

Major Project Report on

## **EXAM-EVALUATOR**

Submitted in the partial fulfilment of the requirement for the award of the  
degree

### **BACHELOR OF TECHNOLOGY**

In

### **COMPUTER SCIENCE ENGINEERING**



**UNIVERSITY INSTITUTE OF ENGINEERING AND TECHNOLOGY**

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**B. Tech. CSE 7<sup>th</sup> A**

**251802015**

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His guidance, inspiration and constructive suggestions throughout the project has resulted in a successful completion of this project.

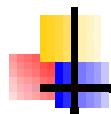
I'm also thankful to my dear friends for their cooperation and support in this project work.

Date: .....

**BHANU AGGARWAL**

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**251802015**



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## **ABSTRACT**

COVID-19 pandemic has affected almost every aspect of our lives. Healthcare systems, businesses, economies, study, etc. all are adversely affected. Even in such tough times, online study has proven to be a boon for students and teachers. It has helped millions of students to continue their learning process and continue their courses. To enhance this system, “EXAM-EVALUATOR” has been developed.

In the times, when digital modes of study and learning are being used widely, “EXAM-EVALUATOR” is a much needed entity to benefit both the students and teachers. This software makes the process of result generation easy and efficient. This system saves a lot of time of the users. Main purpose of this system is to make the online study process more interactive and smooth, to build a better communication regarding studies between students and teachers.



## **INTRODUCTION**

Due to the Covid-19 pandemic, education system has shifted to complete digital mode. Educational institutes use various web conferencing apps to conduct online classes. Online study is like a boon for the students in the times when the whole world is undergoing the adversities of wide spread pandemic. Online studies has let millions of students worldwide to keep their study courses continue. To make online studies more effective and productive it needs to improve in the parts of evaluation of exams and result generation.

When it comes to online exams or assignments, it becomes a tedious task to be completed. In the times of online exams, submission of answer sheets documents and then evaluating them are two very important tasks. Students need a portal where they can submit their answer sheets according to their class and subjects. Similarly teachers also need something which can help them in evaluating the uploaded answer sheets.

“EXAM-EVALUATOR” has been developed keeping in mind the problems faced by students and teachers during online exams. As teachers were never much familiar with online mode, this website offers them an easy alternate method of checking students’ answer sheet and examination activities. This website is useful to evaluate answer sheets in digital format. This system lets the teachers generate results easily and efficiently. Teachers can create classes, add students and evaluate their answer sheets. After evaluating answer sheets teacher can download compiled result of each

class in PDF format. Students can export to email or download their result in all subjects in compiled form in PDF format.



## PROBLEM DEFINITION

The main purpose of “EXAM-EVALUATOR” is to improve the exam evaluation system easy and effective and consequently the online study system. Teachers were not much familiar with the online mode of evaluation. There are various platforms available for online studies. But there is no such platform available that provides the features of marks updating and result generation.

Following are some of the problems which led to the creation of this website:

**Problem 1:** There is no such single platform which provides both functionalities: Storing and evaluating the answer sheets and automatic result generation.

**Problem 2:** It is very difficult to check the answer sheets by annotating the PDF files on desktops or laptops. This task takes a lot of time and patience to check and evaluate the answer sheets of hundreds of students.

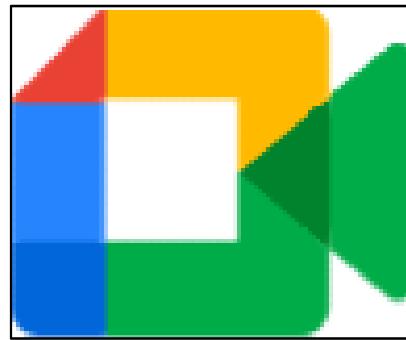
**Problem 3:** There is no such platform that displays detailed exam analysis and generates a marksheets for each student.



## RELATED WORK

For the purpose of online study, institutions are using various web conferencing apps like Google Meet, Zoom, Microsoft Teams, Blackboard etc.

- **Google Meet:** It is a video-communication service by Google. Previously it was known as Hagouts meet. In Google Meet a large number of students can join using the meeting link provided to them by the host, which in case of online study is the teacher. Here teacher can share his screen and teach students via audio and video communication. There is a chat-box option where students as well as teacher can write text message to interact with other members of the meeting. But there isn't any option to examine the answer sheets of students and generate their results.



Google Meet

- **Zoom:** It is also a web conferencing service. It has some better features than Google Meet. A larger number of students can join at the same time. Private interaction via can also be done either between teacher-student or student-student. Also it has features that we can share a specific app on our screen. Also we can share a document which is accessible to every member of the meeting. Host can give privileges to any member accordingly. But this also doesn't have the option to examine answer sheets and compile results of all students.



Zoom

- **Blackboard:** It is another service used by various institutions for the purpose of online study. It has multiple features for students as well as teachers. Online class via web conferencing, attendance system, quizzes etc. are its important features. But when it comes to exam evaluation and result generation, this doesn't provide any feature.



Blackboard

- **Microsoft Teams:** This is another video conferencing service from Microsoft. It is very much similar to Google Meet. It also doesn't have support for exam evaluation processes.



Microsoft Teams

Various other apps are also available which facilitate the purpose of online study but none of them provides the features of evaluating answer sheet documents and then generating results. "EXAM-EVALUATOR" provides these two much needed features for online study.

## TECHNOLOGIES USED

This website is being built using the following technologies:

- i. **PHP:** PHP is a server scripting language, and a powerful tool for making dynamic and interactive Web pages. PHP is a widely-used, free, and efficient alternative to competitors such as Microsoft's ASP. PHP 7.4.19 is the latest stable release. PHP code is usually processed on a web server by a PHP interpreter implemented as a module, a daemon or as a Common Gateway Interface (CGI) executable. On a web server, the result of the interpreted and executed PHP code which may be any type of data, such as generated HTML or binary image data would form the whole or part of an HTTP response. Various web template systems, web content management systems, and web frameworks exist which can be employed to orchestrate or facilitate the generation of that response. Additionally, PHP can be used for many programming tasks outside of the web context, such as standalone graphical applications and robotic drone control. PHP code can also be directly executed from the command line.



- ii. **JavaScript:** JavaScript (JS) is a lightweight, interpreted, or just-in-time compiled programming language with first-class functions. It is most well-known as the scripting language for web pages. JavaScript is high-level, often just-in-time compiled, and multi-paradigm. It has curly-bracket syntax, dynamic typing, prototype-based object-orientation, and first-class functions. Alongside HTML and CSS, JavaScript is one of the core technologies of the World Wide Web. Over 97% of websites use it client-side for web page behaviour, often incorporating third-party libraries. All major web browsers have a dedicated JavaScript engine to execute the code on the user's device. As a multi-paradigm language, JavaScript supports event-driven, functional, and imperative programming styles. It has application programming interfaces (APIs) for working with text, dates, regular expressions, standard data structures, and the Document Object Model (DOM).



- iii. **SASS:** SASS stands for Syntactically Awesome Stylesheet. SASS is an extension to CSS. It is completely compatible with all the versions of CSS. It reduces repetition of CSS and therefore saves time. Sass consists of two syntaxes. The original syntax, called “the indented syntax,” uses a syntax similar to Haml. It

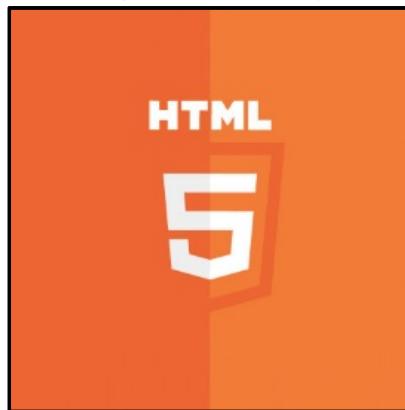
uses indentation to separate code blocks and newline characters to separate rules. The newer syntax, “SCSS” (Sassy CSS), uses block formatting like that of CSS. It uses braces to denote code blocks and semicolons to separate rules within a block. The indented syntax and SCSS files are traditionally given the extensions `.sass` and `.scss`, respectively. Sass (in the larger context of both syntaxes) extends CSS by providing several mechanisms available in more traditional programming languages, particularly object-oriented languages, but that are not available to CSS3 itself. When SassScript is interpreted, it creates blocks of CSS rules for various selectors as defined by the Sass file.



iv. **MySQL:** MySQL is the most popular Open Source Relational SQL Database Management System. MySQL is one of the best RDBMS being used for developing various web-based software applications. A relational database organizes data into one or more data tables in which data types may be related to each other; these relations help structure the data. SQL is a language programmers use to create, modify and extract data from the relational database, as well as control user access to the database. In addition to relational databases and SQL, an RDBMS like MySQL works with an operating system to implement a relational database in a computer's storage system, manages users, allows for network access and facilitates testing database integrity and creation of backups.



- v. **HTML5:** Hypertext Markup Language (HTML) is the standard markup language for documents designed to be displayed in a web browser. HTML 5 is the latest version. HTML5 includes detailed processing models to encourage more interoperable implementations; it extends, improves, and rationalizes the markup available for documents and introduces markup and application programming interfaces (APIs) for complex web applications. For the same reasons, HTML5 is also a candidate for cross-platform mobile applications because it includes features designed with low-powered devices in mind.



## METHODOLOGY

“EXAM-EVALUATOR” is a website for both, students and teachers. They can log into their accounts using their credentials. Credentials to students are given by the respective teacher.

**Registration process:** Teachers can register on the website using ‘REGISTER’ button provided on the top right corner. Registration can be done by entering the following details:

- Name
- Email id
- Picture (use Google drive link)
- Password

Credentials required for teachers to log in:

- **Registered email id:** This is the email id which the teacher uses while registering himself on “EXAM-EVALUATOR” website.
- **Password:** This password is generated by teachers itself at the time of registration.

