to become one of the most preferred education technology platforms across the globe.
- They implement one-to-one learning that addresses every child's learning needs.
- And allows students to be holistically involved in their education and active life long learners.



## Methodology :

- 1) Visualization with 3D animations and in air projections
- 2) Byju's uses amazon web services (aws) as the cloud platform for it's website and mobile app
- 3) PostgreSQL uses as primary database
- 4) Technologies used

Amazon s3

Amazon EC2

Amazon RDS

Amazon RedShift



## Advantages :

interactive online classes

Easy registration using mobile number , email id  
or

social media account

Monthly or weakly tests to sharpen students

## Disadvantages :

High Expensive

No provision for college based classes

No live classes



# Google classroom

## Reference:

- <https://support.google.com/edu/classroom/answer/6020279?hl=en>
- Aim:
- Users can use Classroom in their schools to streamline assignments, boost collaboration, and foster communication
- Classroom is available on the web or by mobile app



- Users can use Classroom with many tools that they already use, such as Gmail, Google Docs, and Google Calendar.

### Methodology :

- It uses a similar model as Dr. Ruben Puentedura's SAMR model.



## Advantages :

- Free of cost
- Ease of use
- High privacy
- Unlimited Class size

## Disadvantages :

- No provision for live classes
- It lacks Attendance management system



# Google Meet

## Reference:

- [https://en.m.wikipedia.org/wiki/Google\\_Meet](https://en.m.wikipedia.org/wiki/Google_Meet)

## Aim:

- Google describes Meet as "a video meeting experience with one goal: make joining meetings effortless".
- The company wanted to improve Hangouts to make it easier and faster for people start and join video conferences



## Methodology :

- Technologies used
- WebRTC
- It stands for Web Real-Time Communication,
- It is a networking technology introduced in 2011 by Google
- It enables real-time audio, video, and data transmission across the web and native browsers





## Advantages :

- Two-way and multi-way audio and video calls with a resolution up to 720p
- An accompanying chat
- Call encryption between all users[8]
- Noise-cancelling audio filter
- Low-light mode for video

## Disadvantages :

- No Academic activities
- only for video conferencing



# Mobile application for students attendance and mark management system

## Reference:

- Somasundaram, V., Kannan. M, Sriram, V., 2016,“Mobile based Attendance Management System”, Indian Journal of Science and Technology, 9 (35),pp. 1-4.
- Avinaash Ram, S.P., Albert Mayan, J., 2015,“Mobile attendance management and employee registration”



## Aim:

- To design a mobile application for student attendance and mark management system
- Allows the users to mark attendance through mobile devices.
- Allows the teachers to mark and edit the attendance.

## Methodology :

- Mobile application is developed using Sun Java Wireless Toolkit 2.5.2\_01



## WORK FLOW :

### STAFF

- Enter, edit and update the student mark attendance details
- View the attendance
- View mark details

### STUDENT

- View the attendance
- View mark details



# PARENTS

- View the attendance
- View mark details

## Advantages :

- Accuracy
- Efficiency
- Visibility
- Real-time tracking
- Security



## Disadvantages :

- Less features
- Absence of proper network connection make it difficult to access.



# SMART UNIVERSITY-STUDENT INFORMATION MANAGEMENT SYSTEM

## Reference:

- S.R.Bharamagoudar, Geeta R.B., S.G.Totad “Web Based Student Information Management System” , International Journal of Advanced Research in Computer and Communication Engineering -June 2013, ISSN : 2319-5940
- Sandeep Kumar, Mohammed Abdul Qadeer, Archana Gupta, “Location Based Services using Android” , IEEE- 2009



## Aim:

- To design Student Information Management System
- It is a cloud based system for university management

## Methodology :

- SUSIMS is a cross platform solution supporting Android, IOS and Web.
- Data is stored in MySQL data base and php language is used to make backend scripting language .





- student information management system are
- partitioned into modules.
- Each module represents activities carried out by each department.
- Attendance module
- Placement module
- Result module
- E-notes module etc



## Advantages :

- It overcomes the limitations of the desktop based system as our cloud can be accessed by Android, IOS and Web.
- Improved communication gap between university and students with help of instant notification

## Disadvantages :

- No provisions for live classes
- Lack of assignment and grading options



# COMPARISON OF RELATED WORKS

| Ref. No: | Methodology Used  | Advantages   | Disadvantages   |
|----------|---|--|---|
| [1]      | Byju' s app   | Interactive online classes<br>Easy registration                          | High expensive<br>No provision for online based classes |
| [2]      | Google Classroom  | Free of cost<br>Ease of use  | No attendance system<br>No live classes                 |
| [3]      | Mobile application for students attendance and mark management system | Accurate<br>Real time tracking<br>secure                                 | No feature that support classes                         |
| [4]      | Google meet   | Two-way and multi-way audio and video calls with a resolution up to 720p | No other academic activities                            |
| [5]      | Smart University-Student Information Management System                | Huge amount of papers saved .hence eco-friendly                          | No live classes<br>No support for test                  |



# 4. PROBLEM STATEMENT



# PROBLEM STATEMENT

- The goal of building an e-learning web app with extra features along with the basic ones make online education more promising.
- It is a non-trivial task to effectively discover and evaluate the features of each system providing e-learn facilities.
- Each of the e-learn system may lack some of the features which the user mostly needed.
- An e-learning system which focuses on good quality teaching, periodic class works, attendance & security , all through a user friendly interface at free of cost will be mostly adopted.



# 5. E-Learn

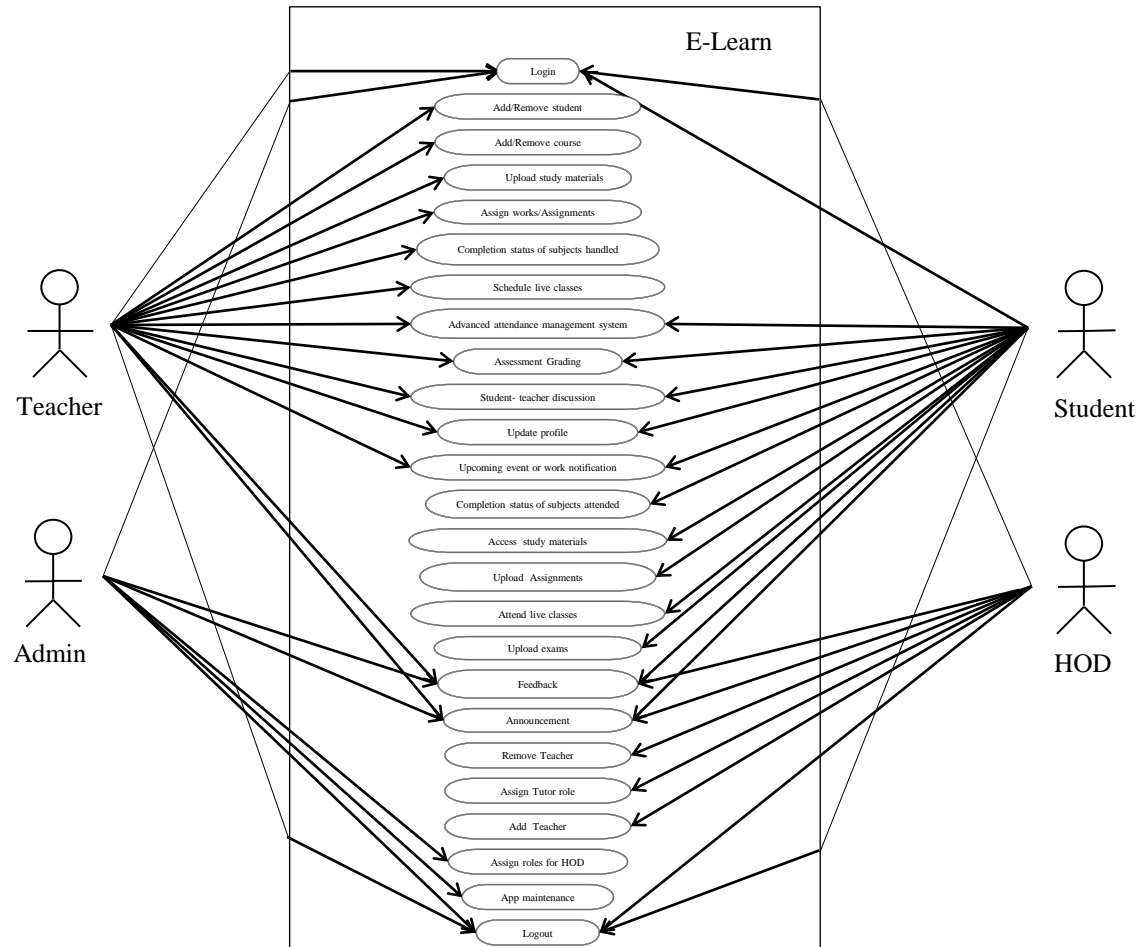


## 5. E-Learn

- Use-case Diagram
- Software Architecture
- Working Principle
- Data Flow Diagram
- ER Diagrams

