UNIVERSITY OF DAR-ES-SALAAM

COLLEGE OF INFORMATION AND COMMUNICATION TECHNOLOGY

(COICT)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

IS 335: FINAL YEAR PROJECT 2019/2020

MID-SEMISTER PROJECT REPORT

PROJECT TITLE: CDE MANAGEMENT PLATFORM

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SIGNATURE: ……

DATE: JULY 3, 2020

DECLARATION

I SIMON ELIZABETH E with registration number 2017-04-07373, declare that, this report is the outcome of my own work that I undertake at CDE and has been prepared by myself to fulfill the curricular requirements accordance with the Regulations of the University of Dar-es-Salaam and has not been presented to any other University for examination either in Tanzania or overseas

STUDENT Name: ……

Signature: ……

SUPERVISOR'S NAME: …….

Signature: ……

ACKNOWLEDGEMENT

I would like to thanks to my almighty God, who giving me power and energy from start up to the end of mid-semester report.

I would like to thank my supervisor Ms. Zaituni Kaijage for the guidance throughout the project progress, I am really grateful for her support and encouragement towards me. With her knowledge and support this project is progressing well.

Also more thanks to Ms. Merina Marcelino to take a time to explain me more about CDE, guidelines and data collection so as to accomplish this mid-semister report.

Moreover, I do appreciate the effort made by CDE students including Laura Mandari, Salmon nicholous and ticky malcus but few to mention for their explanation during my research so as to fulfill this report.

Thanks all.

ABSTRACT

Challenge driven education (CDE) is a education method which intends to enable university students to identify problems in the communities and find different solutions aimed at enhancing a scalable working skills such as problem solving and team collaboration skills. Globally it started in Sweden at KHT Royal Institute of Technology School of Engineering and Management and later spread to different countries including Tanzania in different universities such as University of Dar es Salaam at college of information and communication technology (COICT).

Along of good work done by CDE in college of information and communication technology (COICT), there is no platform for an awareness of CDE, also there is no place to keep their records of their projects, visitors, sponsors, attendance reports, events done in CDE as well as there isn't area to make suggestions for students and blog to place challenges for an external organization, currently they still use the paperwork and social media to conduct their processes which is traditional way of doing management processes.

In this period of advancement of science and technology, development of web based application is needed, so as to keep track of all CDE processes, the system module is made of the combination of four modules, which work with collaboration with each other and make it beneficial to accomplish the main scheme. There are students, supervisors, challenge owners and coordinator modules. Firstly the system offer management of student reports, storage for projects, area for students to apply PT and confirmation of FYP, formulates a team for CDE students and publications such as news, events.

Secondly provide the chance for different customers or companies to do temporary registration for submitting their challenges. Also provide interface for challenge owner willing to work with CDE to communicate with each other and view status of their projects.

Lastly system provides means that will store records of organizations and CDE organization visitors for future use. This is having an interface of registering visitors or sponsors, their details will be stored directly in the database, for easy accessibility once the information is needed.

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LIST OF ABBREVIATIONS

COICT	College of Information and Communication Technology
CDE	Challenge Driven Education
HTTP	Hypertext Transfer Protocol
PC	Personal Computer
SIDA	Swedish international development cooperation agency
UDSM	University of Dar-es-salaam
ERD	Entity relationship diagram
PT	Practical training
FYP	Final year project
LMS	Learning management system
DLAB	Data lab
ERD	Entity relationship diagram
DFD	Data flow diagram

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CHAPTER ONE: INTRODUCTION

1.0: GENERAL INTRODUCTION

Challenge Driven Education (CDE) is an area where university graduates can contribute so as to come up with different solutions to societal problems that are trans-disciplinary. The role of the university in society development is creation of new knowledge. CDE started in Sweden at KHT Royal Institute of Technology School Of Engineering and Management. It was started in 1827 and later introduced into different countries around the world at different universities including University of Dar es salaam (COICT) in Tanzania, Tanzania and Sweden have a far-reaching collaboration within research through funding from the Swedish international development cooperation agency (SIDA), UDSM and KTH have been collaborating for many years, and from 2016 CDE has been one of the joint areas of research (kht.diva-portal.org)

CDE involve four entities, firstly students who brainstorm to get solutions of a certain problem, secondly challenge owner who own a challenge, thirdly supervisor that is a teacher who supervises students until tackle a perfect solution, and lastly is coordinator who monitor all activities at CDE. Currently CDE still use the paperwork to conduct activities which is tradition way of doing management. Paper work is not efficient way to organize the documents because data may be lost, and also CDE Lack Bridge of facilitating communication. Up to now CDE encounters challenge to find challenge owners which is costful, and leads to getting challenge owners who are not fully interested to work together with them, so can make complication in collaboration to get a solution, for instance last year DAWASA gave CDE difficulties.

Solution is development of web based application to handle different activities done at CDE also create awareness so as people to know about CDE and will facilitate for challenge owners to mention their challenges and which is like request to work with CDE and this will make easier for CDE rather than before.

CDE management platform after completion of its development will serve the following issues: -

1. Reduce cost associated with paper work.
2. It will increase challenge owner and facilitate to get challenge owner
3. Less time consuming compared to traditional way because having records stored in the databases will make it easier whenever we need a backup from the previous executed documents.

1.1: STATEMENT OF THE PROBLEM

CDE has been facing the challenge of lack of awareness, not all people know about CDE, they have to seek for challenge owners or companies to work with. There is no efficient way to backup their records, for instance if there is a project done by previous students and it came up to current students want to continue with that project, a backup is an issue. Also there is no public area to facilitate communication between CDE stakeholders. Currently they still use the paperwork and social media to conduct their process which is traditional way of doing management processes.

This system comprises with four modules and solved as a team, according division of work as a team my modules is coordinator and supervisor.

The problems which face CDE at COICT according to supervisor and coordinator modules are;

1. Lack of awareness about CDE.
2. Lack of a centralized attendance reports tend to missing of backward reports.
3. Lack of efficient way to handle all activities done in CDE such as performing CDE student attendance, forming groups according a certain challenge, project status completion.
4. Lack of record's storage of challenge owners, sponsors, students, supervisors and coordinators.
5. Lack of public area to facilitate communication.

1.2: PROJECT OBJECTIVES

This project has a main objective which is also divided into a couple of specific objectives

1.2.1 : MAIN OBJECTIVE;

The main objective of this project is to eliminate paper work based on CDE activities by designing and implementing a web based application to manage all activities done at CDE and provide an awareness of CDE.

1.2.2 : SPECIFIC OBJECTIVES

The following are the specific objectives according to my module;

1. To specify requirements of the system.
2. To design and implement the database system.
3. To design and develop a CDE coordinator and supervisor module.

4. To integrate modules to form one system.
5. Testing the implemented system.

1.3: SIGNIFICANCE OF THE PROJECT

A supervisor and coordinator modules has the following significances;

1. Help to create awareness about CDE.
2. It helps to increase efficient of CDE activities such as tracking of project status and completion rate, performing attendance and stored on database.
3. Facilitates the communication between coordinator and challenge owner.
4. The supervisor will be able to monitor what the students have done and their progress.
5. The projects will altogether be managed centrally.

1.4: SCOPE AND LIMITATION OF THE PROJECT

This project is to be done throughout the whole academic year (which is relatively 34 weeks) but until now I have reached in implementation of some parts and proceeding with another phase which is other implementation parts.

Since, this project will be accessible to all CDE stakeholders through mobile and web interfaces, therefore internet connection will be necessary for it to work.

1.5: ORGANIZATION OF THE REPORT

This report is divided into four major sections that include introduction, literature review, methodologies, system analysis and design and implementation and testing.

The Introduction chapter is further divided into general introduction, problem statement, objectives, and significance of the project and scope of the project.

In the general introduction of this report, the important things behind the need for the project are explained and the current situation is discussed. The problem is defined in the problem statement section. In this section, it is shown that this project solves a problem that is important for the CDE coordination team. The objectives of this project both main and specific objectives are stated in the objectives section. The impact of the project is discussed in the significance of the project section. In the scope section deliverables, features, functions, tasks and deadlines of the project are discussed.

In the Literature review chapter, there are more information about existing related systems that have been proposed and developed, were discussed and the need for this project is established.

In the Methodologies chapter, explain the methods used and to be used to collect the requirements. The Software Development Life Cycle is also discussed explaining how this system will be created.

In the analysis and design chapter, explanation about system requirements analysis and show how users can interact with system by using use case diagram and sequence diagram. Show interaction between entity and processes by using DFD as well as well diagram of class diagram and ERD for database purpose.

And finally in implementation and testing chapter, shows how the system works and system testing.

CHAPTER TWO: LITERATURE REVIEW

This chapter consist different reviews on the concept of this project topic. The literature review is done to strengthen the documentation and the guide to challenge driven education. The following section is about the guide concept related in this project.

Today our societies face range of complex challenges, from sustainable development to high population and the well-being in our societies, prior the KHT Royal Institute of Technology believed that universities around the world can share a large pool of young, creative, curious students that can make impact within the societies university and can contributes solutions to societal problems for sustainable development, so along of all that came with challenge driven education, (kht.diva-portal.org).

Although there is no existing system but there some related system as CDE work such as DLAB and LMS UDSM which work the same like this project for some parts, also there are related guides about CDE which help me to know more about CDE and how to implement this platform.

DLAB is a center of activity, connecting data revolution to national priorities, global commitment and diverse programs and investments. It allows community engagement in their system likewise in CDE; it allows challenge owners to engage in the system. Also publications about the projects, goals, updating news and events so as students and challenge owners can see, so as to know more about CDE before joining or start working with CDE, also store projects and have more details about that projects and all this is done at DLAB center.

LMS UDSM it is learning management system that makes easily communication between lectures and students, lectures can upload notes and other learning materials, calendar and schedules about his or her course and students can download notes and other learning materials and view calendar and schedules, likewise to this system but in different way.

CHALLENGE DRIVEN EDUCATION guide it explains more details about CDE from when it started and how widely used internationally. This guide includes the objectives of this CDE organization, ambition, role of CDE, also a fully history about CDE and how the CDE organization works, so this guide provides more knowledge about this field.

CHAPTER 3: METHODOLOGIES

Methodologies used in CDE management system are:

1. Data collection

During requirement gathering, I conducted data collection through interviewing CDE students, CDE coordinator. The main case study area for this project is the CDE at College of Information and Communication technology (COICT), UDSM.