Credentials required for students to log in:

- **Roll number:** This is provided to the students by respective teachers.
- **Email id:** This email id is provided to teachers by students to register themselves on the “EXAM-EVALUATOR”. Using this email id students log into their accounts.
- **Password:** This password is also provided to the students by teachers to let them log into their accounts.

“EXAM-EVALUATOR” provides various features for students as well as teachers.

## ADVANTAGES

### **Logistical Management:**

### **Traditional Answer Sheet Checking Process**



- 1 Administration
- 2 Logistic, Transport
- 3 Storage
- 4 Physical Handing

Logistical management is the organization of the question papers and answers sheets before the examination, after the examination and during the paper checking as well.

Physically answer sheet to be stored in a central location insecure environment. The exam paper checker needs to visit this centralized location in order to evaluate the answer sheets of the individual students. Location is one of the important constraints in such a situation.

If there are thousands of answer sheets to be evaluated then you may need hundreds of evaluators who should visit this central location and evaluate answer sheets in secure manner.

Moderators are also expected to visit the location to moderate / recheck answer sheets. The time consumed for this activity along with the cost is higher.

In some cases, universities or institutes prefer to send answer sheet copies through courier at examiner location. It involves delays and coordination activities. Physical handling of the answer sheet added to delays of result processing.

This integrated manner of dealing with the handling of the answer sheets is risky as well as extremely time-consuming.

## **Student Request for Answer Sheet Copy :**

If the student ever has issues or doubts regarding the marks or overall summation of the figures given to them, or if they wish to recheck their papers, it has now being made mandatory for the institutions to provide with that

Nowadays there are norms where students can request to have a photocopy of the checked/evaluated answer sheet. In the traditional methods, it becomes a tedious job of manually getting out the answer sheet and photocopying it in order to issue it to the student.

In the traditional method, it was a very tedious job of manually getting the answer sheets photocopied in order to issue it to the student.

Occasionally, there were also times when the sheets needed to be sent via post to the candidate, making it even vulnerable to damage of any sort.

The entire deal with manually handling the papers is very risky and time-consuming.

## **Identity Disclosure:**



Whilst any examination process, the privacy or say the identity of the candidate has to be secured. It is one of the most mandatory requirements of examination conduction.

In the traditional way of answer sheet evaluation, it is essential to hide identify student details to avoid malpractices. Manually each answer sheet should be arranged so as to hide the identity of the student.

This makes the identification of the candidate more obvious and the safety regarding the privacy of the student was much more at risk.

Apparently, there was a need to take action for the reduction of the errors that take place during the earlier methods of examination evaluation.

The perfect and most needed solution to the same was the adoption of the Onscreen Evaluation System, which is designed especially for the purpose of paper checking.

## **Onscreen evaluation eliminate most of the hassles of traditional processes:**

Onscreen evaluation is the ideal solution for the rectification or rather up-gradation of the age-old exercise of manual paper checking.

## Traditional Paper Evaluation Process



- Central Location to Collect all Answer Sheets
- Invitation to Paper Checkers/ Moderators at Central Location
- Secure Physical Environment for Evaluation
- Physical Storage of Answer Sheets
- Logistical Activities

## Onscreen Answer Evaluation



- Answer Sheet Scanning
- Onscreen Evaluation
- Automatic Score Calculations
- Instant Result Generation
- Student Request for Answer Sheet Copy Managed through Software



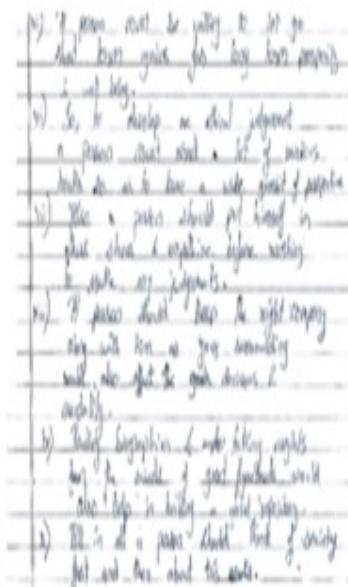
With the perfectly tailored software for the evaluation of the answer sheets, Onscreen evaluation has come up to be extremely handy and user-friendly for the users, along with being free from human error.

The software of Onscreen evaluation is specifically designed in such a way that it not only checks papers without error but also comes with many distinct features.

## **Answer Sheet Scanning:**

It involves **process to scan each answer sheet** and store in the software system in secure manner.

High speed scanners scan the answer sheet with proper masking process. Student identity information like name, Roll No are masked.



## **Answer Sheet Evaluation: (Digital Correction of Exam Papers):**

There is no location constraint in such a case. Any examiner/ answer sheet checker or Moderator can verify/ evaluate answer sheets sitting at their location.

Person can securely log in to the system and can evaluate scanned answer sheets.

The screenshot illustrates a digital evaluation system for scanned answer sheets. The interface is divided into several sections:

- Marks to be assigned:** A vertical column of green buttons for marking scores from 0 to 10, with a red square highlighting the '5' button.
- Page Number:** Displays "Page Number : 1".
- Time Taken for Evaluation:** Shows "Time Taken : 00:01:02".
- Total Score Auto Calculated Here:** A table showing the score for each question out of 10, with a total of 0.00 / 30.00.
- Question Text:** The question being evaluated: "Explain Product Building with Suitable example...".
- Actual annotations added:** Handwritten notes on the scanned paper, including:
  - "Brand Architecture Process"
  - "Brand Architecture is used to organize brand, product and service according to the convenience of the audience"
  - "This allows the consumer's to provide their input or comment on various brand in family while learning about only one."
  - "For example, Miller brand sells its"
- Page Numbers Visited/ Not Visited:** A list of page numbers: 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20.
- View Question Paper/ Model Answer Sheet for Reference:** Buttons for viewing the question paper or model answer sheet.
- Finish Evaluation Button:** A button to complete the evaluation process.

The technology-driven process is efficient and the time needed to evaluate answer sheet reduces significantly as physical handling of answer sheet is eliminated.

Logistical cost and travel management of each evaluator/moderator is eliminated.

## **Auto Calculation of Total Marks for Answer Sheet:**

The system helps to auto calculate the total. As an examiner you need not have to keep track on compulsory, optional questions attempted by the students. The system takes into consideration best of performances of the students for optional answers.

The calculation of the total is as per the question paper pattern and marking scheme. It eliminates manual processes. As an examiner you can save 5 to 10 minutes of total calculation activity.

## **Result Generation:**



It becomes automated as the system can directly calculate the result and can generate mark sheets instantly. It can eliminate the process of manually entering marks in the software.

There is facility to export the result in excel format. This format can be imported in any of the result generation solution. Manual data entry work of entering marks, validation of it can be eliminated.

It would help to speed up the result generation process.

It is mandatory to declare results for the university within 45 days of examination dates. There are a timeline and pressure to complete the entire answer sheet evaluation activity within the stipulated timeline.

**An onscreen evaluation system** can help to simplify the result generation process. The system is defined in such a way that calculation of total marks obtained by the student is auto based on the exam pattern.

If the student has attempted 4 questions out of 5 and there is the instruction of attempt any 3 out of 5 then the system would consider the best of 3 scores while calculating the results. Examiners need not have to keep track of it.

It saves time on manual score calculations. The entire result of the individual as well as a group of students is available on a single click button and it can be exported in the excel sheet as well.

## **Student request for scan copy:**

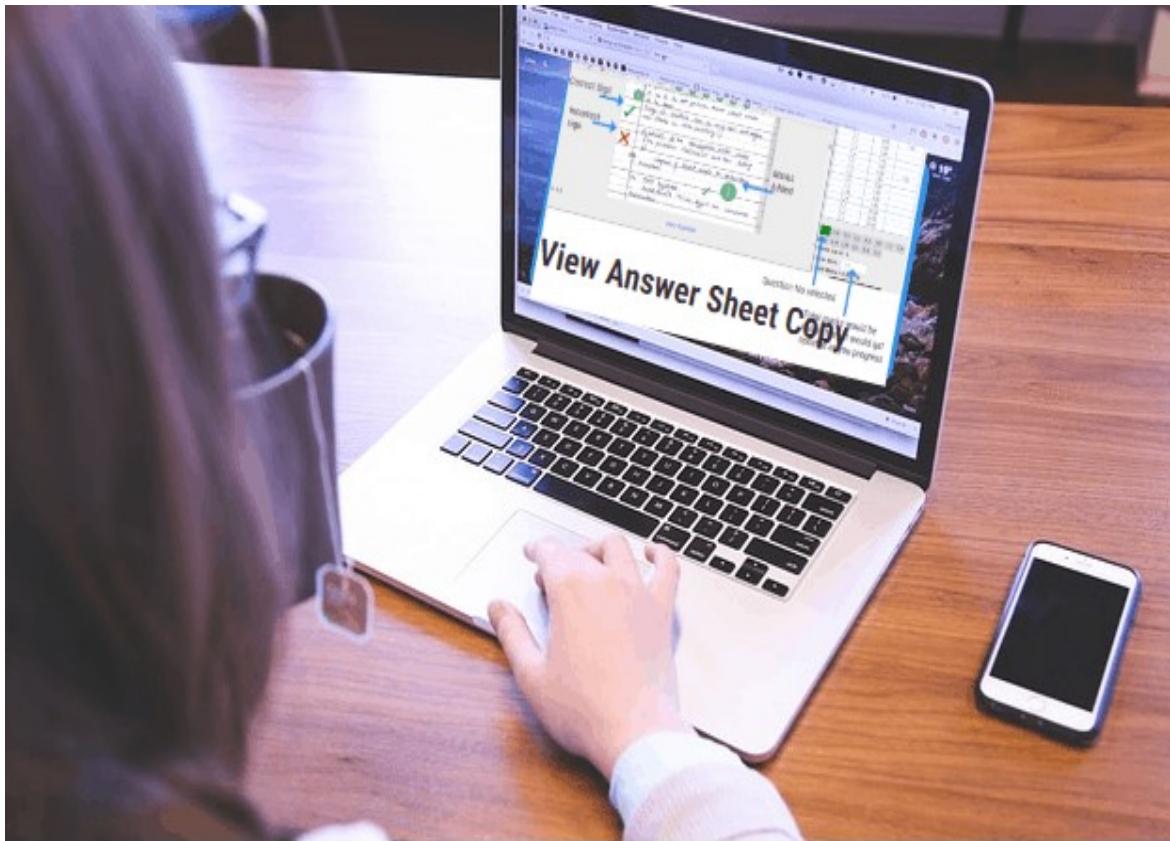
It can be managed easily from the software system.