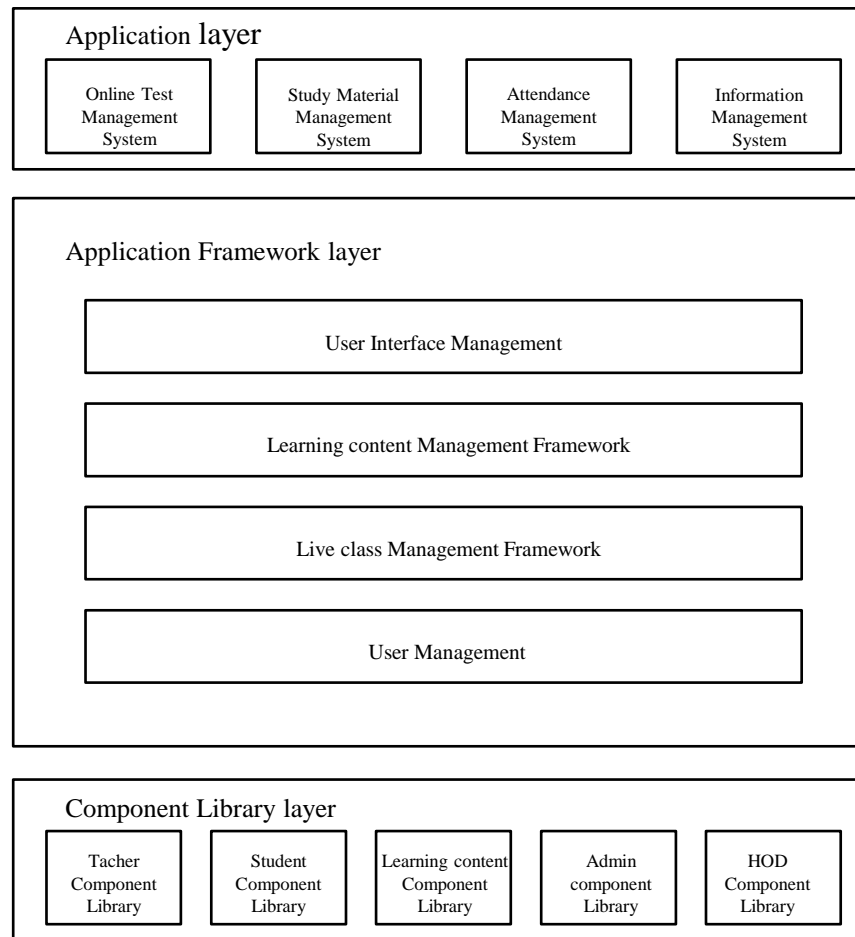


# 5.1 USE CASE DIAGRAM





# 5.2 SOFTWARE ARCHITECTURE (Detailed)



## 5.3 WORKING PRINCIPLE

- E-learning domain software architecture is divided into three levels
- They are component library layer, application framework layer, and application layer, respectively, from bottom to top

### Component library layer

- This layer is the basis of the whole E-learning software architecture
- It is a group of reusable software units that had been tested in other projects.



## 5.3 WORKING PRINCIPLE

- It mainly includes
- the student component library,
- the learning content component library,
- the instructor component library
- the admin component library
- the hod component library



## 5.3 WORKING PRINCIPLE

- Application framework layer
- The application framework layer is the gathering of all the frameworks
- From the perspective of E-learning, we could integrate every component that supported the instructional model/learning model
- The application framework layer also provides the management and maintenance of the system



## 5.3 WORKING PRINCIPLE

- This layer includes
- User interface management
- Learning content management framework
- Live class management framework
- User management framework
- The user interface management framework is responsible for all the UI element
- user experience of the web app while the user management framework manages the student and teachers
- learning content management framework manages all the learning content



## 5.3 WORKING PRINCIPLE

- Application layer
- This layer is a group of individualized and custom-made E-learning software architecture developed through choosing the framework and components
- It includes:
  - An online testing management system
  - A study material management system,
  - An educational information management system
  - Advanced attendance management system



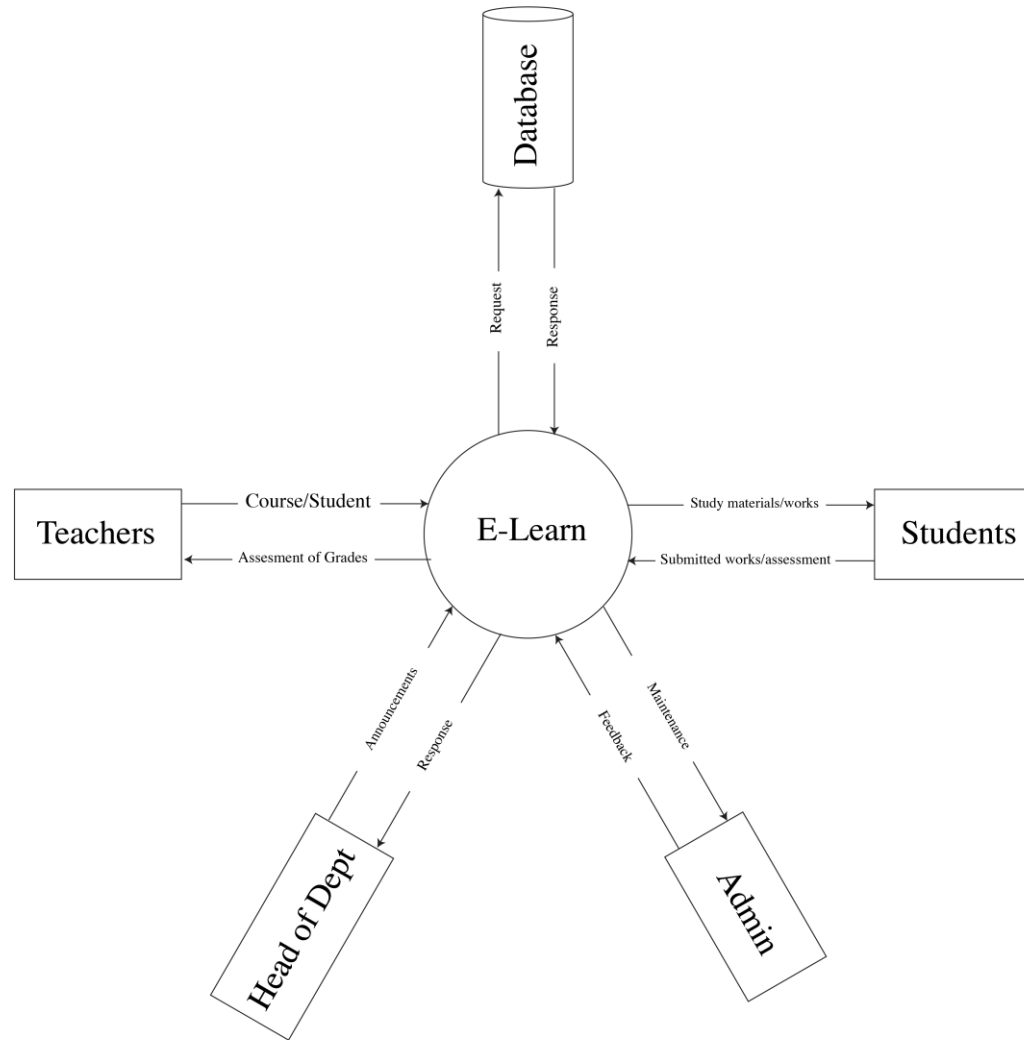
## 5.3 WORKING PRINCIPLE

- These three layers combine to create The software architecture
- Ui elements are includes in public framework
- Request passed by public framework is passed to abstract framework
- Abstract framework passes a query to component library layer which respond to the query request.
- Application layer provides the necessary systems for the functioning