The aim of interviewing students is to obtain information about CDE and specifically what they do. Also aim that researching on what are the expectations of the students in order to incorporate them in the design of the system.

Interviews to CDE coordinator aim to obtain more information about CDE and understanding the technology in deep as it is a new technology.

Also the data collection through reading different documentations which guide about challenge driven education (CDE)

2. Agile Methodology

In this project Agile methodology is used, this methodology will help the CDE team to add some increment to the project because this methodology allows the customers, developers and testers to constantly interact with each other.

The reason for choosing Agile Methodology is to breakdown the big project into small parts of user functionalities, prioritizing them and then continuously delivering them in couples of week cycle called iterations. The performance is measured by customer at the end of iteration, the lessons learned in iterations are captured back and used in future iteration, in this way the CDE platform is constantly improved and the process of the developing are also improved.

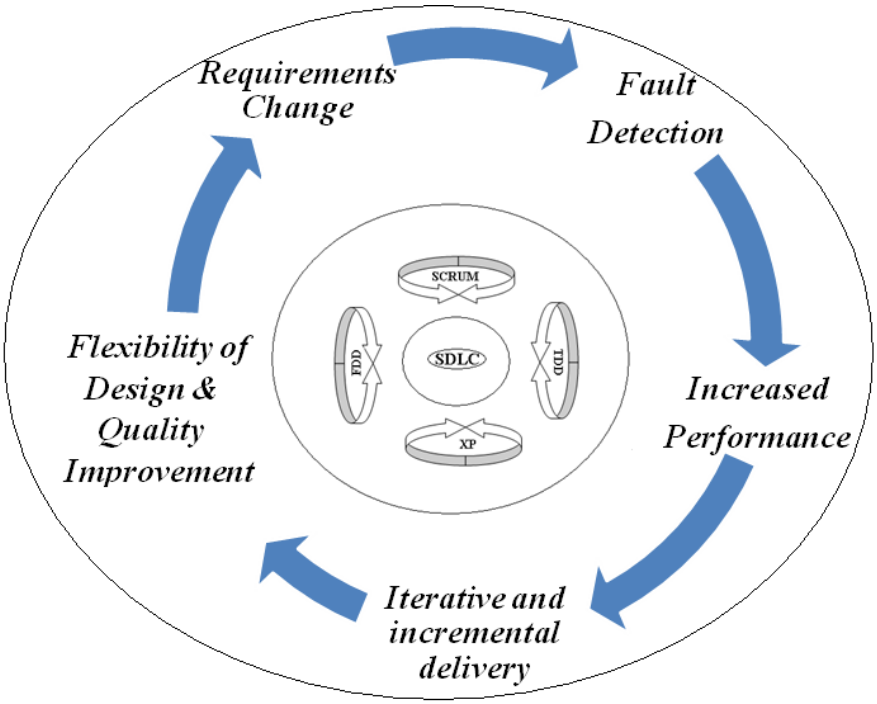


Figure 1: Agile Development Software Model

1. Visual studio code tool

Another tool used in implementation as text editor for running codes. It is cross platform which work on different operating systems but for me I am going to use it on windows operating system.

The advantages of using this text editor are;

1. It is intelliSense for programming language, it provide JavaScript, blade, HTML, CSS and sass and all of this language are used.
2. Integrated version control (Built-in-Git) which makes easily to commit work into repository after debugging.
3. Side by side editing on different files sometimes I need to refer one file's code for another file, it makes easily by allowing opening side by side editor.

CHAPTER 4: SYSTEM ANALYSIS AND DESIGN

4.1: REQUIREMENT SPECIFICATIONS

This section explains the system more on the requirements analysis which include functional and non functional requirements as well as domain requirements

4.1.1: FUNCTIONAL REQUIREMENTS

i. Authenticate users
ii. Register and view identified challenge
iii. Send and view comments
iv. Create and view plans/schedule
v. Create/add and remove system users
vi. Fill attendance and generate report
vii. Display attendance reports
viii. Display weekly and final reports
ix. Formulate team
x. Display project status and completion rate
xi. Publish news and events

4.1.2 : NON-FUNCTIONAL REQUIREMENTS

i. Security:

The system will provide security of data and privacy of information.

ii. Performance:

System will allow ensuring an output in time, time from task started to task ended, hence high performance to keep track different activities.

iii. Usability:

System will be easy to use, learn, adapt and become skillful while using it.

iv. Reliability:

The system will be available and guarantee no inconvenient waiting time.

4.1.3 : DOMAIN REQUIREMENTS

1. User of the system must first log in the system in order to perform all operations
2. Since CDE management platform is the web system, the server must be set up to host a database. Also, the system must be able to be accessed in all devices without deteriorating user experience.
3. The database must be backed up every time to ensure the safety of data store in case the original database gets failures.
4. The system must be able to be accessed in all web browsers without changing the appearance of some features.
5. The system must be able to adapt update capabilities for the future technology changes.
6. More than one user will be able to access system simultaneously without any contradiction.
7. Users must have an internet connection in order to access the contents of the system.

4.2: SYSTEM DESIGN

This section shows design of the system. It also explains the functionalities of the system that interact with the user as well as processes within a system and database architecture.

4.2.0: USE CASE DIAGRAM

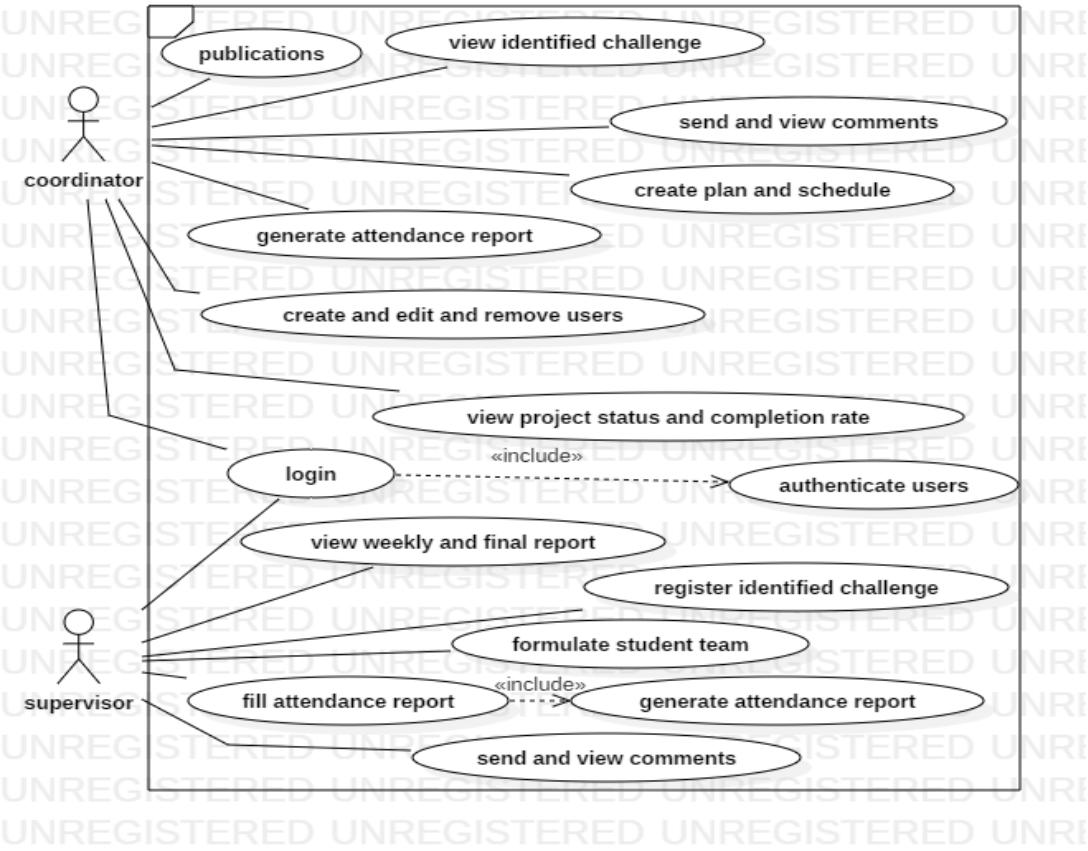


Figure 2: use case diagram of coordinator and supervisor modules

USE CASE No.	1
USE CASE TITLE	Authenticate users
ACTOR	Coordinator and Supervisor
INITIAL ASSUMPTIONS	▪ Users of the system must have username and password. ▪ Users must supply their credentials to the system so that they can be authenticated.
SUCCESS CRITERIA	▪ Users will successfully have logged in.
WHEN SOMETHING GOES WRONG	▪ In case the something goes wrong; the supervisor and coordinator will

	be notified to check if he or she is connected to the internet and refresh the browser. ▪ Also, users will be notified to recheck their login credential if are correct and re-type again. ▪ If the problems persist, users will be notified to recover their password and logging again.

Table 1: use case description for authenticate users

USE CASE NO.	2
USE CASE TITLE	Create ,Edit and remove user
ACTOR	Coordinator
INITIAL ASSUMPTION	▪ A coordinator able to create a new user and assign default password, also user can be edited incase some information is wrong and user can be removed
SUCCESS CRITERIA	▪ Coordinator successfully create user, edit and delete a certain user
WHEN SOMETHING GOES WRONG	▪ In case user failed to be added, edited, removed check if connected to the internet and refresh the browser.

Table 2: case description for create, edit and delete users

USE CASE NO.	3
USE CASE TITLE	View and send comments
ACTOR	Supervisor and Coordinator
INITIAL ASSUMPTION	▪ A Supervisor has to view and send

	comments according team student report ▪ Coordinator has to view and send comments from different CDE stakeholders
SUCCESS CRITERIA	▪ A coordinator and supervisor will view and send the comments
WHEN SOMETHING GOES WRONG	▪ In case the system fails to view and send the comment he or she supposed to check if connected to the internet and refresh the browser.