As per rules and regulations, most of the institutions and universities allow students to see their evaluated answer sheet copies. Students need to make payments to get access to their evaluated answer sheets.

In case of such requests, the institution needs to identify physical answer sheet copy, prepare a photocopy of it and issue it to the respective students. There is a significant logistical and administrative activity in this process.

An onscreen evaluation system can eliminate all administrative hassles and can simplify this process. Students can easily see digitally evaluated answer sheet using technology.

If particular student requests for such a copy then the administrator can assign View access right to such student so that students can see individual answer sheet copy online itself.



## Re-Evaluation of Answer Sheet :

There are cases when the students are not satisfied with the results, and request for revaluation or rechecking of answer sheets. Onscreen evaluation makes it simpler to do this activity. This process can be completed in record time. It can help to generate results in a quick time.

The traditional process of re-evaluation involves activity to handle physical answer sheets. Moderator is provided with physical answer sheet copy where all entries made by previous examiners are masked. The process of masking is manual and it can be a time-consuming activity.

Moderator re-evaluates the answer sheet and the new score (if it is significantly different from the original score) is updated in the system. This new data should be used to print a new mark sheet for the student.

There are 3 to 4 steps of handling physical answer sheets and manual data entry work. The chances of error in this activity are high. Using the onscreen evaluation process, you can easily manage moderation and rechecking work as a software reassigned answer sheet copy to the moderator with masking of previously evaluated entries.



## FEATURES FOR STUDENTS

- **Upload answer sheet:** Students can upload their answer sheets using the '*UPLAOD ANSWERSHEET*' button. Students have to enter the link of the PDF uploaded on Google Drive.
- **Show answer sheet:** Students can see their uploaded answer sheets using the '*SHOW ANSWERSHEET*' button. Student can view the uploaded answer sheet to verify if he/she uploaded the correct PDF.
- **Result board:** It displays list of all subjects whose PDFs has been uploaded, marks in each question and total marks gained along with the PDF uploaded.

- **Download marksheet:** To download marksheet '*DOWNLOAD MARKSHEET*' button is provided. Students can download or export the marksheets through mail which specifies subject name & the marks gained in respective subjects.



## FEATURES FOR TEACHERS

- **Create Class :** Teacher can create a class by specifying Class name & Subject.
- **Modify / Delete :** Teacher can modify class details or can even delete class using the '*MODIFY*' button.
- **Load Students :** After creating a class, teacher shall upload link of Class List. This list will contain the information of students to be added in a specific class. By doing so, all student data will get stored in Database.
- **Export Result :** After evaluation of all answer sheets uploaded by students, the result can be exported. Compiled result of students can be downloaded in PDF format.
- **Examine Answer sheets :** Clicking this button answer sheet along with a small form is displayed. Teacher can enter marks gained in each question. The question number and the respective marks is to be filled in the prompts provided on the left hand side of web page. Cumulative marks is calculated simultaneously and by clicking on submit button marks get stored in the data base.

# SOURCE CODE

## Index.php:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <link rel="stylesheet" href="./dist/css/style.css">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <link rel="preconnect" href="https://fonts.gstatic.com">
    <script src="https://unpkg.com/sweetalert/dist/sweetalert.min.js"></script>
    <link href="https://fonts.googleapis.com/css2?family=Roboto:wght@500&display=swap"
rel="stylesheet">
    <link href="https://fonts.googleapis.com/css2?family=Nunito:wght@400;700;900&display=swap"
rel="stylesheet">
    <link href="https://fonts.googleapis.com/css2?family=Poppins:wght@500&display=swap"
rel="stylesheet">
    <script src=".node_modules/waypoints/lib/noframework.waypoints.min.js"></script>
    <title>Exam-Evaluator</title>
</head>
<body id="body">
    <?php
        if (isset($_GET['email']) === true) {
            if ($_GET['email'] == "exist")
                echo '
                    <script>
                        swal("Error", "Email Already Exist!", "error").then(name => {
                            window.location.href = "./";
                        });
                    </script>';
            }
            if (isset($_GET['success']) === true) {
                if ($_GET['success'] == "data-added") {
                    echo '<script>
                        swal("Success", "You\'re registered sucessfully!", "success").then(name => {
                            window.location.href = "./";
                        });
                    </script>';
                }
            }
        }
    ?>
    <header>
        <nav class="nav">
            <div class="nav__logo">
                
```

```

<div class="web-name">
    <p class="nav__web-name" style="margin-left: 10px;">Exam Evaluator</p>
</div>
</div>
<div class="nav__menu">
    <button id="signinBtn" class="white-button nav__button">Sign In</button>
    <button id="signupBtn" class="primary-button nav__button">Register</button>
</div>
</nav>
</header>
<section class="intro">
    <div style="height: 1px; width: 100%; margin-bottom: 25px;"></div>
    <div class="intro__icon">
    </div>
    <div style="height: 4px; width: 100%;" id="waypoint"></div>
    <div class="intro__head" id="introHeadID">Digital Evaluation of Answer sheets</div>
    <div class="body-text intro__body">Digital answer sheet evaluation provides many advantages for the education institutes to simplify post examination activities leading to result processing.</div>
</section>
<section class="why-app" style="margin-top: 16px">
    <div class="why-app__text" style="text-align: center">
        <div class="why-app__text__blue-head" style="background: #fdbf43">
            Sign In to continue.
        </div>
    </div>
</section>
<!-- Register Section -->
<section class="register" id="register">
    <div class="register__overlay">
    </div>
    <div class="register__content">
        <div class="register__details">
            
            <h1>Welcome to Exam Evaluator</h1>
            <div class="register__forms">
                
                <form action=".//resources/php/registration.php" onsubmit="return validateForm()" method="POST" class="form">
                    <input class="form__input" type="text" id="tea_name" name="tea_name" required placeholder="Name">
                    <input class="form__input" type="email" name="tea_email" placeholder="Email ID">
                    <input class="form__input" type="text" name="tea_picture" placeholder="Picture(Google Drive Link)">
                    <input class="form__input" type="password" id="tea_pass" name="tea_pass" required placeholder="Password">
                    <input class="form__input" type="password" id="tea_con_pass" name="tea_con_pass" placeholder="Confirm Password">
                </form>
            </div>
        </div>
    </div>
</section>

```

```

        <button type="submit" class="primary-button" name="submit">Submit</button>
    </form>
</div>
</div>
</section>
<!-- Teacher Section --&gt;
&lt;section class="features"&gt;
    &lt;div class="features__heading"&gt;
        &lt;h1&gt;Features&lt;/h1&gt;
    &lt;/div&gt;
    &lt;div class="features__feature"&gt;
        &lt;div class="features__feature__teacher feature_box"&gt;
            &lt;h1&gt;Teacher&lt;/h1&gt;
            &lt;ol class="featureList"&gt;
                &lt;li&gt;&lt;strong&gt;Create Class : &lt;/strong&gt;Teacher can create a class by specifying Class name &amp; Subject.&lt;/li&gt;
                &lt;li&gt;&lt;strong&gt;Modify / Delete : &lt;/strong&gt;Teacher can modify class details or can even delete class.&lt;/li&gt;
                &lt;li&gt;&lt;strong&gt;Load Students : &lt;/strong&gt;After creating a class, teacher shall upload link of Class List. By doing so, all student data will get stored in Database.&lt;/li&gt;
                &lt;li&gt;&lt;strong&gt;Export Result : &lt;/strong&gt;Compiled result of students can be downloaded in PDF format.&lt;/li&gt;
                &lt;li&gt;&lt;strong&gt;Examine Answersheets : &lt;/strong&gt;Clicking this button answersheet along with a small form is displayed. Teacher can enter marks gained in each question. Cumulative marks is calculated simultaneously and by clicking on submit button marks get stored in the data base.&lt;/li&gt;
            &lt;/ol&gt;
        &lt;/div&gt;
        &lt;div class="features__feature__teacher feature_box"&gt;
            &lt;h1 class="yellow"&gt;Student&lt;/h1&gt;
            &lt;ol class="featureList"&gt;
                &lt;li&gt;&lt;strong&gt;Upload Answersheet : &lt;/strong&gt;Student have to enter the link of the PDF uploaded on Google Drive.&lt;/li&gt;
                &lt;li&gt;&lt;strong&gt;Show Answersheet : &lt;/strong&gt;Student can view the uploaded answersheet to verify if he/she uploaded the correct PDF.&lt;/li&gt;
                &lt;li&gt;&lt;strong&gt;Result Board : &lt;/strong&gt;It displays list of all subjects whose PDFs has been uploaded, marks in each question and total marks gained along with the PDF uploaded.&lt;/li&gt;
                &lt;li&gt;&lt;strong&gt;Download Marksheets : &lt;/strong&gt;Student can download or export the marksheets through mail which specifies subject name &amp; the marks gained in respective subject&lt;/li&gt;
            &lt;/ol&gt;
        &lt;/div&gt;
    &lt;/div&gt;
&lt;/section&gt;
&lt;script src=".//resources/js/script.js"&gt;&lt;/script&gt;
&lt;script src=".//resources/js/waypoint.js"&gt;&lt;/script&gt;
&lt;script src=".//resources/js/responsive.js"&gt;&lt;/script&gt;
&lt;/body&gt;
&lt;/html&gt;
</pre>

```

## **connection.php**