# 5.4 DATA FLOW DIAGRAM

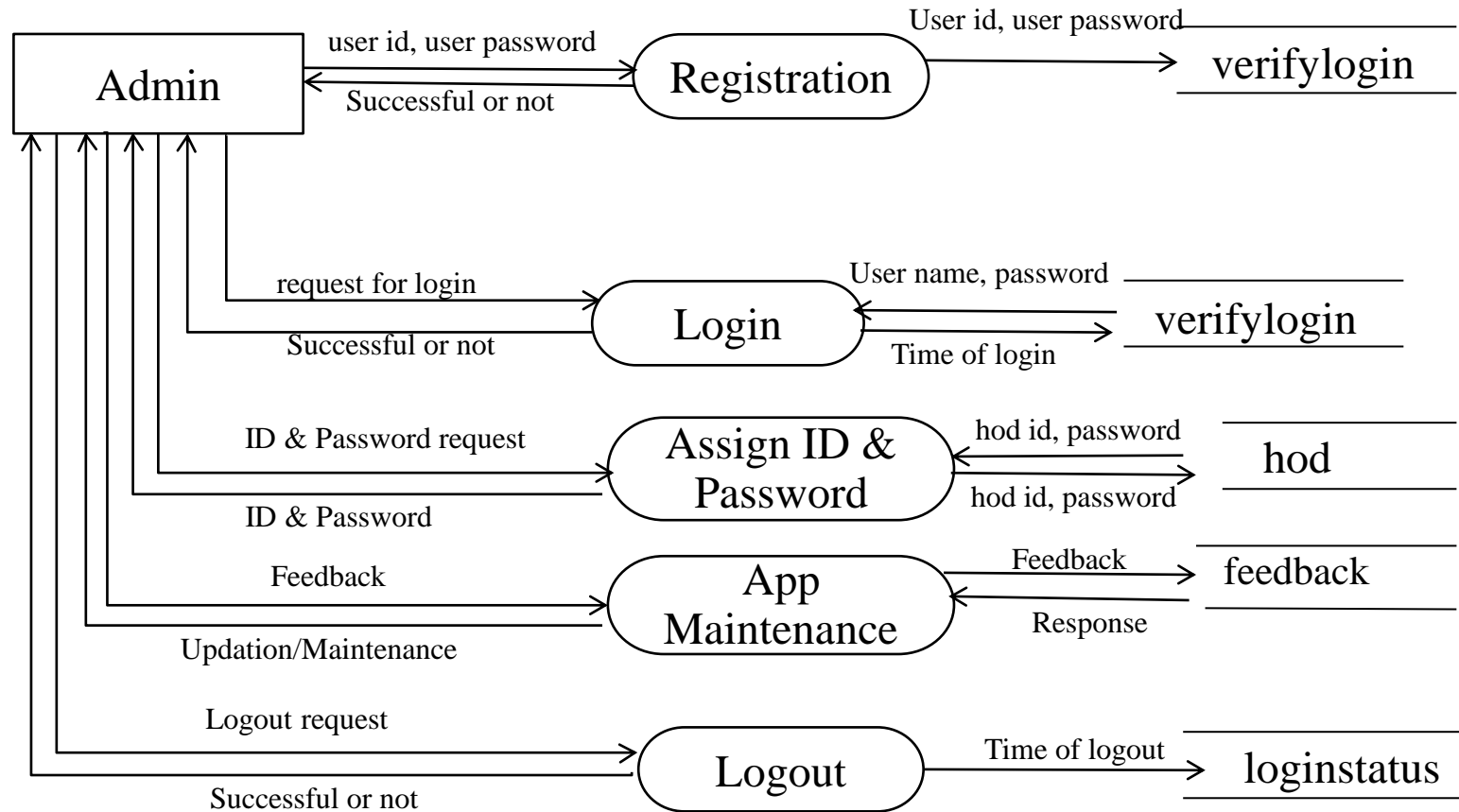
## LEVEL 0





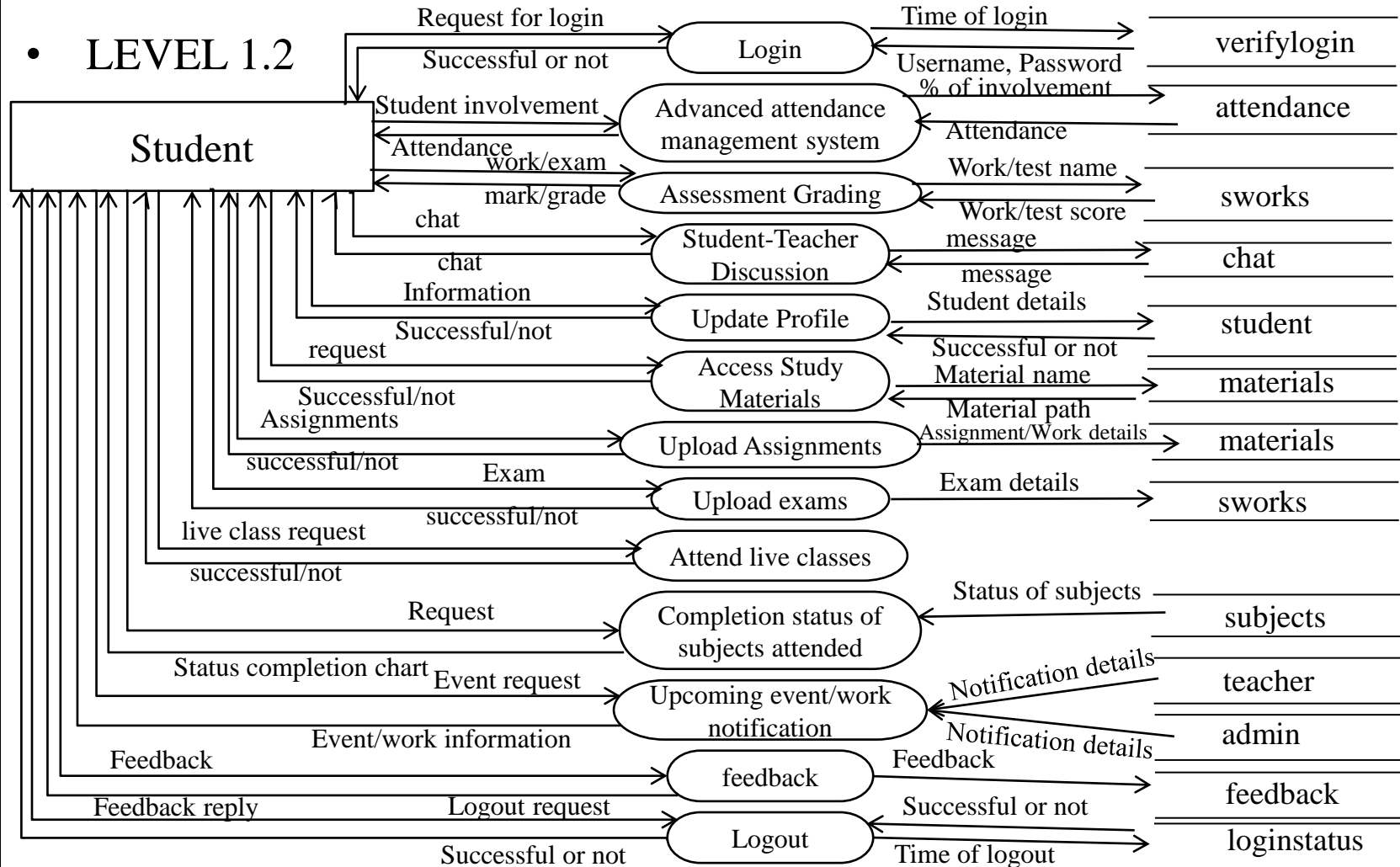
## 5.4 DATA FLOW DIAGRAM(contd.)

- LEVEL 1.1



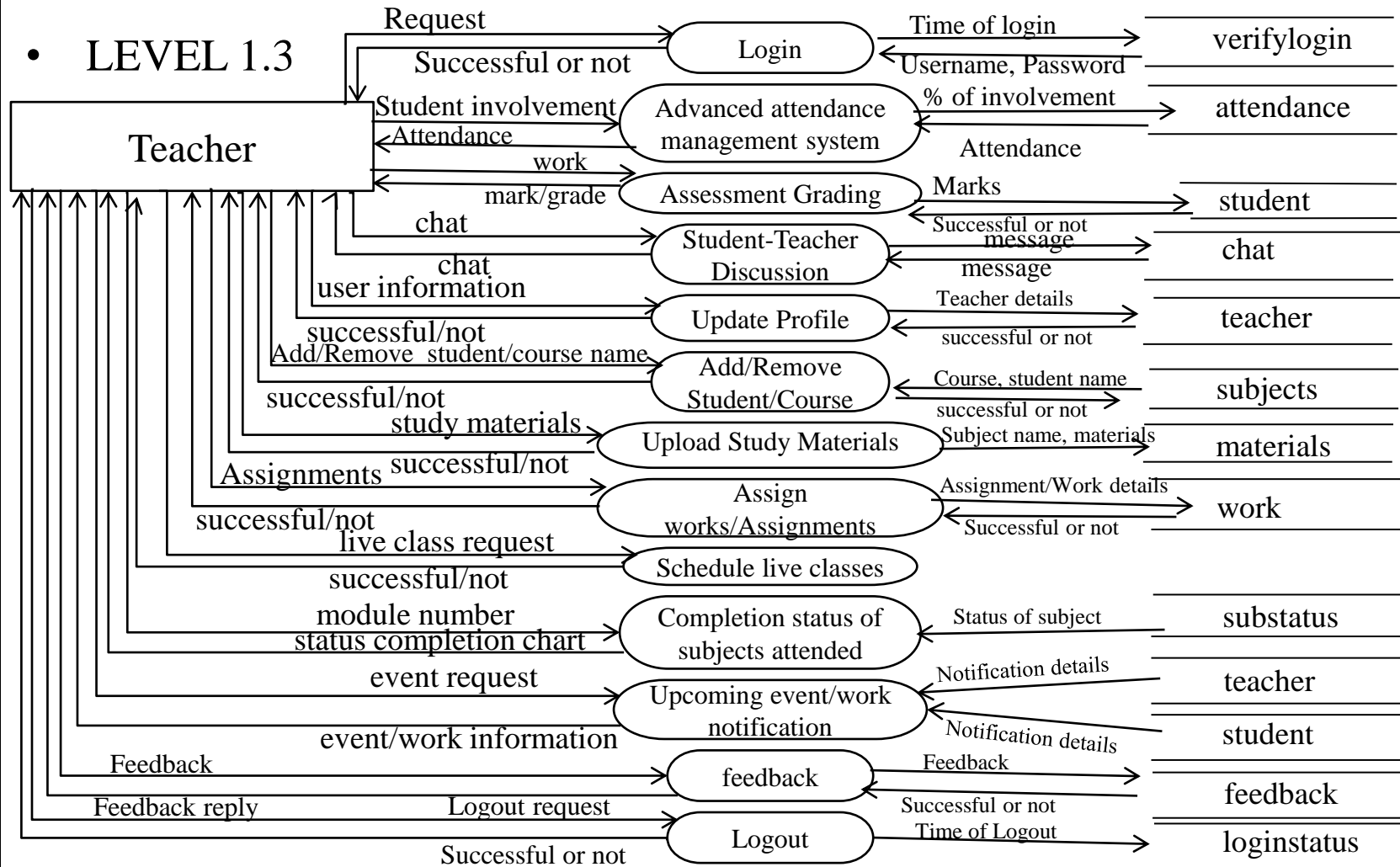
# 5.4 DATA FLOW DIAGRAM(contd.)