Table 3: use case description for view and send comments

USE CASE NO.	4
USE CASE TITLE	Formulate Team
ACTOR	Supervisor
INITIAL ASSUMPTION	▪ The Supervisor has to formulate a group of students as team
SUCCESS CRITERIA	▪ The students will be formulated into several groups in which they will work as a Team.
WHEN SOMETHING GOES WRONG	▪ In case the Supervisor fail to Formulate a team, he or she must check if that student is registered as CDE students in coordinator module

Table 4: use case description for formulate a team

USE CASE No.	5
USE CASE TITLE	attendance

ACTOR	Supervisor and Coordinator
INITIAL ASSUMPTIONS	▪ An attendance will be added to the system so as supervisor to fill the punctuality of the students ▪ And generated by both supervisor and coordinator
SUCCESS CRITERIA	▪ Attendance will be successfully displayed to the system.
WHEN SOMETHING GOES WRONG	▪ In case the something goes wrong; the supervisor will be notified to check if he/she is connected to the internet and refresh the browser.

Table 5: use case description for attendance

USE CASE No.	6
USE CASE TITLE	view weekly and final report
ACTOR	Supervisor
INITIAL ASSUMPTIONS	▪ A weekly and final reports uploaded by student will be viewed by a supervisor in the system
SUCCESS CRITERIA	▪ All this reports will be viewed in the supervisor module in the system.
WHEN SOMETHING GOES WRONG	▪ In case the something goes wrong; the student will be notified to check if he/she uploads a formatted file.

Table 6: use case description for view weekly and final report

USE CASE No.	7
USE CASE TITLE	Create plan and schedule
ACTOR	Coordinator

INITIAL ASSUMPTIONS	▪ A coordinator create or upload a plans or schedule of activities in the system
SUCCESS CRITERIA	▪ Coordinator will create plans successfully and viewed by students and supervisor in the system.
WHEN SOMETHING GOES WRONG	▪ In case the something goes wrong; the coordinator will be notified to check if he/she is connected to the internet and refresh the browser.

Table 7: use case description for plan and schedule

USE CASE No.	8
USE CASE TITLE	attendance report
ACTOR	System
INITIAL ASSUMPTIONS	▪ A system should track attendance filled by supervisor and list of students with their status will be displayed to the system.
SUCCESS CRITERIA	▪ Attendance report will be successfully displayed to the system.
WHEN SOMETHING GOES WRONG	▪ In case the system failed to generate attendance report, the system will set timeout in case a generate attendance report failed for the particular range of time, then the system will resend it again.

Table 8: use case description for attendance report

USE CASE No.	9
USE CASE TITLE	Fill and view attendance
ACTOR	Supervisor, coordinator

INITIAL ASSUMPTIONS	▪ A supervisor fill a student attendance by tick if student is present and un tick if a student is absent ▪ A coordinator should see an attendance report which generated by a system
SUCCESS CRITERIA	▪ Attendance will be filled and report will be successfully displayed to the system.
WHEN SOMETHING GOES WRONG	▪ In case the something goes wrong; a supervisor or coordinator will be notified to check if he/she is connected to the internet and refresh the browser.

Table 9: use case description for fill and view student's attendance

USE CASE No.	10
USE CASE TITLE	View project status and completion rate
ACTOR	Coordinator
INITIAL ASSUMPTIONS	▪ A coordinator should see an project status and completion rate of the projects within a system in his/her user interface
SUCCESS CRITERIA	▪ A project status charts will be shown and capture the rate completion of the projects
WHEN SOMETHING GOES WRONG	▪ In case the something goes wrong; a coordinator will be notified to check if he/she is connected to the internet and refresh the browser.

Table 10: use case description for view project status and completion rate

USE CASE No.	11
USE CASE TITLE	Publications

ACTOR	Coordinator
INITIAL ASSUMPTIONS	▪ A coordinator should able publish different things such as events, news and others
SUCCESS CRITERIA	▪ Publications will be successfully displayed to the system.
WHEN SOMETHING GOES WRONG	▪ In case the something goes wrong; a coordinator will be notified to check if he/she is connected to the internet and refresh the browser.

Table 11: use case description for publications

4.2.1: CLASS DIAGRAM

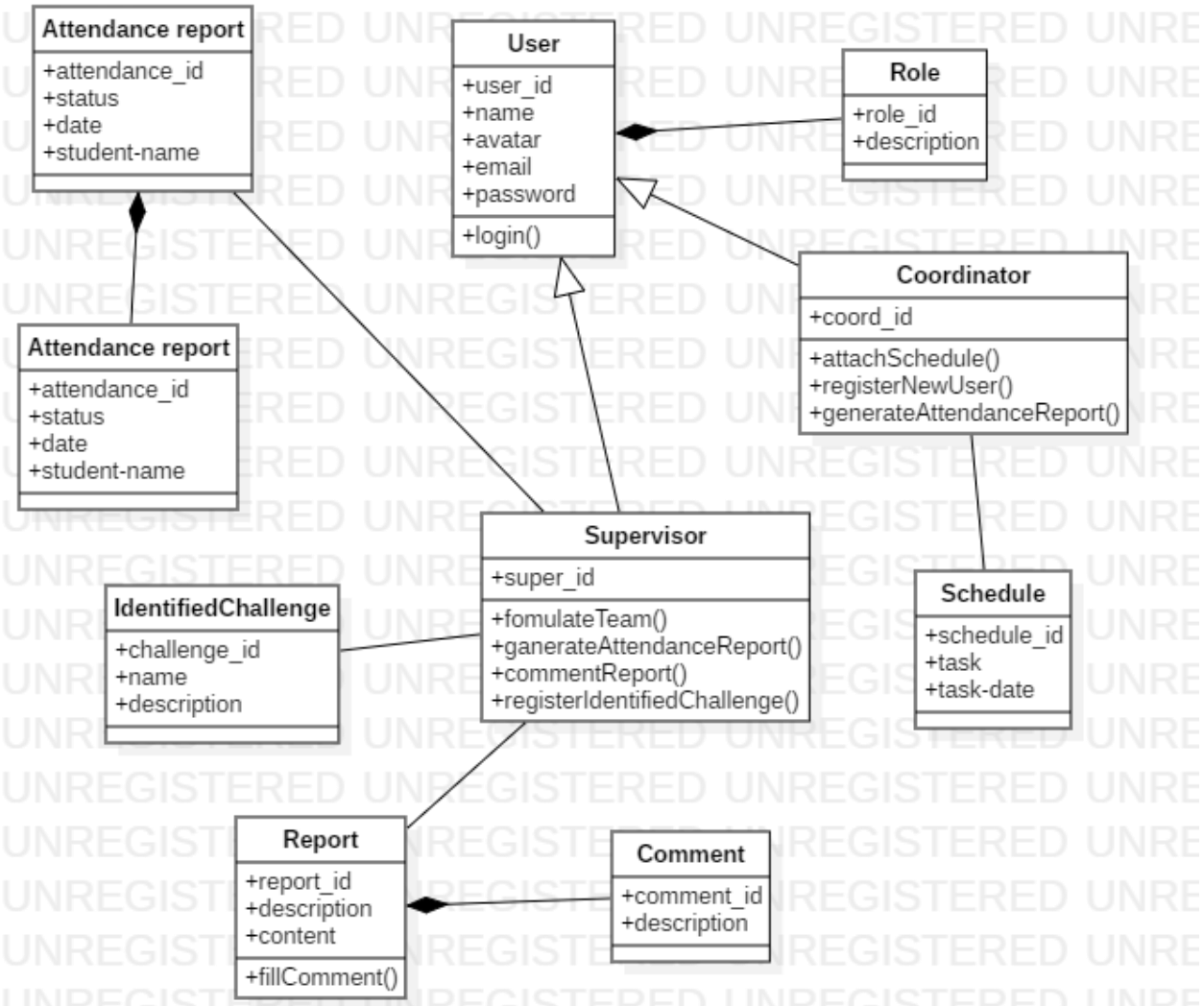


Figure 3: Class diagram of coordinator and supervisor module for CDE management platform

4.2.2: DATA FLOW DIAGRAMS

- **Context level diagram**

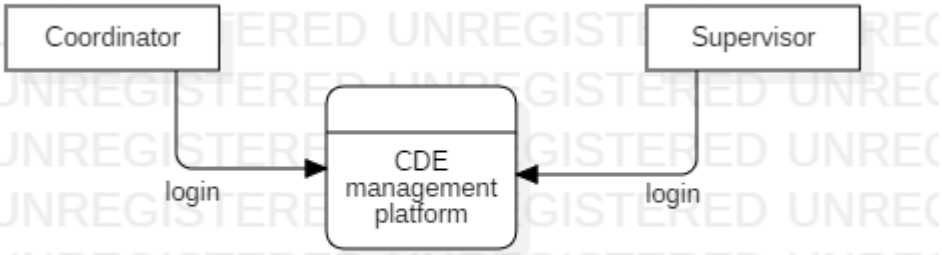


Figure 4: DFD Diagram context level for supervisor and coordinator module of CDE management platform