```
<?php

$con = mysqli_connect('localhost', 'root', "", "exam_evaluate");

function extractor($url)

{

    if(strpos($url, "drive.google.com") !== false)

    {

        $id = explode('/', $url)[5];

        return "https://drive.google.com/uc?id=".$id;

    }

    else

    {

        return $url;

    }

}

function getPreview($url)

{

    if(strpos($url, "drive.google.com") !== false)

    {

        $id = explode('/', $url)[5];

        return "https://drive.google.com/file/d/".$id."/preview";

    }

    else

    {

        return $url;

    }

}

?>
```

## **teach\_login.php**

```
<?php
```

```

include './connection.php';

$stu_rollNo = $_POST['stu_rollNo'];
$stu_email = $_POST['stu_email'];
$stu_pass = $_POST['stu_pass'];

$query = mysqli_query($con, "SELECT * from `student_cred` where `stu_rollNo`='$stu_rollNo'");
if(mysqli_num_rows($query) > 0)

{
    $query = mysqli_query($con, "SELECT * from `student_cred` where `stu_rollNo`='$stu_rollNo' and `stu_email`='$stu_email'");

    if(mysqli_num_rows($query) > 0)

    {
        $query = mysqli_query($con, "SELECT * from `student_cred` where `stu_rollNo`='$stu_rollNo' and `stu_email`='$stu_email' and `stu_pass`='$stu_pass'");

        if(mysqli_num_rows($query) > 0)

        {
            session_start();
            $_SESSION['rollNo'] = $stu_rollNo;
            header("location: ../../dashboard/student-dashboard/");
            echo "All three matched";
        }
    }
    else
    {
        header("location: ../../login?error=wrong_pass");
        //return to main login page and show error popup(pass does not exist)
    }
}
else
{
    header("location: ../../login?error=wrong_mail");
    echo "email to this roll num does not match";
    //return to main login page and show error popup(email to this roll num does not match)
}
}
else
{

```

```

header("location: ../../login?error=wrong_roll");
//return to main login page and show error popup(roll number not exist)

}

?>

```

## **student login.php**

```

<?php

include './connection.php';

$stu_rollNo = $_POST['stu_rollNo'];

$stu_email = $_POST['stu_email'];

$stu_pass = $_POST['stu_pass'];

$query = mysqli_query($con, "SELECT * from `student_cred` where `stu_rollNo`='$stu_rollNo'");

if(mysqli_num_rows($query) > 0)

{

    $query = mysqli_query($con, "SELECT * from `student_cred` where `stu_rollNo`='$stu_rollNo' and `stu_email`='$stu_email'");

    if(mysqli_num_rows($query) > 0)

    {

        $query = mysqli_query($con, "SELECT * from `student_cred` where `stu_rollNo`='$stu_rollNo' and `stu_email`='$stu_email' and `stu_pass`='$stu_pass'");

        if(mysqli_num_rows($query) > 0)

        {

            session_start();

            $_SESSION['rollNo'] = $stu_rollNo;

            header("location: ../../dashboard/student-dashboard/");

            echo "All three matched";

        }

    else

    {

        header("location: ../../login?error=wrong_pass");

        //return to main login page and show error popup(pass does not exist)

    }

}

```

```

    else    {
        header("location: ../../login?error=wrong_mail");
        echo "email to this roll num does not match";
        //return to main login page and show error popup(email to this roll num does not match)
    }
}

else
{
    header("location: ../../login?error=wrong_roll");
    //return to main login page and show error popup(roll number not exist)
}
?>

```

## **updatingMarks.php**

```

<?php
    include "./connection.php";
    session_start();
    $tea_id = $_SESSION['teaID'];
    $class_id = $_SESSION['class_id'];
    $i = 0;
    foreach($_POST as $k => $v){
        ++$i; // note I'm using ++$i instead of $i++, the one I'm using is faster
        echo $i." - ".$k." - ".$v."<br>";
    }
    if(isset($_POST[$k])){
        $query_num_columns = mysqli_query($con, "SELECT count(*) FROM
information_schema.columns WHERE table_name ='exam_result';");

        $fetch_num_columns = mysqli_fetch_array($query_num_columns);
        if($i <= ($fetch_num_columns[0]-3)){
            $query = "UPDATE `exam_result` SET ";
            for($j = 1; $j < ($i-2); $j++){
                $q = "Q".($j);

```



```

        header("location: ../../marks-evaluator/");
    }
}

else{
    echo "Error";
}

// alter table and add columns first
}

}

?>

```

## **modifyClass.php**

```

<?php

include "./connection.php";

session_start();

$tea_id = $_SESSION['teaID'];

$classID = $_GET['classID'];

$update = 'updateBtn' . $_GET['i'];

$delete = 'delete_button' . $_GET['i'];

if(isset($_POST[$update])){

    $class_name = strtoupper($_POST['class_name']);

    $full_sub_name = ucwords($_POST['full_sub_name']);

    $sub_name_words = explode(" ", $full_sub_name);

    $sub_name = "";

    for($i = 0; $i < count($sub_name_words); $i++){

        if(ctype_alpha($sub_name_words[$i][0]))

            $sub_name = $sub_name . $sub_name_words[$i][0];

    }

    $class_id = $class_name . "-" . $sub_name;

    $query = mysqli_query($con, "UPDATE `exam_classes` SET `class_id` = '$class_id', `class_name` = '$class_name', `full_sub_name` = '$full_sub_name', `sub_name` = '$sub_name' WHERE `tea_id` = '$tea_id' AND `class_id` = '$classID'");
}

```

```

if($query > 0){

    header("location: ../../dashboard/teacher-dashboard/");
}

else{

    echo "Not Added";

    // Failed to add SWAL

}

}

if(isset($_POST[$delete])){

    $query = mysqli_query($con, "DELETE FROM `exam_classes` WHERE `class_id` = '$classID' AND
`tea_id` = '$tea_id'");

    if($query > 0){

        header("location: ../../dashboard/teacher-dashboard/");
    }

    else{

        echo "Not Added";

        // Failed to add SWAL

    }

}

?>

```

## **logout.php**

```

<?php

session_start();

session_unset();

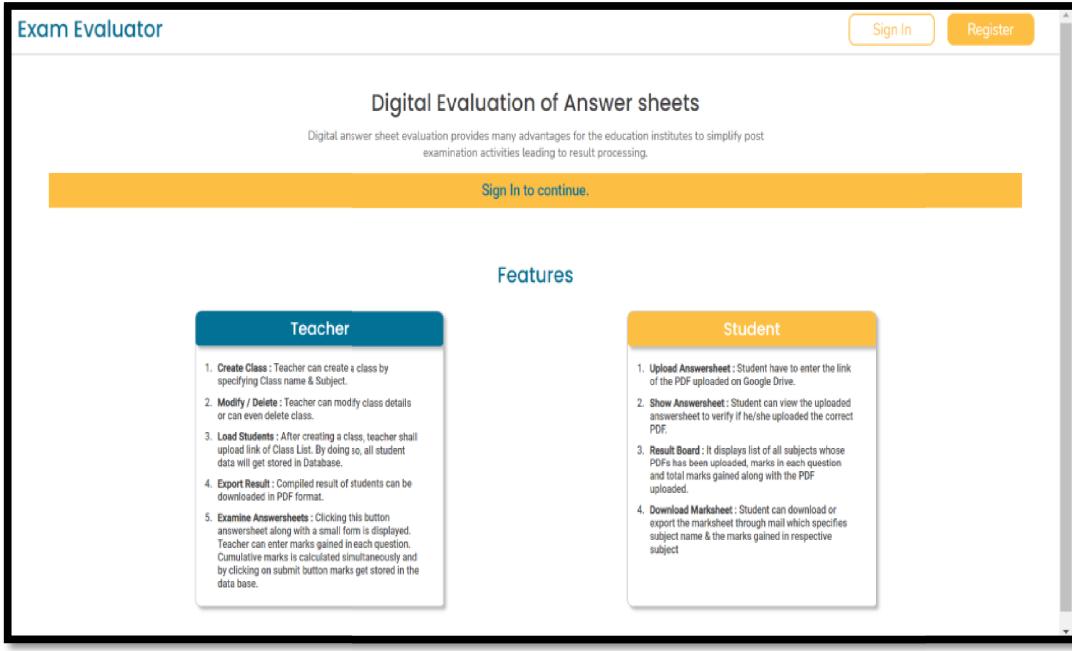
session_destroy();