## • LEVEL 1.2



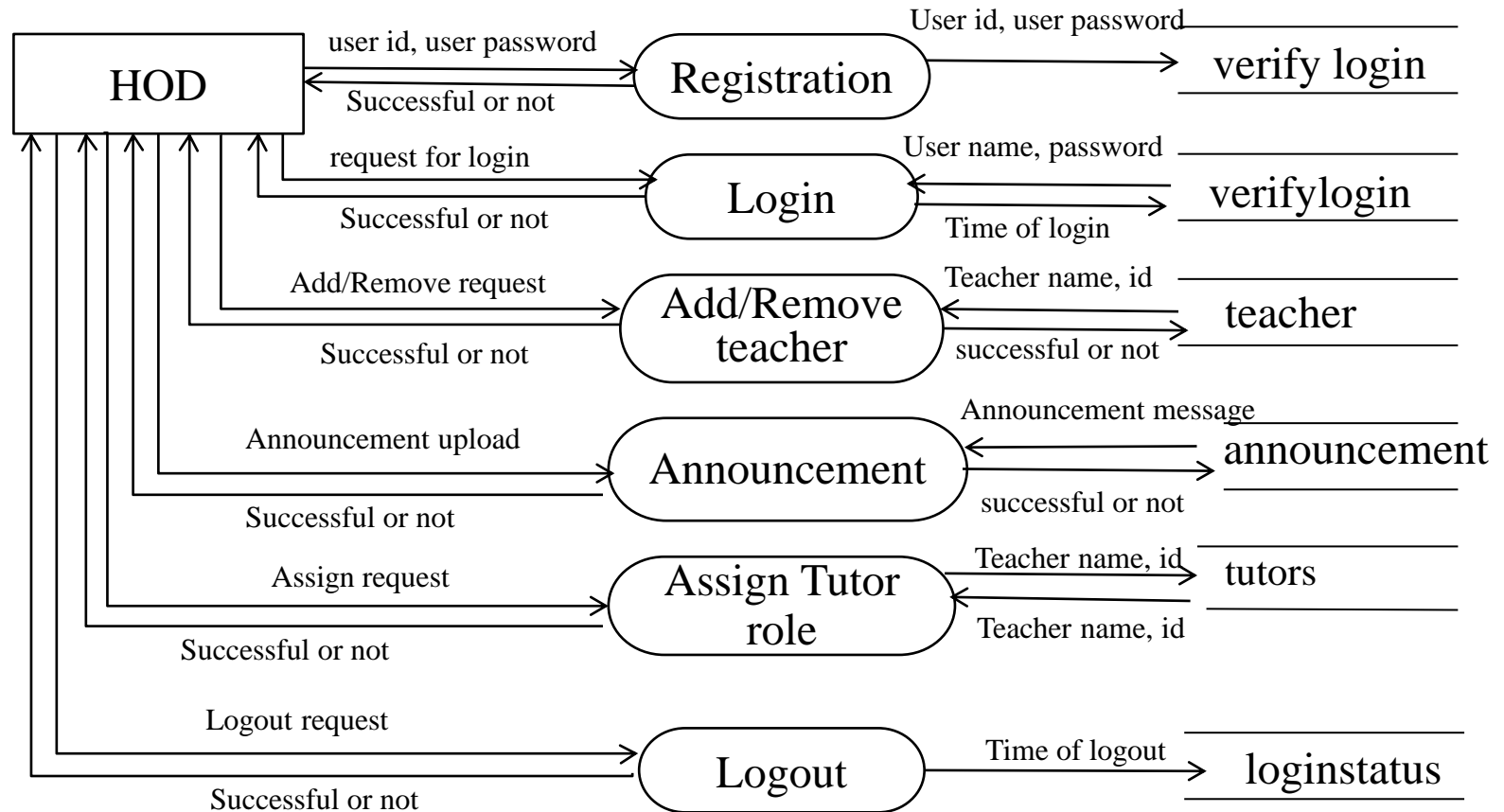
# 5.4 DATA FLOW DIAGRAM(contd.)