Level 0 diagram

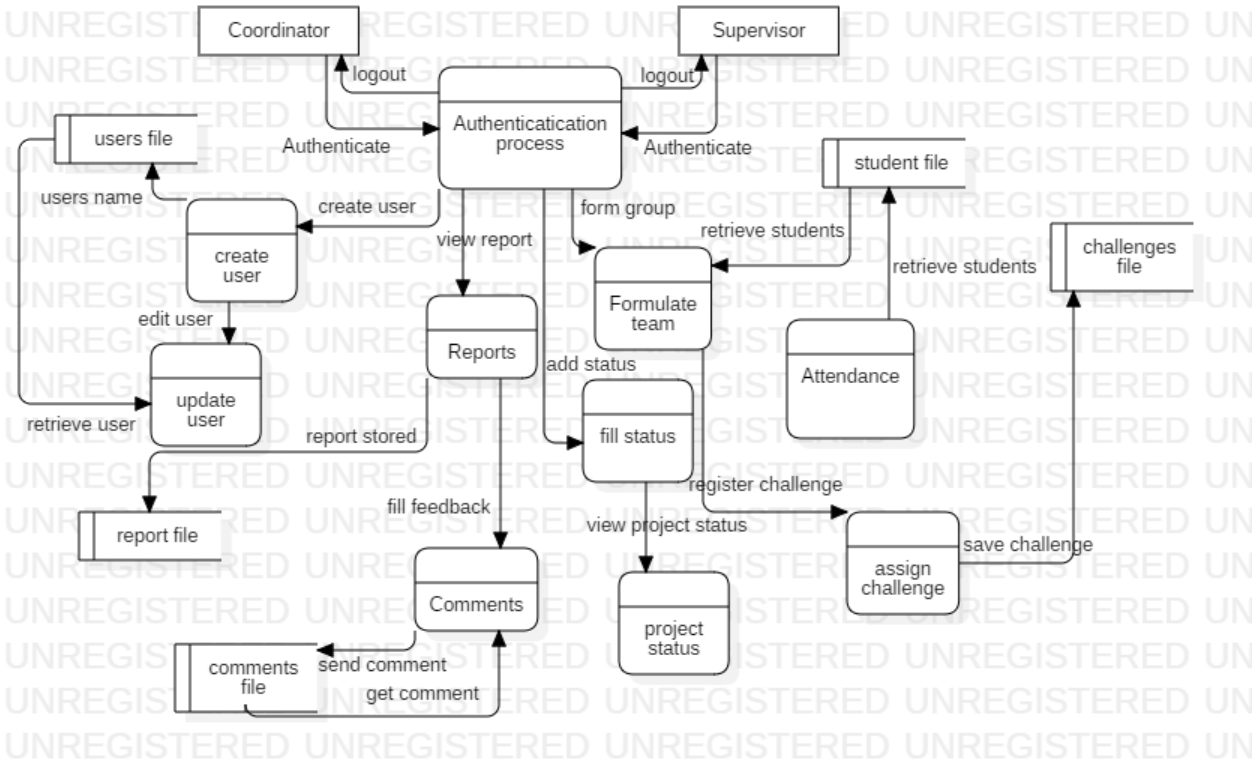


Figure 5: DFD Diagram 0 level for supervisor and coordinator module

4.2.3: SEQUENCE DIAGRAM

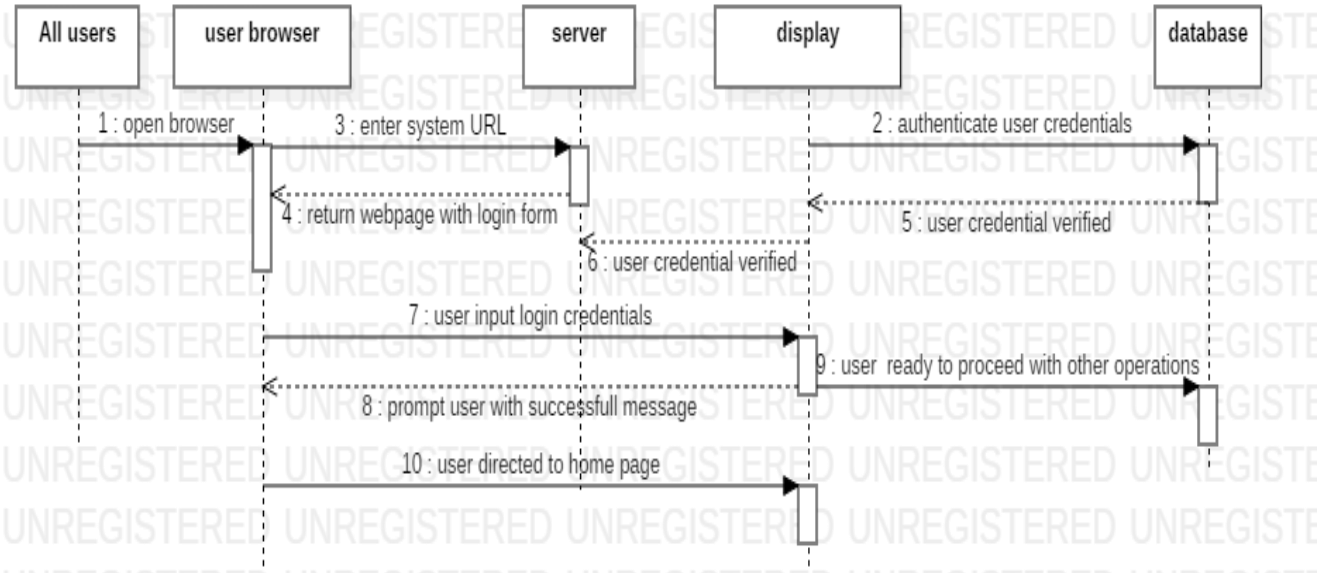


Figure 6: sequence diagram for CDE management platform

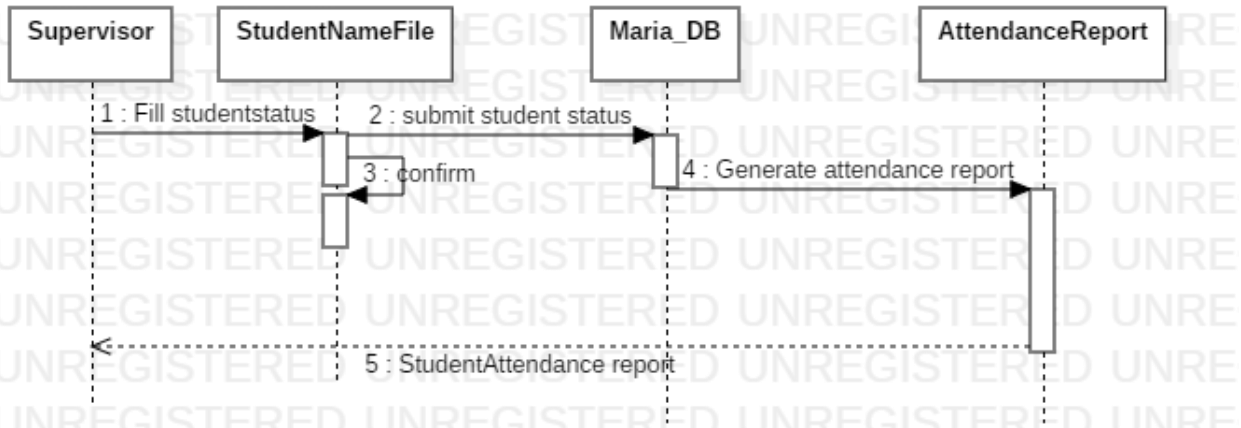


Figure 7: sequence diagram for generate report process in CDE management platform

4.2.4: ENTITY RELATION DIAGRAM

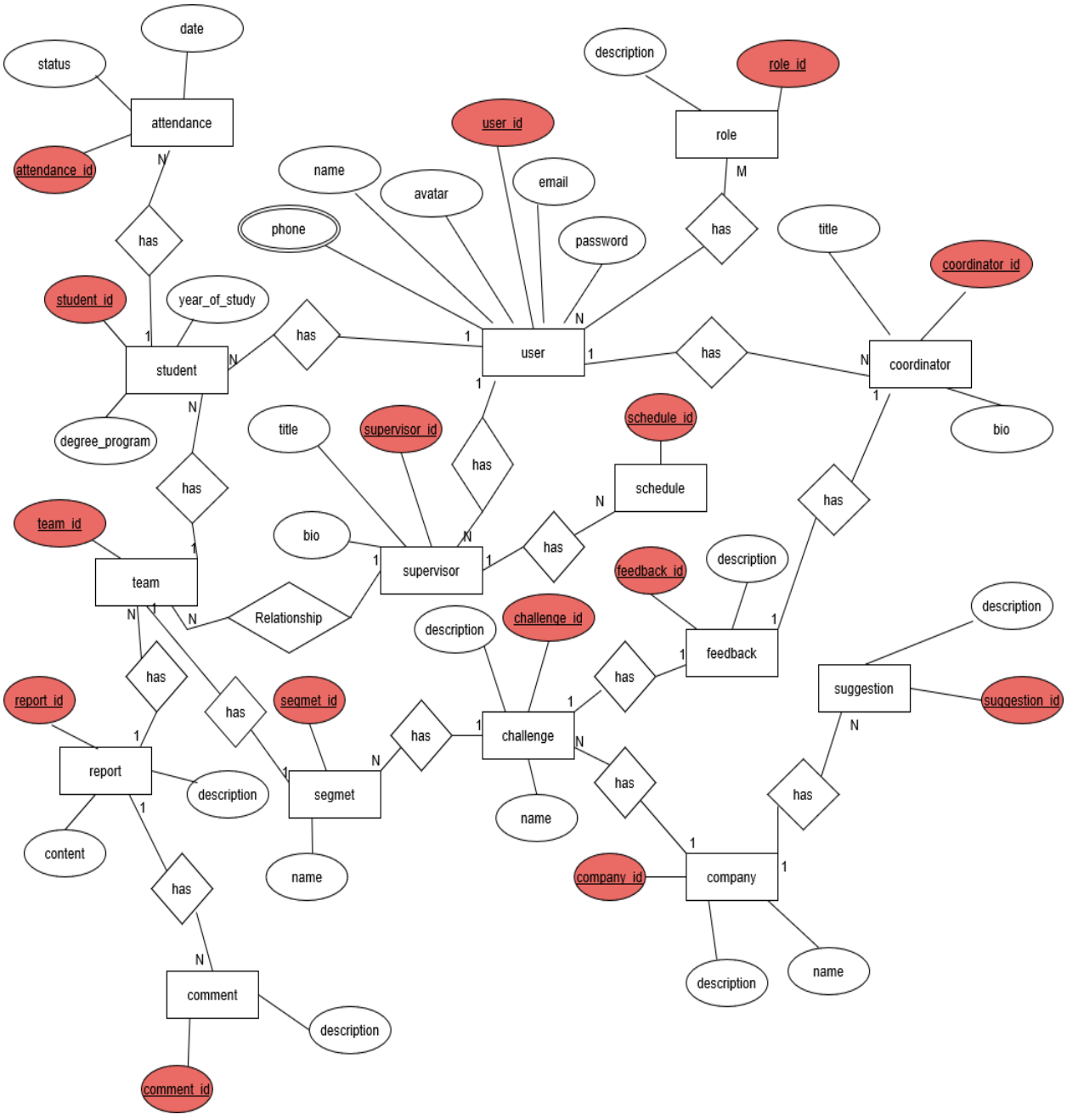


Figure 8: ERD for CDE management platform

CHAPTER 5: IMPLEMENTATION AND TESTING

In this chapter describes implementation and testing done so far in coordinator and supervisor modules.

5.1: SYSTEM IMPLEMENTATION

After database design here is the snapshot of database implementation of whole CDE management platform corresponding tables with attributes inside.