header("location: ../../");?>

```

# SNAPSHOTS

## 1. Home Screen:



The screenshot shows the home page of the Exam Evaluator application. At the top, there is a navigation bar with the title "Exam Evaluator" on the left and "Sign In" and "Register" buttons on the right. Below the navigation bar, the main content area has a header "Digital Evaluation of Answer sheets" with a sub-instruction: "Digital answer sheet evaluation provides many advantages for the education institutes to simplify post examination activities leading to result processing." A yellow button at the bottom of this section says "Sign In to continue.". Below this, there is a section titled "Features" which is divided into two parts: "Teacher" and "Student".

**Teacher Features:**

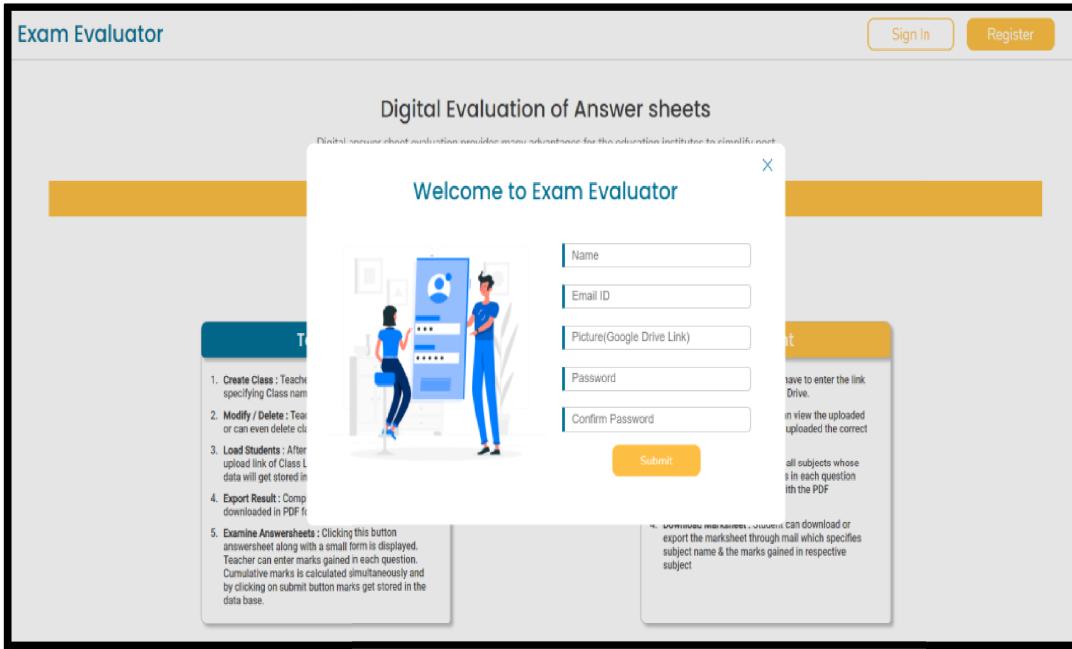
1. Create Class : Teacher can create a class by specifying Class name & Subject.
2. Modify / Delete : Teacher can modify class details or can even delete class.
3. Load Students : After creating a class, teacher shall upload link of Class List. By doing so, all student data will get stored in Database.
4. Export Result : Compiled result of students can be downloaded in PDF format.
5. Examine Answersheets : Clicking this button answersheet along with a small form is displayed. Teacher can enter marks gained in each question. Cumulative marks is calculated simultaneously and by clicking on submit button marks get stored in the data base.

**Student Features:**

1. Upload Answersheet : Student have to enter the link of the PDF uploaded on Google Drive.
2. Show Answersheet : Student can view the uploaded answersheet to verify if he/she uploaded the correct PDF.
3. Result Board : It displays list of all subjects whose PDFs has been uploaded, marks in each question and total marks gained along with the PDF uploaded.
4. Download Marksheet : Student can download or export the marksheet through mail which specifies subject name & the marks gained in respective subject

Home Screen

## 2. Registration:



The screenshot shows the registration page of the Exam Evaluator application. At the top, there is a navigation bar with the title "Exam Evaluator" on the left and "Sign In" and "Register" buttons on the right. Below the navigation bar, the main content area has a header "Digital Evaluation of Answer sheets" with a sub-instruction: "Digital answer sheet evaluation provides many advantages for the education institutes to simplify post examination activities leading to result processing." A yellow button at the bottom of this section says "Sign In". A modal