## • LEVEL 1.3

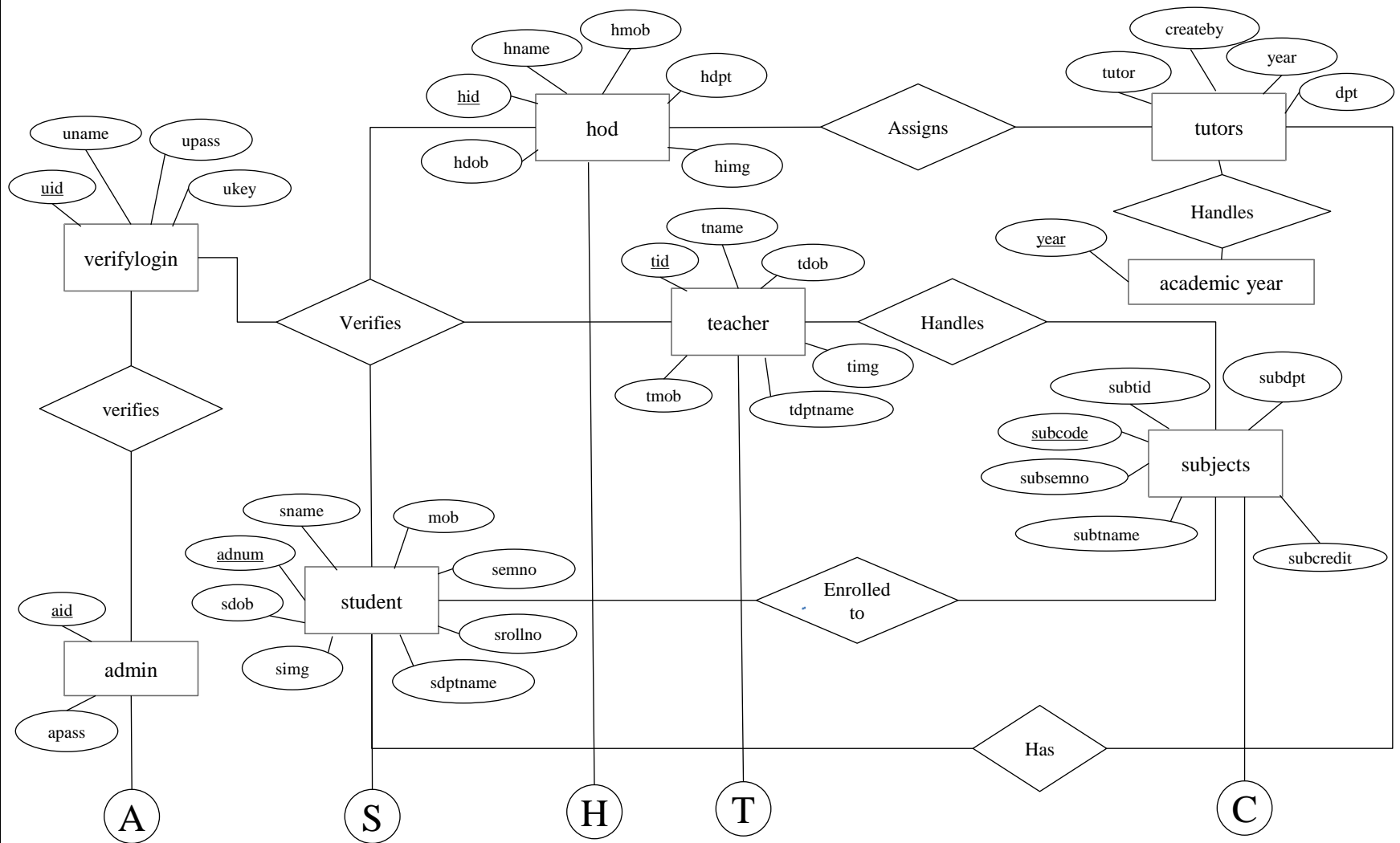


## 5.4 DATA FLOW DIAGRAM(contd.)

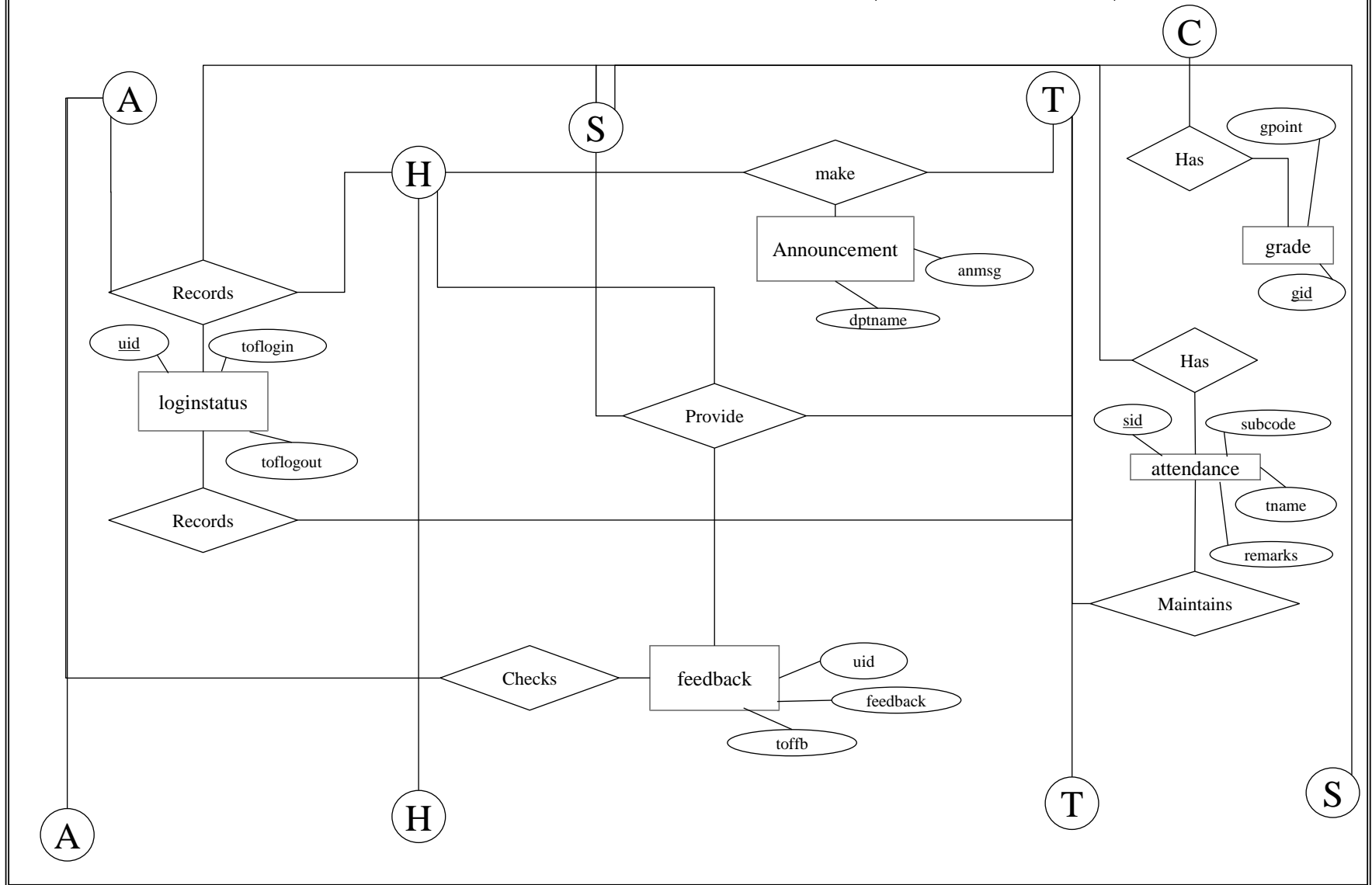
- LEVEL 1.4



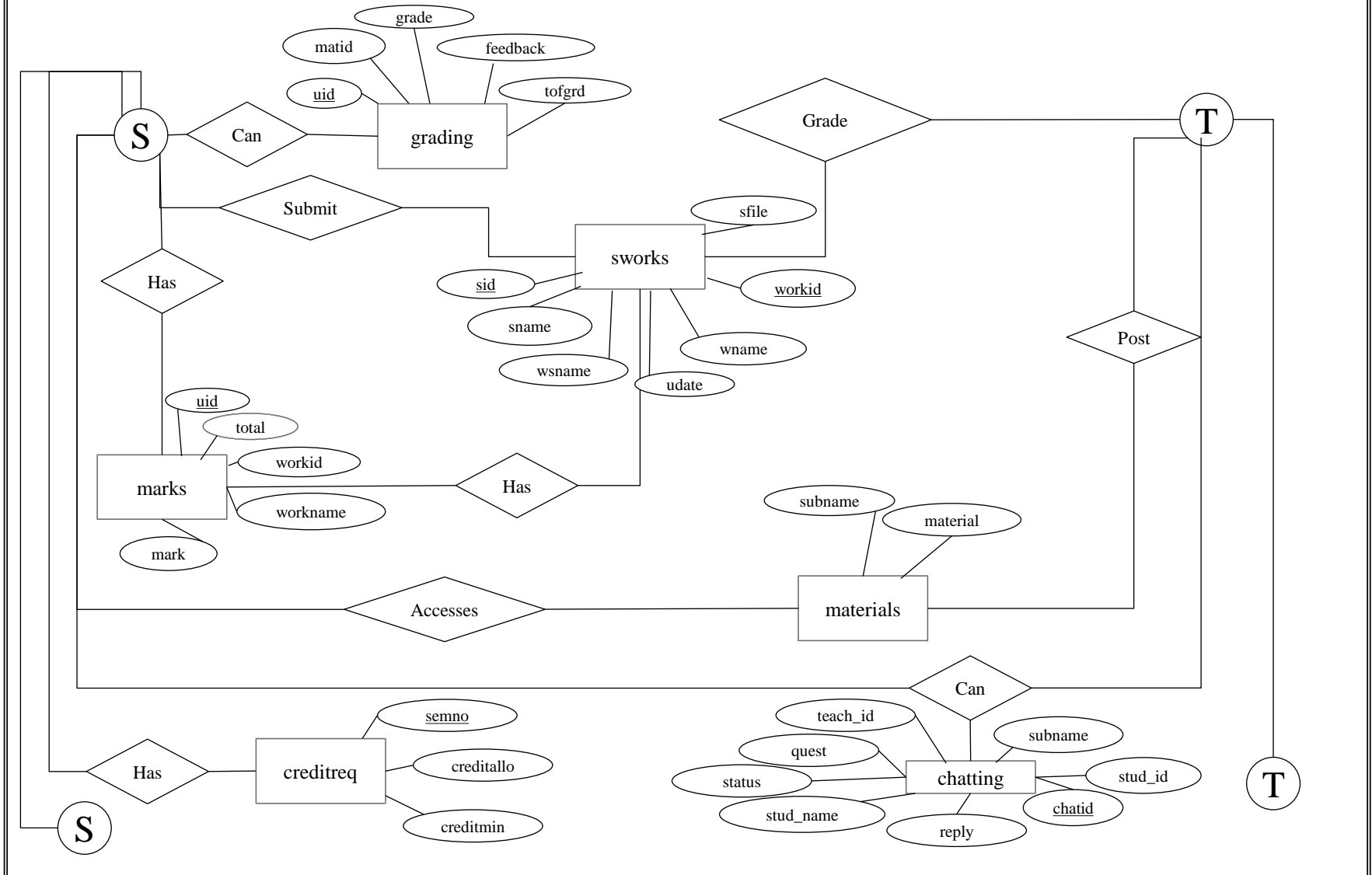
# 5.5 ER DIAGRAM



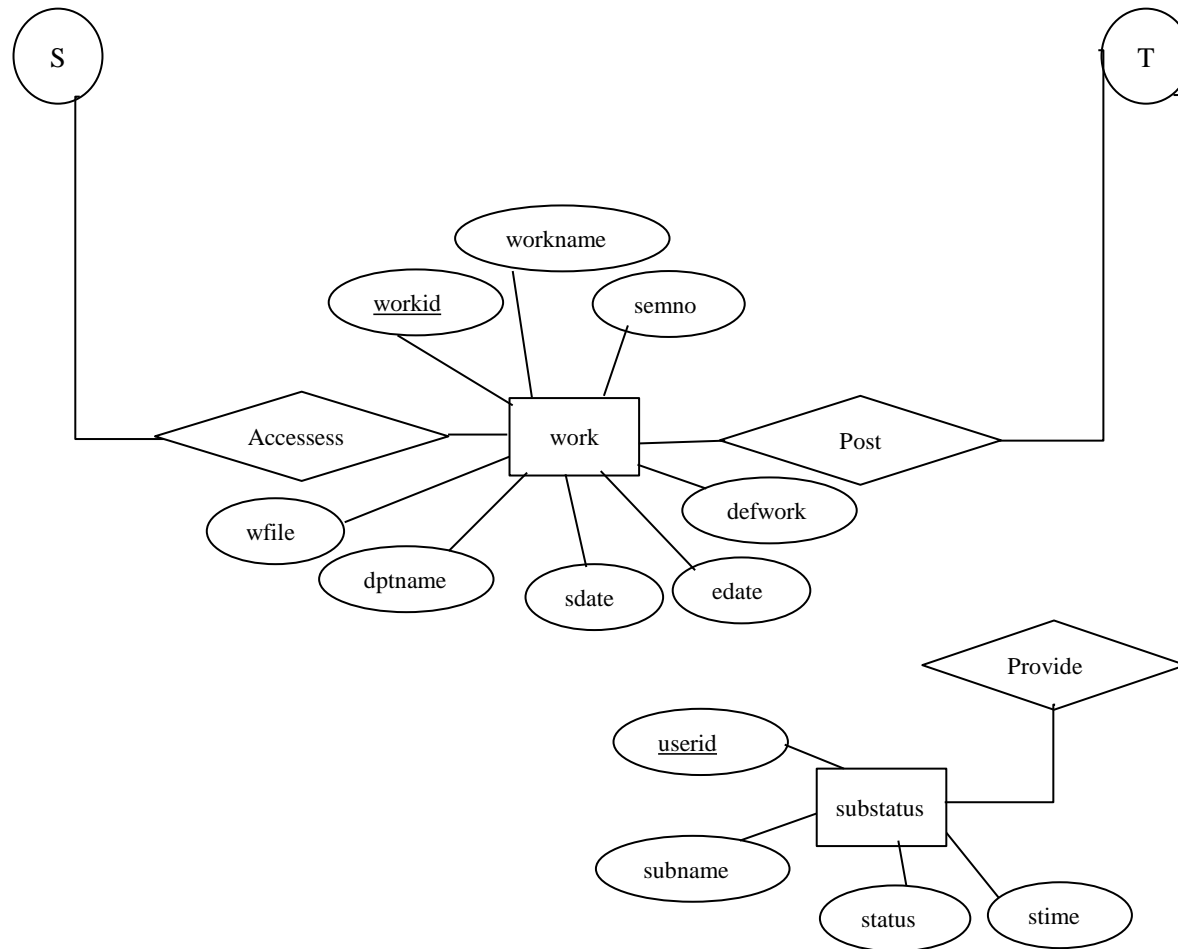
# 5.5 ER DIAGRAM(Contd..)



# 5.5 ER DIAGRAM(Contd..)



## 5.5 ER DIAGRAM(Contd..)





# 6. DESIGN



# 6. DESIGN

- Input Design
- Output Design
- Database Design



# 6.1 INPUT DESIGN

- **Login credentials :**
- The username and user password are provided as input to the system
- **Profile :**
- Details in the profile
- **Works / Exams :**
- These are provided by the teachers as input to the system
- Students upload works/exams as the input to the system.



## 6.1 INPUT DESIGN(contd.)

- **Marks :**
- Marks are provide by the teachers
- **Search :**
- Users are able to search contents in the system by providing search content.
- **Chat :**
- The teacher-student chat are input to the system.



## 6.1 INPUT DESIGN(contd.)

- **Feedback :**
- The teacher, student can provide feedback, which are input to the system.
- **Event/News :**
- They are provided by the Admin, teachers as the input to the system.
- **Study Materials :**
- Teachers upload the study materials as the input to the system.



## 6.2 OUTPUT DESIGN

- **Attendance :**
- Attendance are calculated by system and shown as output.
- **Study Materials :**
- The study materials uploaded by the teachers are output from the system.
- **Marks :**
- Marks are shown as the output of the system.



## 6.2 OUTPUT DESIGN(contd.)

- **Work/Exams :**
- These are output of the system.
- **Chat :**
- Teacher-Student chat are output of the system
- **Feedback :**
- Feedback is output of the system
- **Status of completion :**
- Status of completion is output of the system



## 6.3 DATABASE DESIGN

- teacher

| Field Name | Data type | Size | Constrain   | Description   |
|------------|-----------|------|-------------|---|
| tid        | varchar   | 10   | primary key | Id of teacher   |
| tname      | varchar   | 100  | not null    | Name of teacher                                       |
| tdob       | varchar   |      |             | Date of Birth of teacher                              |
| tmob       | int       | 15   | not null    | Mobile number of teacher                              |
| dptname    | varchar   | 10   | not null    | Department name<br>'CSE', 'CE', 'EEE', 'ECE',<br>'ME' |
| timage     | varchar   | 30   | not null    | Image of the teacher                                  |





## 6.3 DATABASE DESIGN(contd.)

- hod

| Field Name | Data type | Size | Constrain   | Description   |
|------------|-----------|------|-------------|---|
| hid        | varchar   | 10   | primary key | Id of hod   |
| hname      | varchar   | 100  | not null    | Name of hod   |
| hdob       | varchar   |      |             | Date of Birth of hod                                  |
| hmob       | int       | 15   | not null    | Mobile number of hod                                  |
| dhdpt      | varchar   | 10   | not null    | Department name<br>'CSE', 'CE', 'EEE', 'ECE',<br>'ME' |