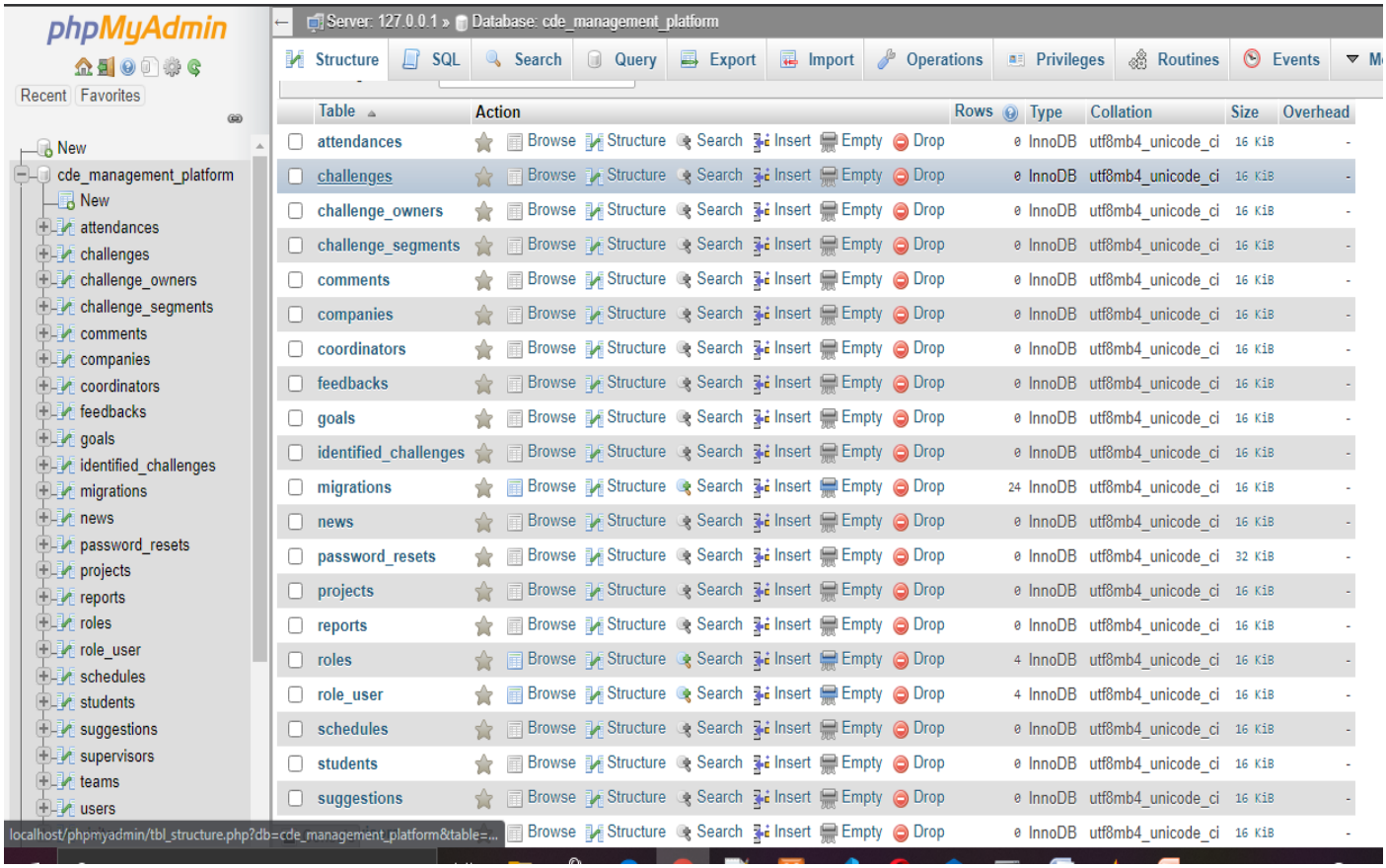


Figure 9: CDE management platform database implementation

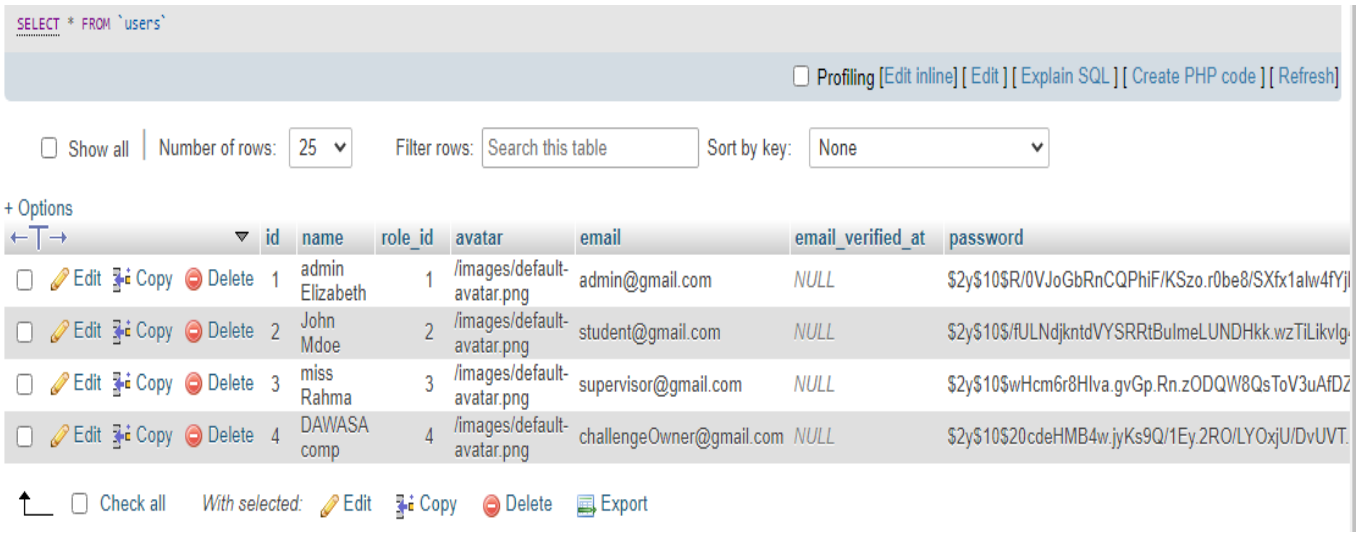


Figure 10: snapshot of user table with attributes

First page of coordinator and supervisor is login page, capably to make authentication if user have right access in this system through user credentials. If a user is already registered, the system will direct the user to specific home page according his or her role and permissions given.

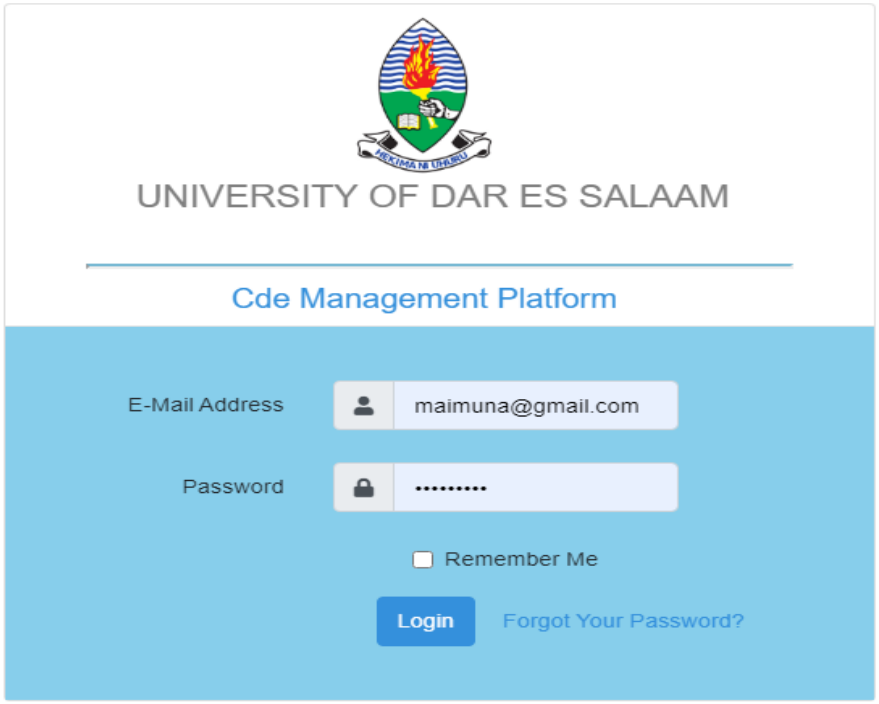


Figure 11: login form of CDE management system

Coordinator user interface shows the coordinators who are registered in the database, coordinators can see details about that user, for instance his or her role, coordinators can delete or edit that user, also coordinators can see the progress of the projects, can add schedule or plans in weekly and can update every week, also can view challenges and publish events, news and other publications. Supervisor can see attendance of students, can receive notifications and preview his or her profile.