window titled "Welcome to Exam Evaluator" is open in the center. This modal contains a cartoon illustration of two people interacting with a large computer monitor. To the right of the illustration is a form with fields for "Name", "Email ID", "Picture(Google Drive Link)", "Password", and "Confirm Password". A "Submit" button is located below these fields. To the right of the form, there is explanatory text about the registration process. On the left side of the registration form, there is a sidebar with "Teacher Features" listed.

**Teacher Features:**

1. Create Class : Teacher can create a class by specifying Class name & Subject.
2. Modify / Delete : Teacher can modify class details or can even delete class.
3. Load Students : After creating a class, teacher shall upload link of Class List. By doing so, all student data will get stored in Database.
4. Export Result : Compiled result of students can be downloaded in PDF format.
5. Examine Answersheets : Clicking this button answersheet along with a small form is displayed. Teacher can enter marks gained in each question. Cumulative marks is calculated simultaneously and by clicking on submit button marks get stored in the data base.

**Registration Form Fields:**

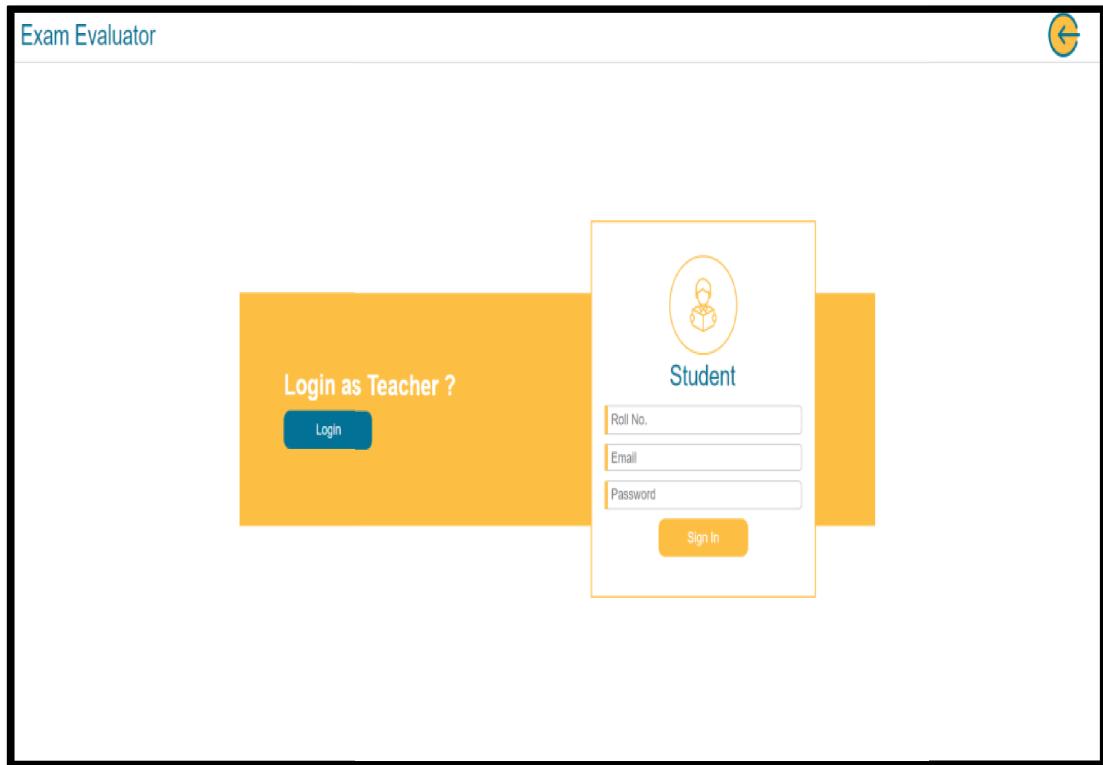
- Name
- Email ID
- Picture(Google Drive Link)
- Password
- Confirm Password

**Registration Instructions:**

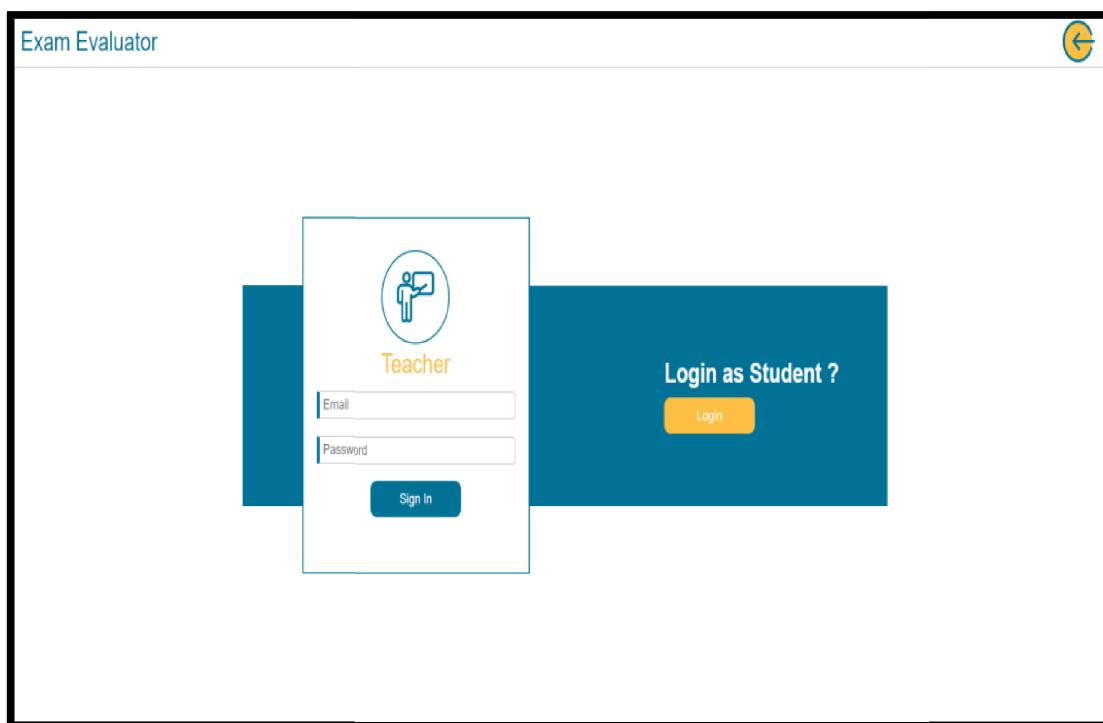
Student have to enter the link of the PDF uploaded on Google Drive. Student can view the uploaded answersheet to verify if he/she uploaded the correct PDF. It displays list of all subjects whose PDFs has been uploaded, marks in each question and total marks gained along with the PDF uploaded. Student can download or export the marksheet through mail which specifies subject name & the marks gained in respective subject

Registration

### 3. Sign In:

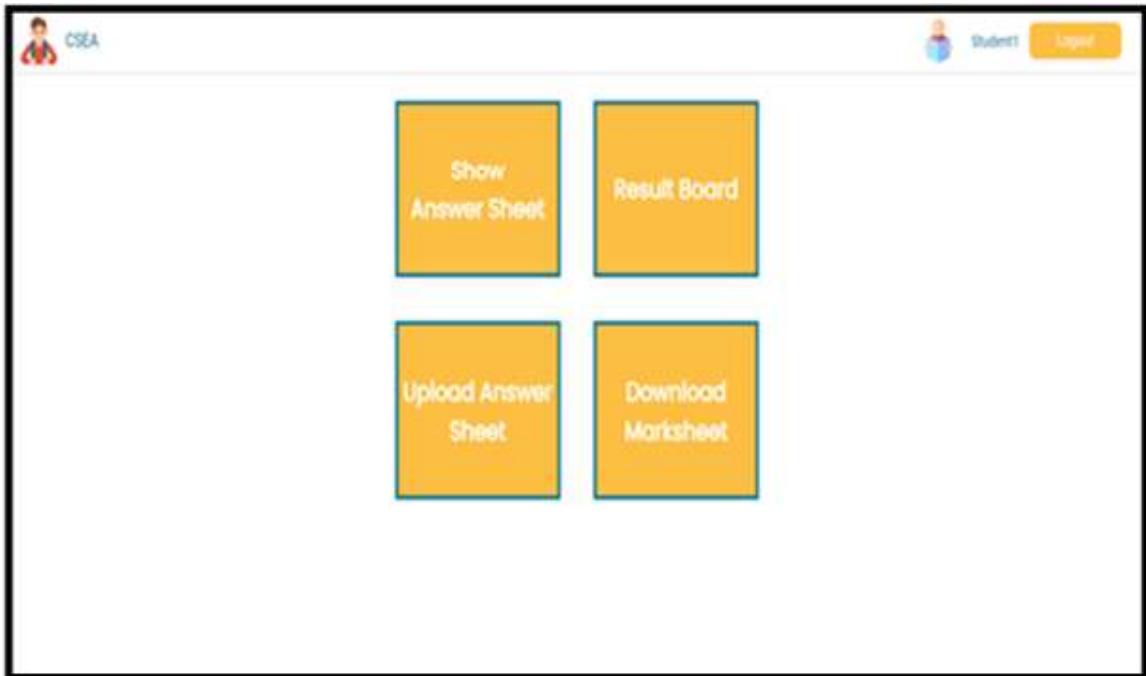


Log In as Student



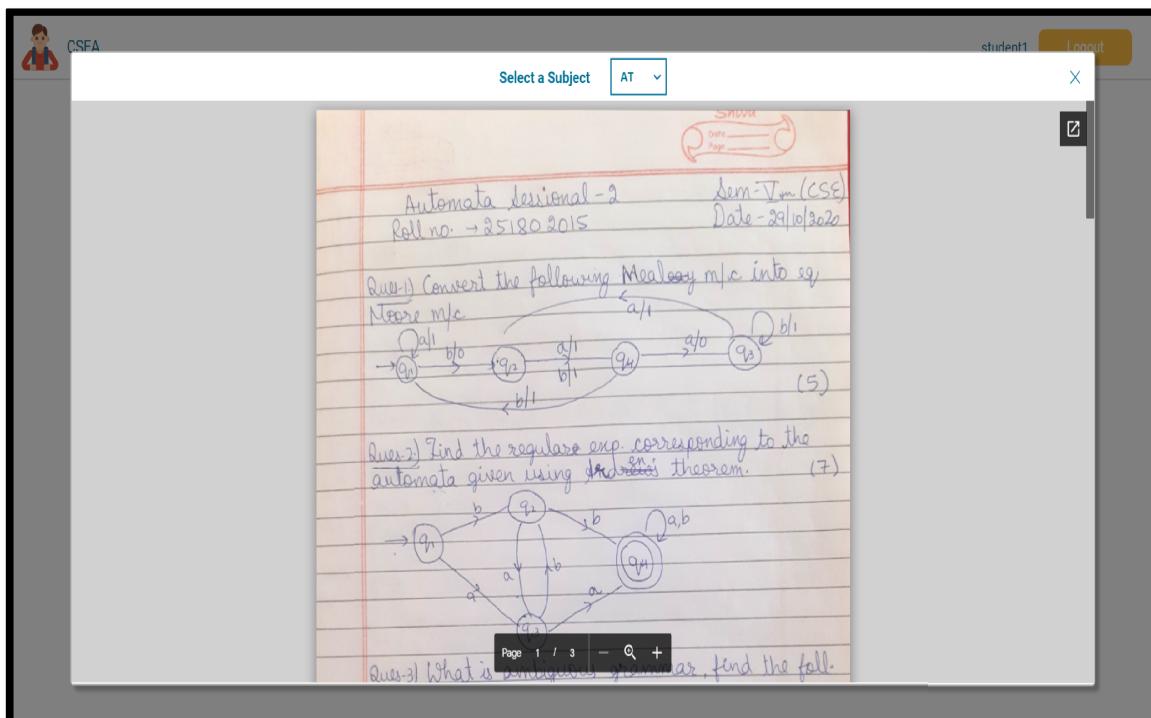
Log In as Teacher

#### **4. Student Dashboard:**



## Student Dashboard

### **5. Show Answer sheet Option:**



### Show Answer-sheet Option

## 6. Result Board Option:

The screenshot shows a dashboard with two main sections. On the left, under 'Names', there are three entries: AT, CN, and COA. To the right, under 'Enter Marks', is a table with columns 'Questions' and 'Marks'. The marks are as follows: Q1=10, Q2=9, Q3=0, Q4=0, Q5=0, Q6=0, Q7=0. A total mark of 19 is displayed at the bottom. On the right side of the dashboard, there is a handwritten note on lined paper. The note includes the following text:  