| himage     | varchar   | 30   | not null    | Image of the hod                                      |



## 6.3 DATABASE DESIGN(contd.)

- student

| Field name | Data type | Size | Constrain   | Description   |
|------------|-----------|------|-------------|---|
| adnum      | varchar   | 10   | primary key | Admission number of student                           |
| name       | varchar   | 100  | not null    | Student name  |
| dob        | date      |      |             | Student date of birth                                 |
| mob        | integer   | 15   | not null    | Student mobile number                                 |
| sdptname   | varchar   | 10   | not null    | Department name<br>'CSE', 'CE', 'EEE', 'ECE',<br>'ME' |
| semno      | varchar   | 10   | not null    | Student current semester<br>number                    |
| simage     | varchar   | 10   | not null    | Image of the student                                  |
| year       | varchar   | 20   | not null    | Academic year of student                              |



## 6.3 DATABASE DESIGN(contd.)

- verifylogin

| Field name | Data type | Size | Constrain                    | Description   |
|------------|-----------|------|------------------------------|---|
| uid        | varchar   | 50   | primary key<br>, foreign key | Id of user  |
| uname      | varchar   | 50   | Not null                     | Name of user  |
| upass      | varchar   | 50   | Not null                     | Password of user  |
| ukey       | time      | 5    | Not null                     | User key , 's' : student , 't' :<br>teacher , 'h' : hod , 'a' : admin |

- loginstatus

| Field name | Data type | Size | Constrain                    | Description        |
|------------|-----------|------|------------------------------|--------------------|
| uid        | varchar   | 10   | primary key<br>, foreign key | Id of the user     |
| tofllogin  | date      |      |                              | The time of login  |
| tofllogout | date      |      |                              | The time of logout |



## 6.3 DATABASE DESIGN(contd.)

- subjects

| Field name | Data type | Size | Constrain   | Description                 |
|------------|-----------|------|-------------|-----------------------------|
| subdpt     | varchar   | 10   |             | Subject Department          |
| subcode    | varchar   | 10   | Primary key | Subject code                |
| subname    | varchar   | 10   | Not null    | Subject Name                |
| subsemno   | int       | 10   | Not null    | Semester Number             |
| subteach   | varchar   | 100  |             | Subject Teacher name        |
| subteachid | varchar   | 10   | Foreign key | Teacher id                  |
| subcredit  | int       | 5    | not null    | Credit assigned for subject |



## 6.3 DATABASE DESIGN(contd.)

- materials

| Field name | Data type | Size | Constrain   | Description                  |
|------------|-----------|------|-------------|------------------------------|
| subname    | varchar   | 20   | Primary key | Subject name                 |
| material   | File      |      | Not null    | Material uploaded by teacher |