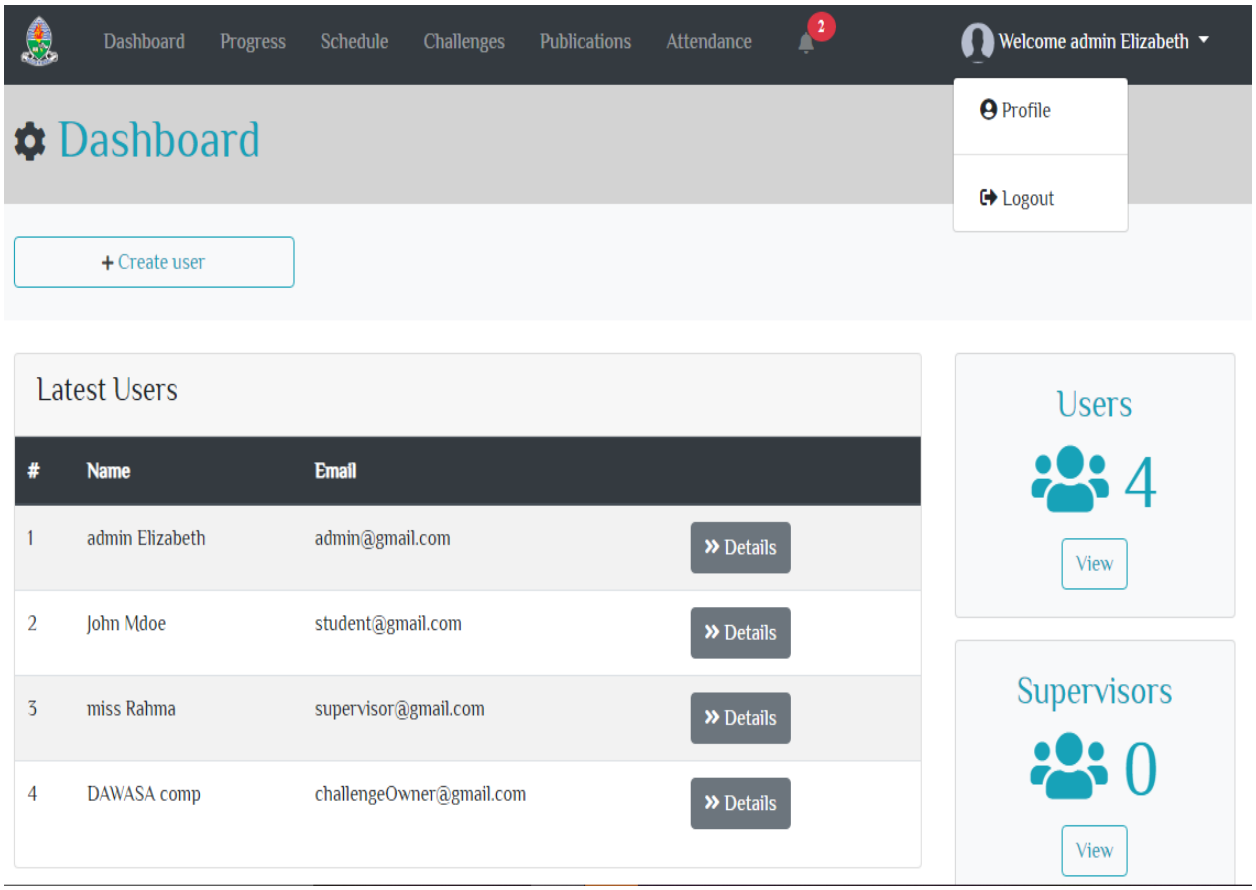


Figure 12: coordinator homepage interface

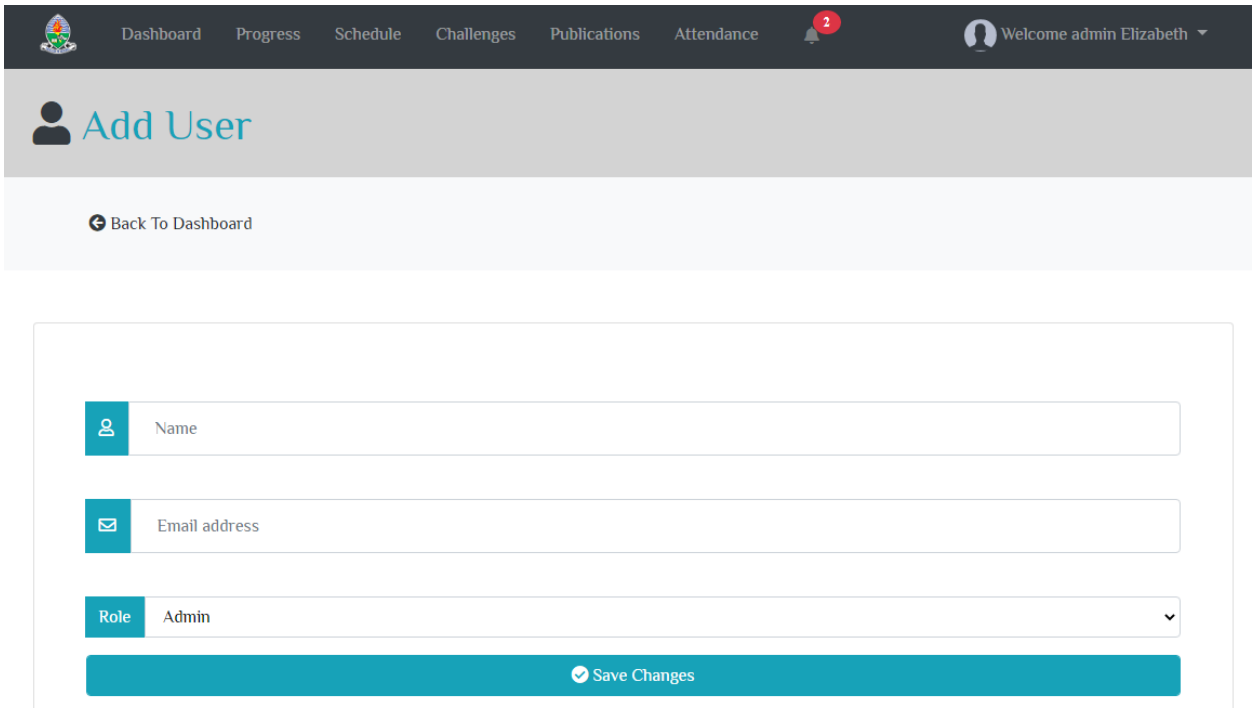


Figure 13: snapshot of coordinator to create user

Supervisor interface includes dashboard interface which create a team and add challenge to a certain team, supervisor can view students reports and make a comments, can also fill students attendance to be captured to the database, moreover can view challenges already registered in the system, view teams which already registered and lastly fill performance of projects according reports so as coordinator to capture projects status.

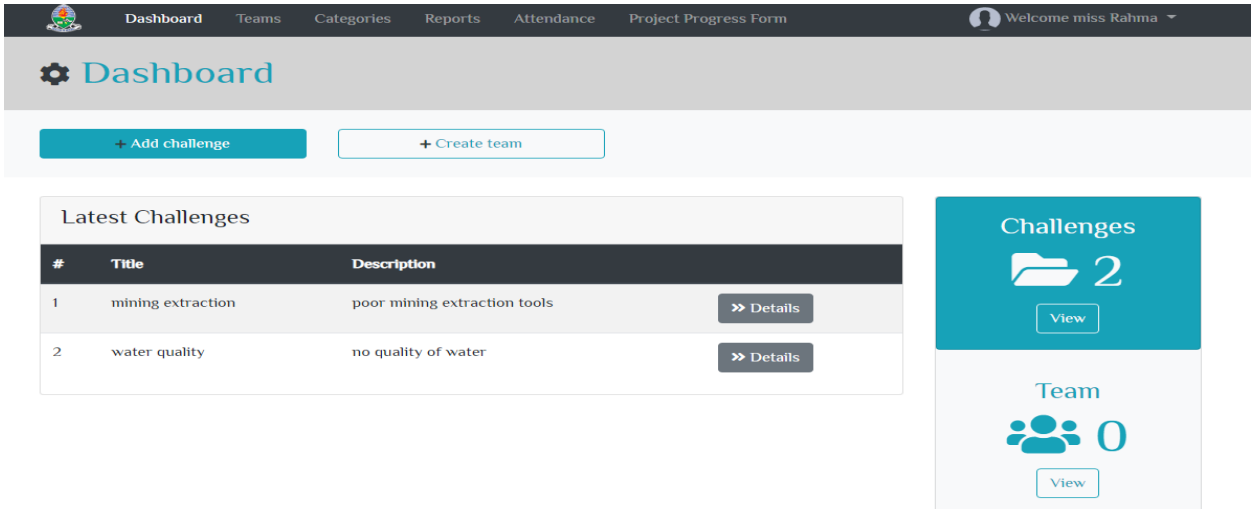


Figure 14: supervisor homepage interface

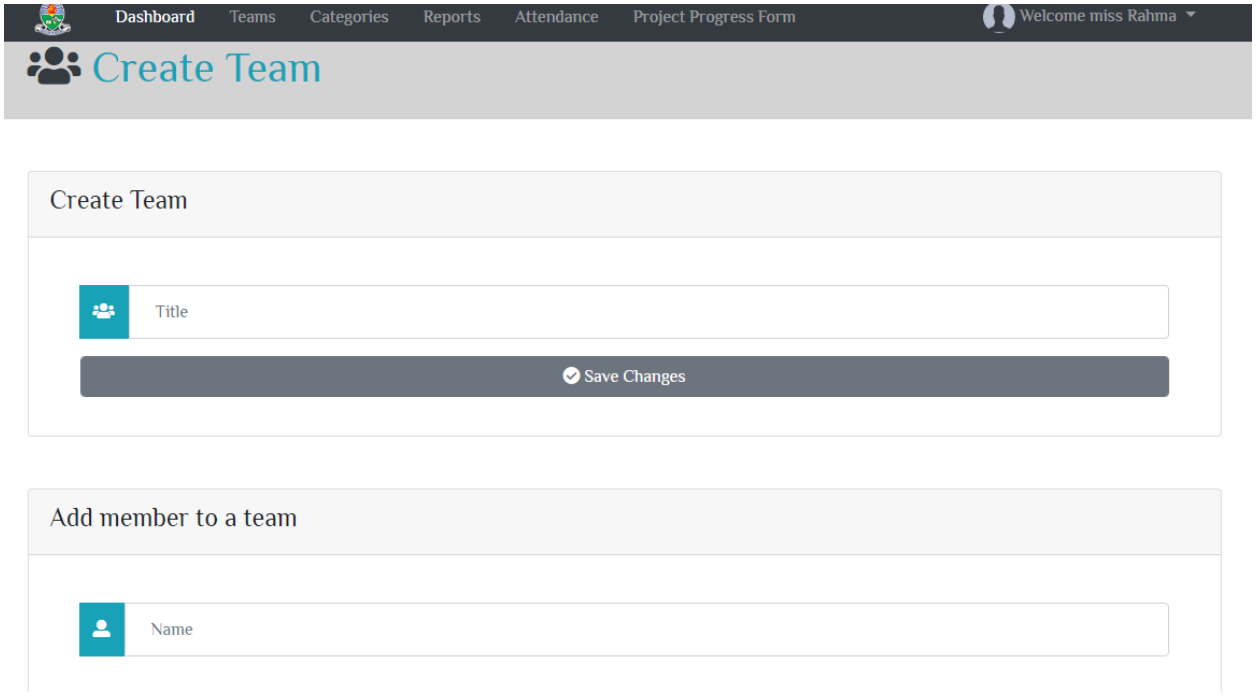


Figure 15: snapshot of supervisor add a team

5.2: SYSTEM TESTING

Demonstration of the system prompts a user to enter the correct fields again in case the entry is invalid. This goes for emails and passwords. The register button will respond only after all fields are valid.