Automata Sessional - 2  
Sem - IV (CSE)  
Date - 29/10/2020  
Roll no. → 251802015  
Ques-1) Convert the following Mealy m/c into eq  
Mealy m/c  
Diagram of a Mealy machine with states q1, q2, q3, q4 and transitions labeled with inputs a and b and outputs s.  
Ques-2) Find the regular exp. corresponding to the automata given using ~~the~~ this theorem. (7)  
Diagram of a DFA with states q1, q2, q3, q4 and transitions labeled with inputs a and b.  
Ques-3) What is ambiguous grammar, find the foll.  
grammar is [REDACTED]  
The note also includes a small logo for 'SOMA' and a link 'Drive Page'.

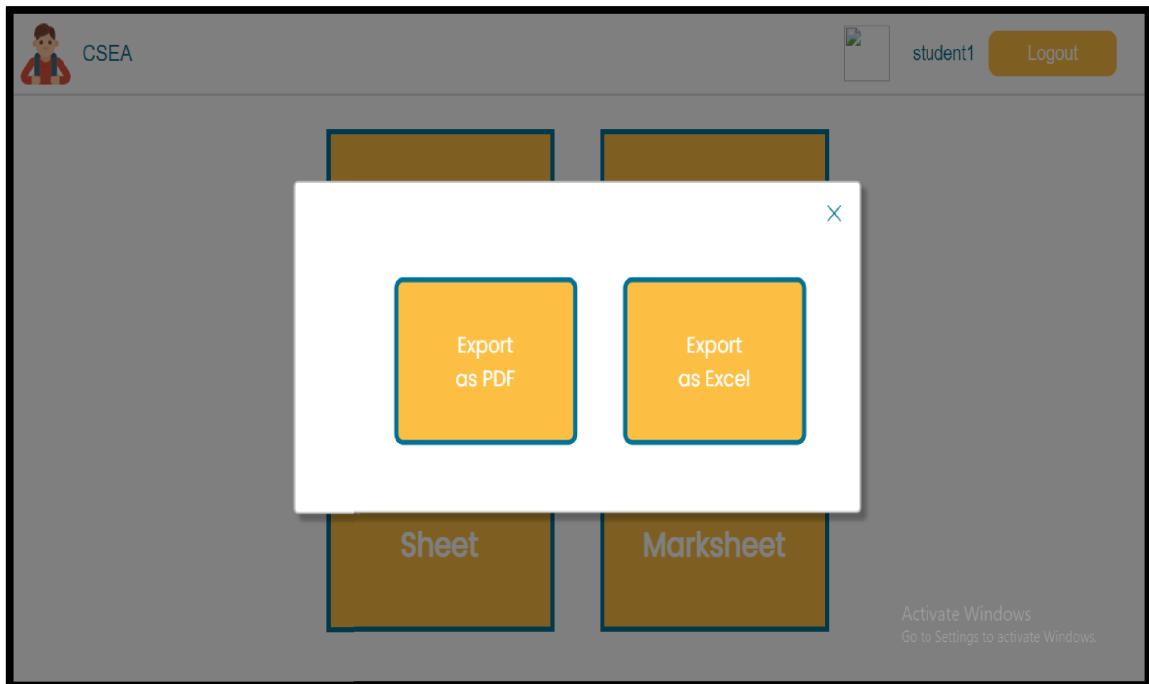
Result Board Option

## 7. Upload Answer Sheet Option:

The screenshot shows a modal window titled 'Upload Answer sheet'. It features a large orange pencil icon at the top. Below the title, there is a dropdown menu labeled 'Select a Subject' and a text input field labeled 'Drive link'. At the bottom of the modal is a large orange 'Upload' button. The background of the page has a dark grey header with the CSEA logo, user information ('student1'), and a 'Logout' button. In the bottom right corner of the page, there is a message: 'Activate Windows' and 'Go to Settings to activate Windows.'

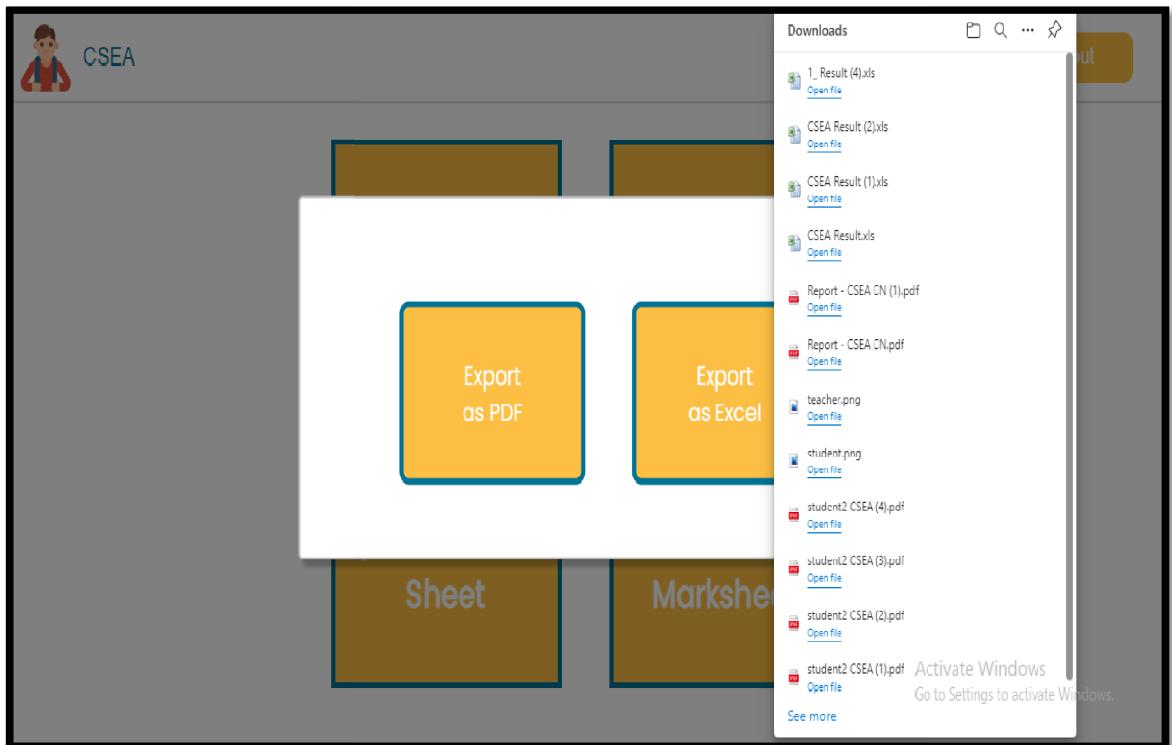
Upload Answer Sheet Option

## 8. Export Data Option:



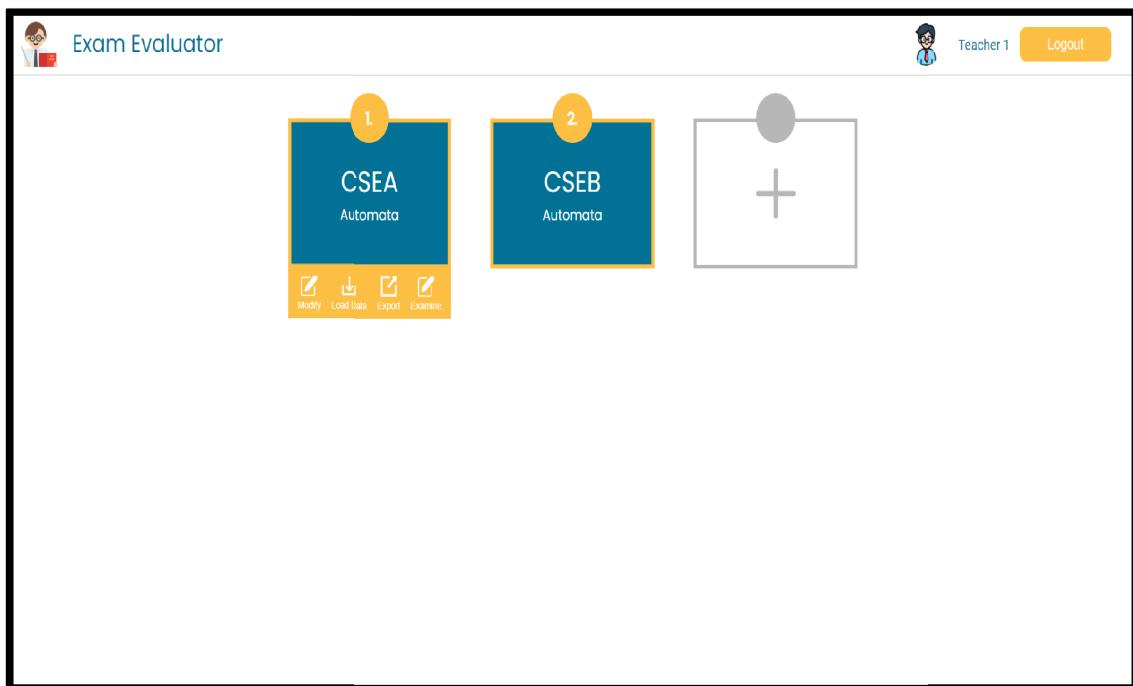
Export Data Option

## 9. List Of Downloads of Data



List Of Downloads of Data

## 10. Teacher Dashboard:



Teacher Dashboard

## 11. Examine window:

A screenshot of the "Examine" window. On the left, there's a table titled "Names" with three entries: "1. student1", "2. student2", and "3. student3". To the right of this is a table titled "Enter Marks" with columns "Questions" and "Marks". The marks for each question are: 1. 10, 2. 9, 3. 0, 4. 0, 5. 0, 6. 0, 7. 0. At the bottom left are buttons for "Total = 19" and "Submit". On the right side of the window, there is a handwritten note on lined paper. The note includes the following text:

Automata Revisional - 2  
Date - 29/10/2020  
Roll no. → 251802015

Ques-1) Convert the following Mealy m/c into eg  
Mealy m/c

Diagram of a Mealy machine with states q1, q2, q3, q4 and transitions labeled with inputs a and b and outputs 0 or 1. The transitions are: q1 to q2 on a/b, q2 to q3 on a/b, q3 to q4 on a/b, q4 to q1 on a/b, q1 to q3 on a/b, and q2 to q4 on a/b. The output for each transition is either 0 or 1, indicated by arrows above the transitions.

Ques-2) Find the regular exp. corresponding to the automata given using deMorgan's theorem. (7)