## 6.3 DATABASE DESIGN(contd.)

- work

| Field name | Data type | Size | Constrain   | Description               |
|------------|-----------|------|-------------|---------------------------|
| workid     | varchar   | 10   | Primary key | Id of the work            |
| workname   | varchar   | 20   |             | Name of work              |
| dptname    | varchar   | 10   | not null    | Department name           |
| semno      | int       | 10   | not null    | Semester number           |
| subname    | int       | 10   | not null    | Name of the subject       |
| defwork    | varchar   | 10   |             | Description of the work   |
| wfile      | file      |      |             | Work file                 |
| sdate      | date      |      |             | Date of assigning work    |
| edate      | datetime  |      |             | Due date & time to submit |



## 6.3 DATABASE DESIGN(contd.)

- grade

| Field name | Data type | Size | Constrain   | Description                  |
|------------|-----------|------|-------------|------------------------------|
| gid        | varchar   | 5    | primary key | Grade                        |
| gpoint     | int       | 10   | not null    | Point corresponding to grade |

- Admin

| Field name | Data type | Size | Constrain   | Description       |
|------------|-----------|------|-------------|-------------------|
| aid        | varchar   | 10   | primary key | id of admin       |
| apass      | varchar   | 50   | not null    | password of admin |



## 6.3 DATABASE DESIGN(contd.)

- attendance

| Field name | Data type | Size | Constrain            | Description                           |
|------------|-----------|------|----------------------|---------------------------------------|
| sid        | varchar   | 10   | primary key          | id of student                         |
| subcode    | varchar   | 10   | Foreign key,not null | code of subject                       |
| tname      | varchar   | 20   | not null             | name of teacher                       |
| attendance | varchar   | 10   |                      | attendance                            |
| remarks    | varchar   | 20   | not null             | incase of applicable reason for leave |





## 6.3 DATABASE DESIGN(contd.)

- feedback

| Field name | Data type | size | constrain | Description                |
|------------|-----------|------|-----------|----------------------------|
| uid        | varchar   | 15   |           | Id of the user             |
| feedback   | varchar   | 1000 |           | description of feedback    |
| toffb      | time      | 10   | Not null  | time of feedback was given |

- announcement

| Field name | Data type | Size | Constrain | Description          |
|------------|-----------|------|-----------|----------------------|
| anmsg      | varchar   | 100  | Not null  | The message contents |
| dptname    | varchar   | 10   | Not null  | Department name.     |



## 6.3 DATABASE DESIGN(contd.)

- tutors

| Field name | Data type | size | constrain | Description                    |
|------------|-----------|------|-----------|--------------------------------|
| Year       | varchar   | 10   | not null  | Academic year                  |
| Dpt        | varchar   | 10   | not null  | Department name                |
| Tutor      | varchar   | 10   | Not null  | Name of tutor                  |
| createby   | varchar   | 10   | Not null  | Name of Hod that assigns tutor |



## 6.3 DATABASE DESIGN(contd.)

- creditreq

| Field name | Data type | size | constrain   | Description  |
|------------|-----------|------|-------------|--|
| semno      | int       | 5    | primary key | Semester number                                    |
| creditallo | int       | 5    | not null    | Credit allocated for a semester                    |
| creditmin  | int       | 5    | not null    | Minimum credit required till now for next semester |

- academicyear

| Field Name | Data type | Size | Constrain | Description   |
|------------|-----------|------|-----------|---------------|
| Year       | Varchar   | 10   | Not null  | Academic year |



## 6.3 DATABASE DESIGN(contd.)

- grading

| Field name | Data type | size | constrain                       | Description                     |
|------------|-----------|------|---------------------------------|---------------------------------|
| uid        | varchar   | 10   | primary key<br>, foreign<br>key | Id of the student               |
| matid      | varchar   | 20   | Primary key                     | Id of the material              |
| rating     | varchar   | 20   | not null                        | Rating or score for the subject |
| tofgrd     | datetime  |      |                                 | Time of grading                 |
| feedback   | varchar   | 100  |                                 | Feedback about review.          |



## 6.3 DATABASE DESIGN(contd..)

- chatting

| Field Name | Data type | Size | Constrain   | Description                     |
|------------|-----------|------|-------------|---------------------------------|
| chatid     | Autofield | 10   | primary key | Id of the question              |
| subname    | varchar   | 10   | not null    | Subject name                    |
| Stud_id    | varchar   | 10   | Not null    | Student id                      |
| stud_name  | varchar   | 10   | not null    | Student name                    |
| teach_id   | varchar   | 10   | not null    | Teacher id                      |
| status     | varchar   | 10   | Not null    | Status of the replay by teacher |
| quest      | varchar   | 50   | Not null    | Question by student             |
| reply      | varchar   | 50   |             | Answer by teacher               |



## 6.3 DATABASE DESIGN(contd..)

- marks

| Field Name | Data type | Size | Constrain   | Description       |
|------------|-----------|------|-------------|-------------------|
| uid        | varchar   | 10   | primary key | Id if the student |
| workid     | float     | 15   |             | Id of work        |
| wname      | float     | 15   |             | Name of work      |
| Mark       | float     | 15   |             | Mark              |
| Total      | float     | 15   |             | Total             |



## 6.3 DATABASE DESIGN(contd..)

- sworks

| Field Name | Data type | Size | Constrain | Description                   |
|------------|-----------|------|-----------|-------------------------------|
| workid     | varchar   | 3    | Not null  | Id of work                    |
| wname      | varchar   | 50   | Not null  | Name of work                  |
| wsname     | varchar   | 20   | Not null  | Name of subject               |
| sid        | varchar   | 20   | Not null  | Student id                    |
| sname      | varchar   | 20   | Not null  | Student name                  |
| update     | datetime  |      | Not null  | Date and Time of upload       |
| Sfile      | File      |      |           | Work file uploaded by student |



## 6.3 DATABASE DESIGN(contd..)

- substatus

| Field Name | Data type | Size | Constrain | Description                    |
|------------|-----------|------|-----------|--------------------------------|
| Userid     | Varchar   | 10   | Not null  | Id of teacher                  |
| Subname    | Varchar   | 50   | Not null  | Subject name                   |
| Status     | Varchar   | 50   | Not null  | Status of subject              |
| stime      | datetime  |      | Not null  | Date and time of status upload |





# 7. IMPLEMENTATION



# 7. IMPLEMENTATION

- Minimum Hardware Requirement
- Minimum Software Requirement
- Sample Code- GUI
- Sample Code- Algorithm



# 7.1

## MINIMUM HARDWARE REQUIREMENTS

- Stable internet connection of at least 3 mb/s is needed.
- Device with minimum of 375x812 resolution needed to be used.
- RAM of minimum 2 GB is needed.
- Storage of at least 500 mb is required.



## 7.2

# MINIMUM SOFTWARE REQUIREMENTS

- Web browsers like chrome and Mozilla are preferred.
- For mac, safari/chrome is preferred.
- Best viewed with Chrome 99 and above, Mozilla 91.0 and above , Safari 12.1.2 and above.



## 7.3 SAMPLE CODE- GUI

```
• @charset "UTF-8";
• /*
• * Container style
• */
• .ps {
•     overflow: hidden !important;
•     overflow-anchor: none;
•     -ms-overflow-style: none;
•     touch-action: auto;
•     -ms-touch-action: auto;
• }
•
• /*
• * Scrollbar rail styles
• */
• .ps__rail-x {
•     display: none;
•     opacity: 0;
•     transition: background-color 0.2s linear, opacity 0.2s linear;
•     -webkit-transition: background-color 0.2s linear, opacity 0.2s linear;
•     height: 15px;
•     /* there must be 'bottom' or 'top' for ps__rail-x */
•     bottom: 0px;
•     /* please don't change 'position' */
•     position: absolute;
• }
•
• .ps__rail-y {
•     display: none;
•     opacity: 0;
•     transition: background-color 0.2s linear, opacity 0.2s linear;
•     -webkit-transition: background-color 0.2s linear, opacity 0.2s linear;
•     width: 15px;
•     /* there must be 'right' or 'left' for ps__rail-y */
•     right: 0;
•     /* please don't change 'position' */
•     position: absolute;
• }
```



## 7.3 SAMPLE CODE- GUI

```
• .ps__rail-y {
•   display: none;
•   opacity: 0;
•   transition: background-color 0.2s linear, opacity 0.2s linear;
•   -webkit-transition: background-color 0.2s linear, opacity 0.2s linear;
•   width: 15px;
•   /* there must be 'right' or 'left' for ps__rail-y */
•   right: 0;
•   /* please don't change 'position' */
•   position: absolute;
• }
•
• .ps--active-x > .ps__rail-x,
• .ps--active-y > .ps__rail-y {
•   display: block;
•   background-color: transparent;
• }
•
• .ps:hover > .ps__rail-x,
• .ps:hover > .ps__rail-y,
• .ps--focus > .ps__rail-x,
• .ps--focus > .ps__rail-y,
• .ps--scrolling-x > .ps__rail-x,
• .ps--scrolling-y > .ps__rail-y {
•   opacity: 0.6;
• }
•
• .ps .ps__rail-x:hover,
• .ps .ps__rail-y:hover,
• .ps .ps__rail-x:focus,
• .ps .ps__rail-y:focus,
• .ps .ps__rail-x.ps--clicking,
• .ps .ps__rail-y.ps--clicking {
•   background-color: #eee;
•   opacity: 0.9;
• }
```