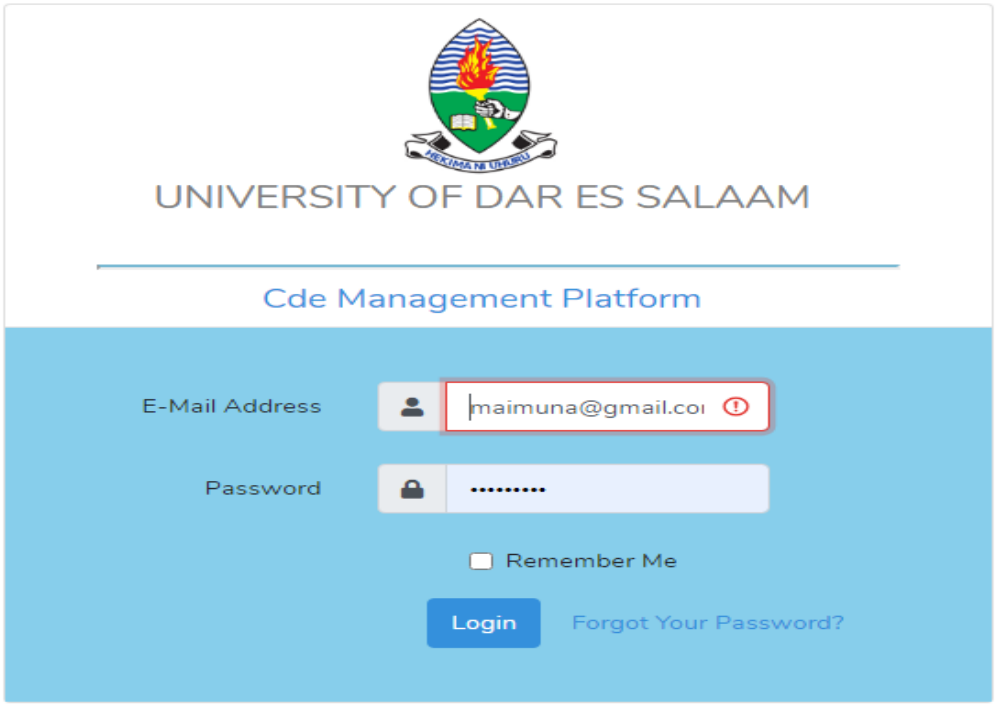


Figure 16: snapshot of testing login page

Also tested if coordinator tries to add a new user to database and if the user is stored successful, a popup of successful message will appear after submitting a form.

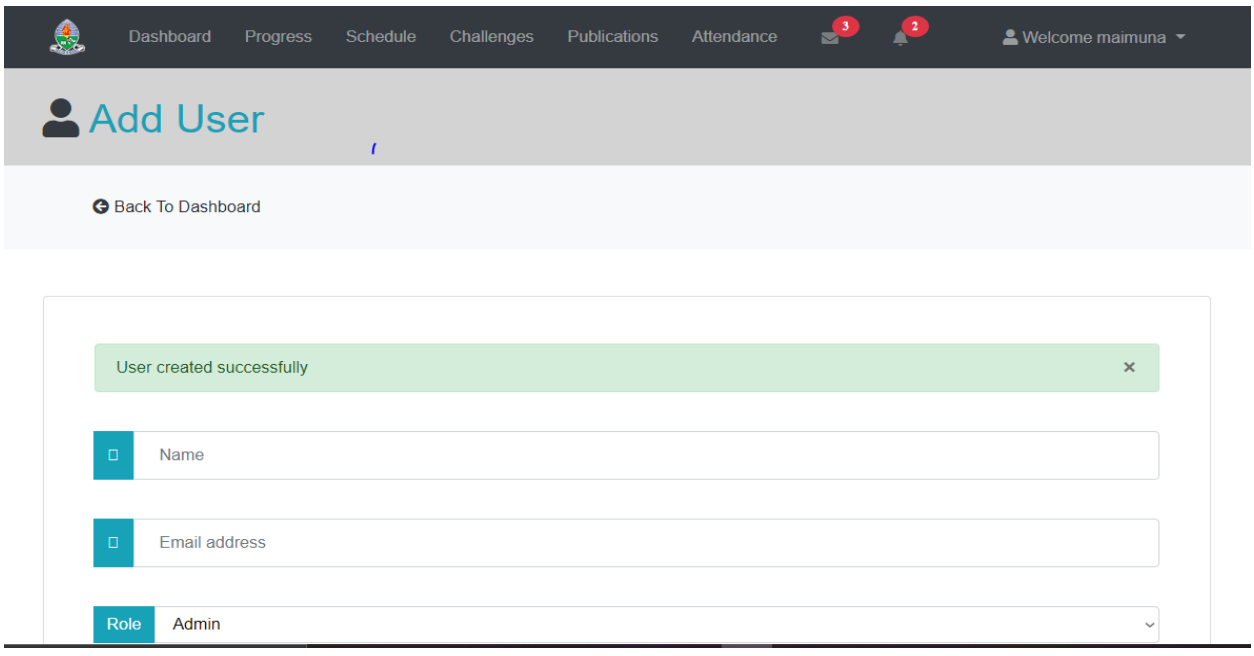


Figure 17: testing create user interface in coordinator module

Also testing if a supervisor tries to add a new challenge to a system and when the user is stored successfully, a popup successful message will appear after submitting changes.

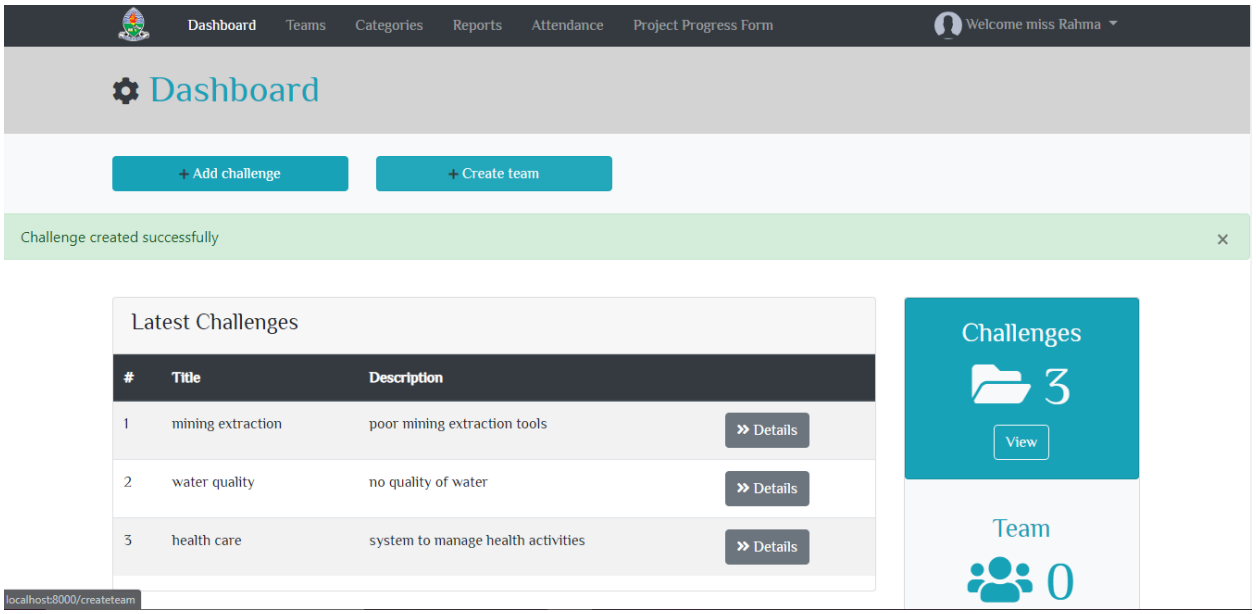
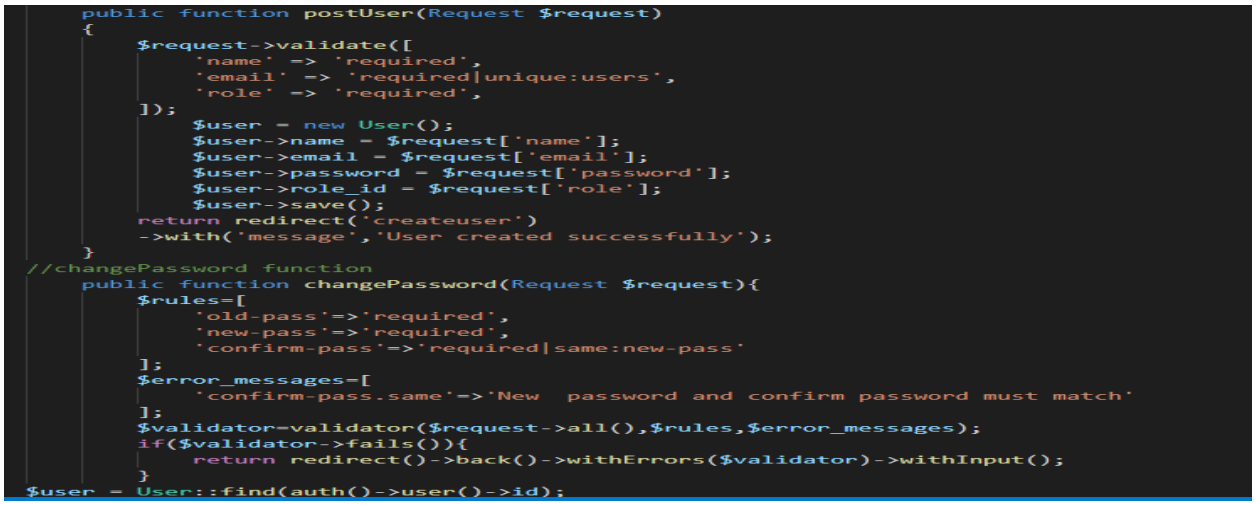


Figure 18: snapshot for testing add challenge interface

In coding section I use MVC architecture model, view, controller for connecting frontend and backend, here are the coding section of user in frontend and backend.