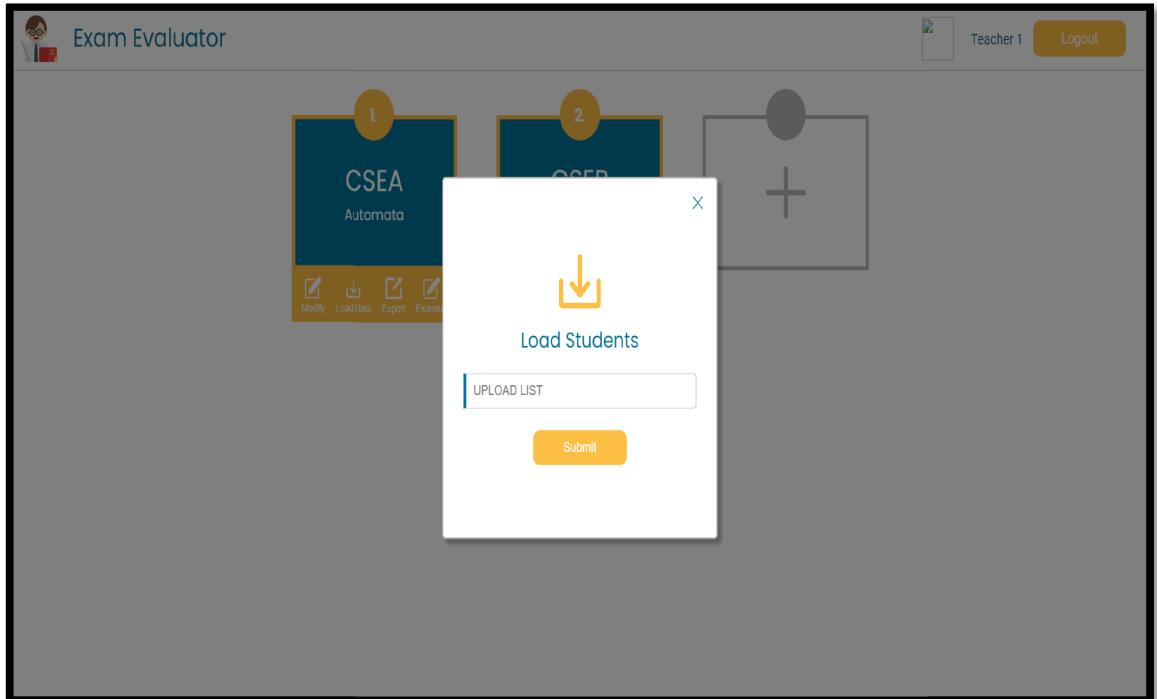
Diagram of a DFA with states q1, q2, q3, q4. Transitions: q1 to q2 on a, q2 to q3 on b, q3 to q4 on a, q4 to q1 on b, q1 to q3 on a, and q2 to q4 on a. State q4 is the final state, indicated by a double circle.

Ques-3) What is ambiguous grammar, find the fall grammar u

Page 1 / 3 - Q +

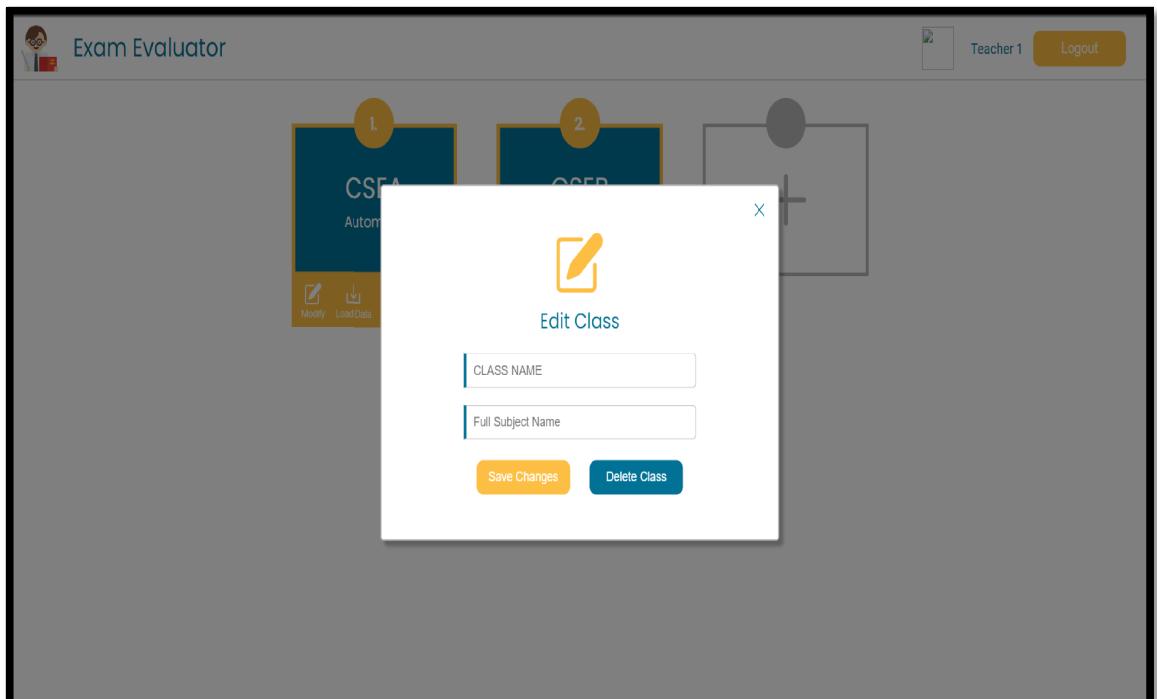
Examine Window

## 12. Load List Option:



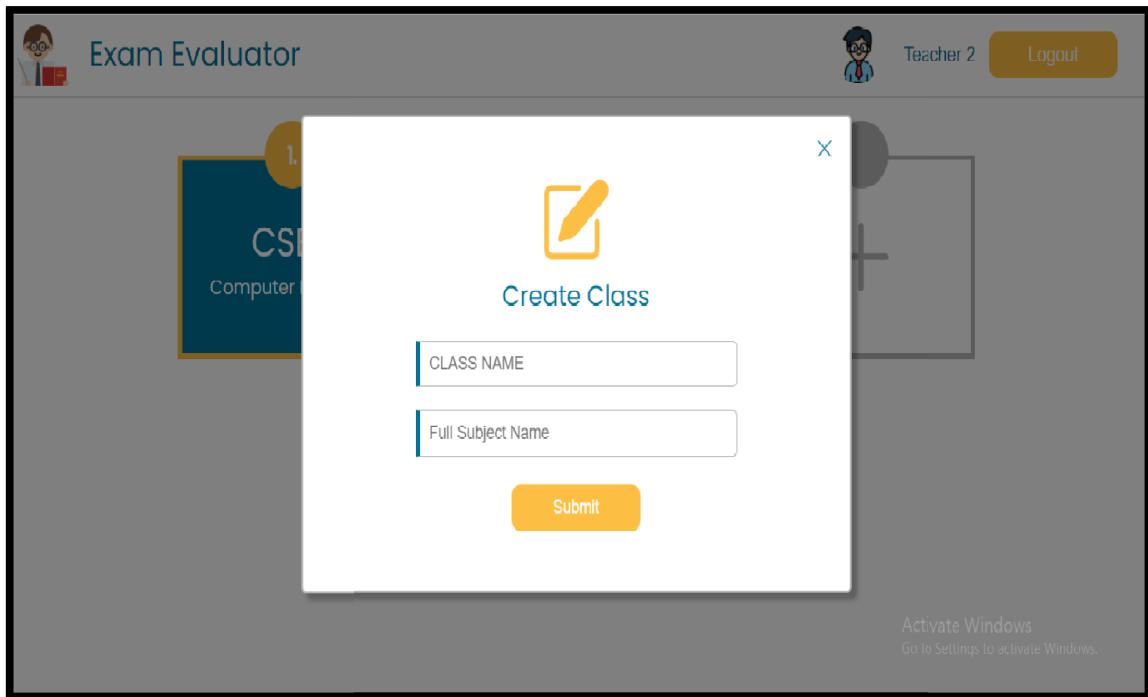
Load List Option

## 13. Modify option:



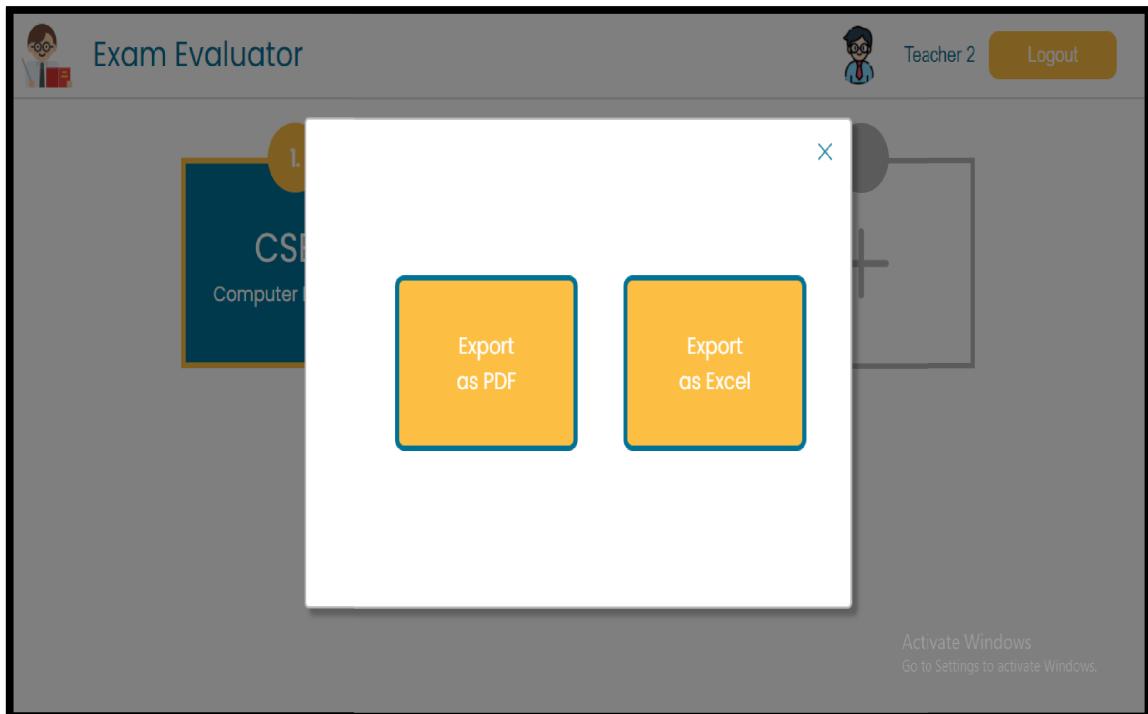
Modify Option

#### 14. Create Class Option



Create Class Option

#### 15. Export Data Option:



Export Data Option



# FUTURE SCOPE

Nothing is cent percent complete. Though “EXAM-EVALUATOR” solves out the problems faced during exam evaluation, there are few features which can be added to it in the coming future to improve the working and overall experience of the system. Following are some points which can be considered in the coming future for this “EXAM-EVALUATOR” system.

- **More secure:** The existing system can be made more secure using different database algorithms instead of using traditional ones.
- **Registration option for students:** In this system, students are added to different classes by teacher only, but in coming times, a feature to register themselves can be provided to students itself.
- **Option to store results:** A feature to store the results can be provided to students so that they can check their previous results anytime and compare whether they need to put more efforts or not.
- **Query box:** If any student has any query regarding results, he/she can write in that query box. This feature can also be added.
- **Announcement section:** This feature can be added for the teachers so that they can convey any important information regarding results or exams. For example, if there is any delay in compilation of results.



# CONCLUSION

A platform like “EXAM-EVALUATOR” is a need of the present. This is going to benefit both the students and the teachers. This will make online study easier and efficient. Detailed result will help in analysing the steps to be taken by the students as well as the teachers. This will result in their performance and a better outcome can be achieved. When all other means of study are lacking “EXAM-EVALUATOR” will be like a support to the existing system of online study. This will enhance the experience and quality of online study and will make the online examining system more efficient and transparent.