# 7.4 SAMPLE CODE- ALGORITHM

- `from asyncio.constants import _SendfileMode`
- `from copyreg import add_extension`
- `from datetime import timedelta`
- `from email.policy import default`
- `from plistlib import UID`
- `from threading import get_ident`
- `from unittest.util import _MAX_LENGTH`
- `from django.db import models`
- `from django.contrib.auth.models import AbstractUser`
- `from django.forms import CharField`
- `# Create your models here.`
- `class teacher(models.Model):`
  - `tid = models.CharField(max_length=10, default=0)`
  - `tname = models.CharField(max_length=100, null=False)`
  - `tdob = models.DateField()`
  - `tmob = models.IntegerField(default=0)`
  - `dptname = models.CharField(max_length=100, null=False)`
  - `timage = models.FileField(default=0)`



# 7.4 SAMPLE CODE- ALGORITHM

- `class hod(models.Model):`
- `hid = models.CharField(max_length=10, default=0)`
- `hname = models.CharField(max_length=100, null=False)`
- `hdob = models.DateField()`
- `hmob = models.IntegerField(default=0)`
- `hdpt = models.CharField(max_length=100, null=False)`
- `himage = models.FileField(default=0)`
- 
- `class student(models.Model):`
- `adnum = models.CharField(max_length=10, default=0)`
- `name = models.CharField(max_length=100, null=False)`
- `dob = models.DateField()`
- `mob = models.IntegerField(default=0)`
- `sdptname = models.CharField(max_length=50, default=0, null=False)`
- `semno = models.CharField(max_length=10, default=0, null=False)`
- `year = models.CharField(max_length=20, default=0)`
- `simage = models.FileField(default=0)`





## 7.4 SAMPLE CODE- ALGORITHM

- `from django.conf import settings`
- `from django.urls import path, include`
- `from django.conf.urls.static import static`
- `from django.conf import settings`
- `from . import views`
- `urlpatterns = [`
  - `path('addstud/', views.addstud, name='addstud'),`
  - `path('add_stud/', views.add_stud, name='add_stud'),`
  - `path('add_teach/', views.add_teach, name='add_teach'),`
  - `path('add_hod', views.add_hod, name='add_hod'),`
  - `path('addwork/', views.addwork, name='addwork'),`
  - `path('add_work/', views.add_work, name='add_work'),`
  - `path('teachhome/', views.teachhome, name='teachhome'),`
  - `path('hodhome', views.hodhome, name='hodhome'),`
  - `path('adminhome', views.adminhome, name='adminhome'),`
  - `path('', views.login_view, name='login_view'),``]`



# 7.4 SAMPLE CODE- ALGORITHM

```
• {% extends 'tbase.html' %}
• {% load static %}
• {% block rightmenu %}
• <form action="/view_works/" method="post">
•     {% csrf_token %}
•     <p>Select Subject :
•         <select id="subname" name="subname" value="{{ subname }}">
•             {% for results1 in showdpt1 %}
•                 <option value="{{ results1.subname }}">{{ results1.subname }}</option>
•             {% endfor %}
•         </select><br>
•     </p>
•     <button type="submit" value="Submit">Submit</button>
•
•     <table>
•         <tr>
•             <th>Work Name</th>
•             <th>Student Name</th>
•             <th>Student id</th>
•             <th>Student Work</th>
•             <th>Mark</th>
•         </tr>
•         {% for work in works %}
•         <tr>
```



# 8. TEST CASES



# SAMPLE TEST CASES

| Test Type           | Input                 | Expected Output           | Actual Output             | Success/<br>Fail |
|---------------------|-----------------------|---------------------------|---------------------------|------------------|
| add_student         | student details       | save to database          | save to database          | success          |
| add_teacher         | teacher details       | save to database          | save to database          | success          |
| add_work            | work details          | save to database          | save to database          | success          |
| upload<br>materials | documents             | files uploaded            | files uploaded            | success          |
| login               | user id &<br>password | login to the home<br>page | login to the home<br>page | success          |



# 9. CONCLUSION



# CONCLUSION

- In this work, we presented a single platform where all the learning activities can be done easily.
- Our work captures the need of students and teachers properly, and provide facilities accordingly.
- The same login page using different keys ensure ease of use , proper security and authority in this platform .
- Our solution provides an effective method to assess the need of education with in the colleges.



# FUTURE ENHANCEMENT

- To this system online courses apart from academic subjects can be integrated
- Online payment facilities within this system
- Live caption for videos



# SCREENSHOTS






# Notifications


[illegible]


# Courses Of Student


Classes 

---





  
CS472  
Principles of information security  
Mrs. Divya M

  
CS472  
Principles of information security  
Mrs. Divya M

  
CS472  
Principles of information security  
Mrs. Divya M

  
CS472  
Principles of information security  
Mrs. Divya M

---





# Subject Page

**Elearn.**

**Hi, Swalih Mp**  
S8 CSE

**Recent Classes**  

Principles of internet security  
Module 1  
**SQL injection**

Principles of internet security  
Module 1  
**SQL injection**

Principles of internet security  
Module 1  
**SQL injection**

Principles of internet security  
Module 1  
**SQL injection**

**Recent Assignments**

● Divya Miss added new Assignment 10 sec

● Divya Miss added new Assignment 10 sec

● Divya Miss added new Assignment 10 sec

● Divya Miss added new Assignment 10 sec

**Recent Assignments**

EIA  
Assignment 1

EIA  
Assignment 1

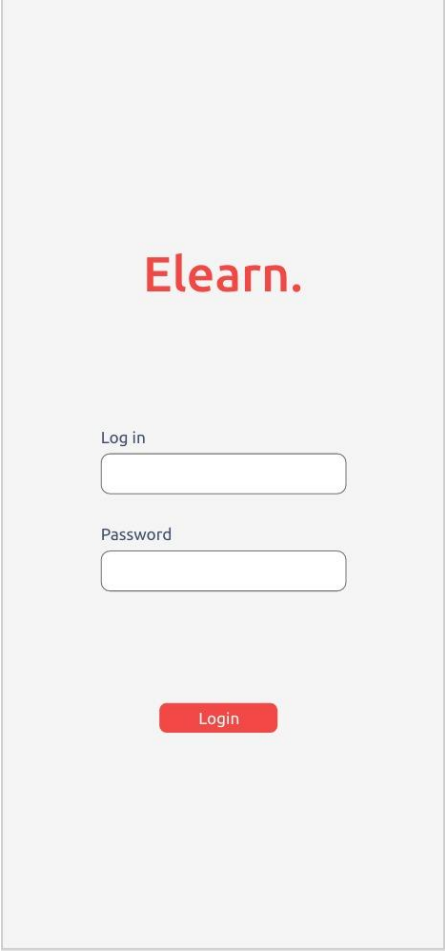
EIA  
Assignment 1

EIA  
Assignment 1

EIA  
Assignment 1



# Login Page for All Users



**Elearn.**

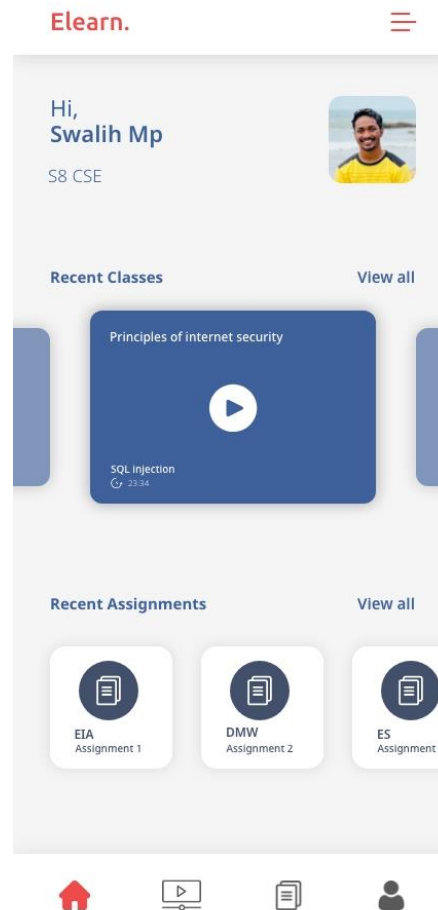
Log in

Password

Login



# Home Page view of Student



# REFERENCES



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# THANK YOU