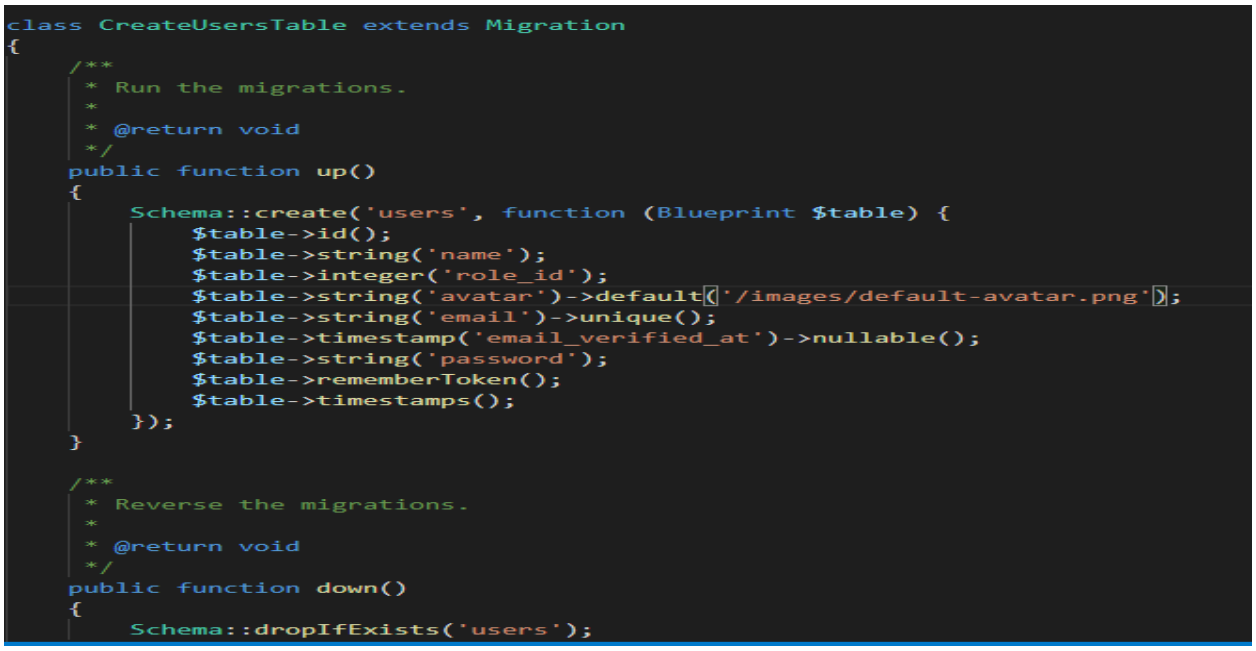
A snapshot of user Controller which includes all logic of user and capable to make connection between view and model among them is below. First function is post user function which is capable to create user in a database with fields of name, email and role and after created returns successful message. Another is change Password function which is capable to update password of the user in the database.



```
    public function postUser(Request $request)
    {
        $request->validate([
            'name' => 'required',
            'email' => 'required|unique:users',
            'role' => 'required',
        ]);
            $user = new User();
            $user->name = $request['name'];
            $user->email = $request['email'];
            $user->password = $request['password'];
            $user->role_id = $request['role'];
            $user->save();
        return redirect('createuser')
        ->with('message','User created successfully');
    }
//changePassword function
    public function changePassword(Request $request){
        $rules=[
            'old-pass'=>'required',
            'new-pass'=>'required',
            'confirm-pass'=>'required|same:new-pass'
        ];
        $error_messages=[
            'confirm-pass.same'=>'New  password and confirm password must match'
        ];
        $validator=validator($request->all(),$rules,$error_messages);
        if($validator->fails()){
            return redirect()->back()->withErrors($validator)->withInput();
        }
$user = User::find(auth()->user()->id);
```

Figure 19: snapshot of user controller

A schema of user, a migration which include attributes of user, is passed through user model to make connection with database, this is just a table.



```
class CreateUsersTable extends Migration
{
    /**
     * Run the migrations.
     *
     * @return void
     */
    public function up()
    {
        Schema::create('users', function (Blueprint $table) {
            $table->id();
            $table->string('name');
            $table->integer('role_id');
            $table->string('avatar')->default('/images/default-avatar.png');
            $table->string('email')->unique();
            $table->timestamp('email_verified_at')->nullable();
            $table->string('password');
            $table->rememberToken();
            $table->timestamps();
        });
    }

    /**
     * Reverse the migrations.
     *
     * @return void
     */
    public function down()
    {
        Schema::dropIfExists('users');
```

Figure 20: snapshot of user table

A model which path our user data from user migration to a database and vice versa

```php
class User extends Authenticatable
{
    use Notifiable;

    /**
     * The attributes that are mass assignable.
     *
     * @var array
     */
    protected $fillable = [
        'name', 'email', 'password','role_id'
    ];

    /**
     * The attributes that should be hidden for arrays.
     *
     * @var array
     */
    protected $hidden = [
        'password', 'remember_token',
    ];

    /**
     * The attributes that should be cast to native types.
     *
     * @var array
     */
    protected $casts = [
        'email_verified_at' => 'datetime',
    ];
```

Figure 21: snapshot of user model

A view which shows code to create new user into a database

```blade
<form action="{{url('createnewuser')}}" method="POST" enctype="multipart/form-data">
        @csrf
        <div class="form-group{{ $errors->has('name') ? ' has-error' : '' }}">
            <label for="name"></label>
            <div class="input-group">
                <div class="input-group-append">
                    <button class="btn btn-info">
                        <i class="far fa-user"></i>
                    </button>
                </div>
                <input type="text" name="name" id="name"
                    class="form-control p-4" placeholder="Name">
            </div>
            @if ($errors->has('name'))
            <span class="help-block">
                <strong>{{ $errors->first('name') }}</strong>
            </span>
        @endif
        </div>
        <div class="form-group{{ $errors->has('email') ? ' has-error' : '' }}">
            <label for="Email"></label>
            <div class="input-group">
                <div class="input-group-append">
                    <button class="btn btn-info">
                        <i class="far fa-envelope"></i>
                    </button>
                </div>
                <input type="email" name="email" id="email" class="form-control p-4"
                    placeholder="Email address" >
            </div>
            @if ($errors->has('email'))
```

Figure 22: snapshot of view to create new user in code

CHAPTER 6: CONCLUSION AND RECOMMENDATION

6.1: CONCLUSION

Generally, this project came as glory for CDE stakeholders, this will manage all processes done by CDE, for instance in this module between CDE coordinator and supervisor a system generate reports, keep track reports, attach schedules, formulation of team and make attendance for CDE students as well as track project status, thus it is a useful project and I hope it is going to be applicable.

Challenges

1. The project required too much knowledge which i have never come across practically before. The project scope was also big to mine so as to get something usable.
2. No more existing CDE systems in locally and globally which consume much time to explore.
3. Integration of the project with my other project members made many completions.

Future Work

The system can be further preceded by any other colleague mainly on the part of integration. The design we implemented is a good foundation for any scale up planned later on because the technology used well supports various environments and development technologies. Aspects like reliability for a large scale and load balancing should be taken into account too

6.2: MAPPING ON HOW IMPLEMENTATION SATISFIES PROJECT SPECIFIC OBJECTIVES

In implementation I archive some field of specific objectives starting from data gathering and analysis, also I already design and implemented CDE management database system, and analysis of requirements and designing. Finally implementations with some system testing.

6.3: RECOMMENDATION

The core subjects that reflect about project management and programming which will be applied by the students in the implementations of the projects, should be emphasized on earlier levels of undergraduate studies, so as to easy the students in the implementations of their final year projects.

REFFERENCES

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https://www.draw.io/

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https://dlab.or.tz

APPENDICES

APPENDEX A: PROJECT BUDGET

S/N	ITEM QUANTITY	UNIT COST	COST
1	Internet bundles	2,000	30,000
2	Printing and binding	4,000	8,000
3	others		10,000
TOTAL			48,000

Table 12: table for project budget

APPENDEX B: TIME SCHEDULE

Task	Start Date	End date	Duration
Planning of CDE platform	20-Nov-19	28-Dec-19	38
Requirements gathering and analysis	29-Dec-19	28-May-20	151
System design of CDE platform	02-Jan-20	04-Feb-20	33
CDE platform implementation	29-Feb-20	03-Jul-20	125
CDE modules integration	01-Jul-20	03-Jul-20	2
CDE System testing	25-May-20	03-Jul-20	39
Bug fixes of CDE platform	02-Jun-20	10-Jul-20	38
Improvements of system	11-Jun-20	15-Jul-20	34
CDE management platformFinal Testing	20-Jun-20	20-Jul-20	30

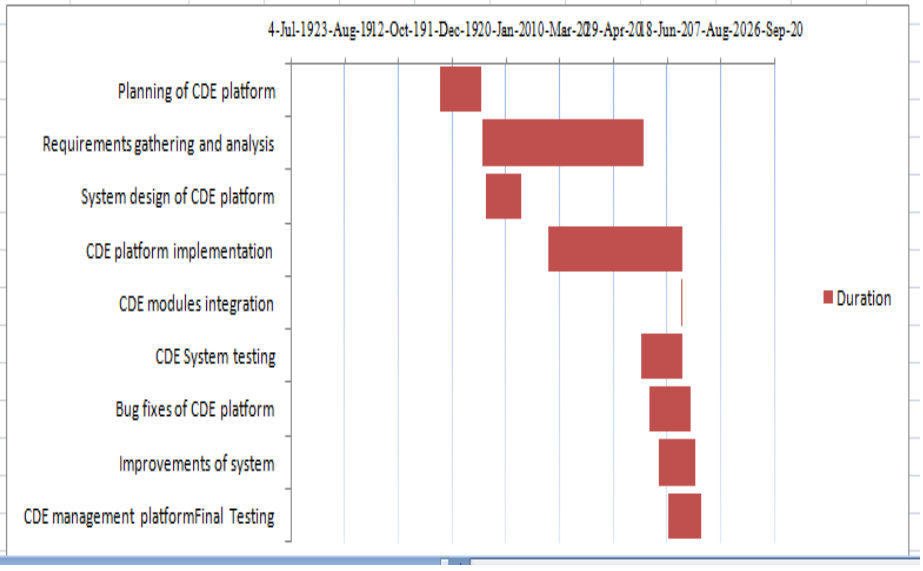

Figure 23: Gantt chart for the CDE Management platform