



Mini project report on

'AceISA'

Submitted in partial fulfillment of the requirements for the award of degree of

Bachelor of Technology

in

Computer Science & Engineering

UE22CS351A – DBMS Project

Submitted by:

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Under the guidance of
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AUG - DEC 2024

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

PES UNIVERSITY

(Established under Karnataka Act No. 16 of 2013)

Electronic City, Hosur Road, Bengaluru – 560 100, Karnataka, India



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Electronic City, Hosur Road, Bengaluru – 560 100, Karnataka, India

CERTIFICATE

This is to certify that the mini project entitled

‘AceISA’

is a bonafide work carried out by

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In partial fulfilment for the completion of fifth semester DBMS Project (UE22CS351A) in the Program of Study -Bachelor of Technology in Computer Science and Engineering under rules and regulations of PES University, Bengaluru during the period AUG. 2024 – DEC. 2024. It is certified that all corrections / suggestions indicated for internal assessment have been incorporated in the report. The project has been approved as it satisfies the 5th semester academic requirements in respect of project work.

Signature

Prof. Nivedita Kasturi

Assistant Professor

DECLARATION

We hereby declare that the DBMS Project entitled **AceISA** has been carried out by us under the guidance of **Prof. Nivedita Kasturi, Assistant Professor** and submitted in partial fulfilment of the course requirements for the award of degree of **Bachelor of Technology in Computer Science and Engineering** of **PES University, Bengaluru** during the academic semester AUG – DEC 2024.

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ABSTRACT

AceISA is a comprehensive online exam management system that enhances the assessment experience for both students and educators. The platform provides students with a seamless interface to access exams, submit answers, and view performance results. For educators, AceISA offers tools to design and organize exams, track individual and collective student performance, and generate leaderboards for a clear view of academic progress. With features like detailed answer tracking, session management to prevent test resubmission, and secure data handling, AceISA ensures both the integrity and convenience of the exam process. This solution is designed to support educational institutions in delivering efficient, insightful, and secure digital assessments that foster improved learning outcomes.

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1. INTRODUCTION

In today's digital education landscape, online examination systems play a crucial role in delivering accessible and effective assessments. AceISA is designed to address the unique challenges and needs of educational institutions transitioning to digital exams. By providing an intuitive and user-friendly interface, AceISA ensures that students can take exams and view results with ease, while offering educators a comprehensive platform to manage and analyse exam performance seamlessly.

AceISA equips teachers with powerful tools to create customized exams, track student progress, and maintain transparent leaderboards, fostering a competitive and supportive academic environment.

The system's robust design emphasizes exam integrity through features that control session behaviour, preventing unauthorized resubmission and ensuring reliable assessment outcomes. Additionally, detailed answer tracking and performance analysis enable educators to gain insights into student strengths and areas for improvement, facilitating a data-driven approach to education.

AceISA thus serves as a vital resource in modern education, combining convenience, security, and flexibility to meet the demands of online assessments and support a streamlined, efficient educational experience.

2. PROBLEM DEFINITION WITH USER REQUIREMENT SPECIFICATIONS

Problem statement:

Educational institutions face challenges in efficiently managing online exams, ensuring exam integrity, and providing insightful performance analytics for students and educators. AceISA addresses these issues by offering a secure, user-friendly platform for conducting and managing digital assessments, fostering both convenience and reliability in the examination process.

User requirements:

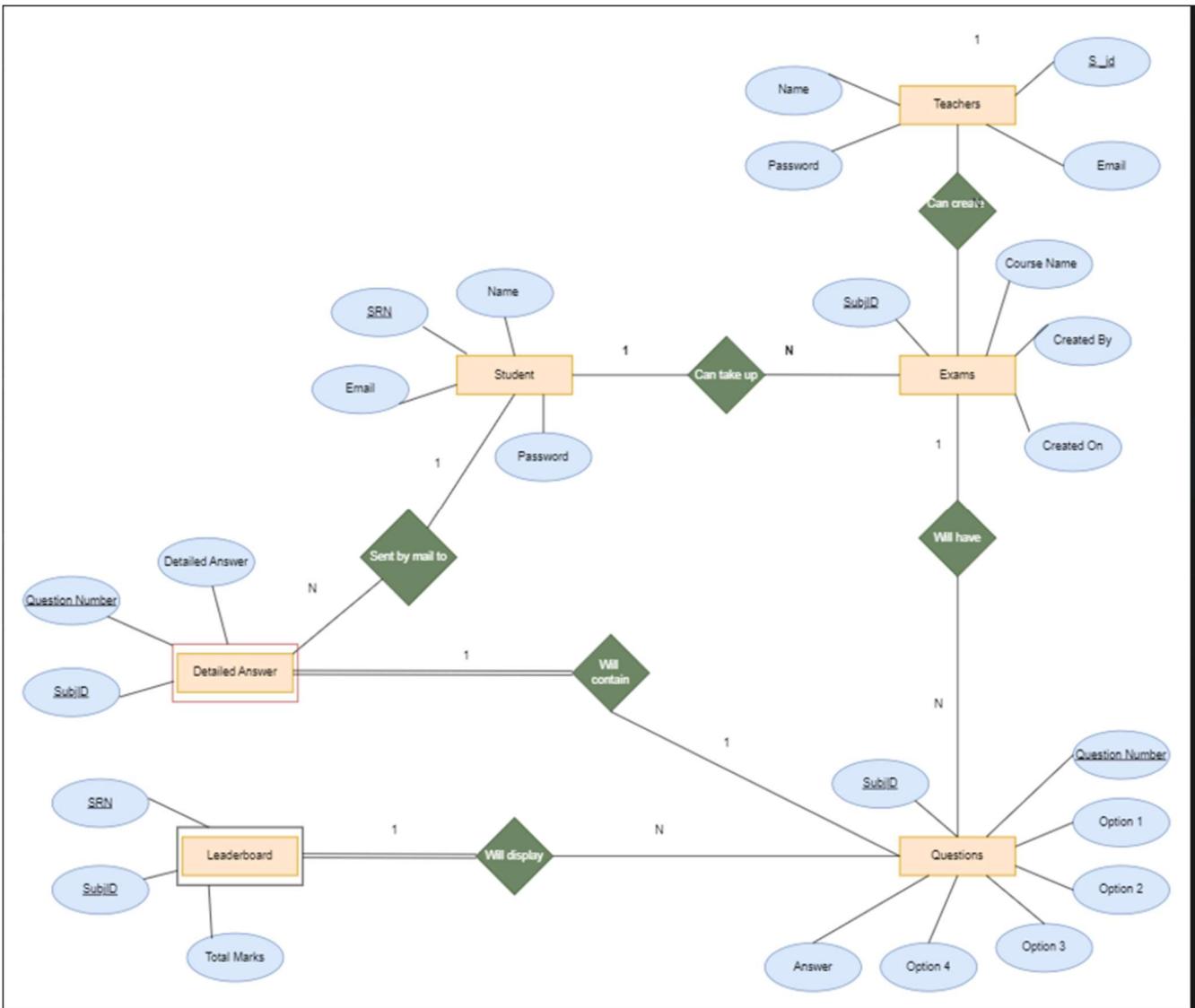
- **Real time student and staff management** – Continuously monitor all the student and staff registrations providing them a unique SRN / SID for streamlined management and identification.
- **Exam access and submission** – Students can view all the available exams, attempt the questions and submit their responses. Upon submission the system instantly calculates the scores and stores it in the backend.
- **Email generation** – After completing an exam, students receive a comprehensive email containing their marks along with all the questions and detailed explanation for each question.
- **Exam management** – Staff members can view and delete exams instantly that is available on the portal, maintaining up-to-date exam offerings.
- **Exam creation** – Staff can create custom exams by entering an exam ID and name, adding questions with multiple-choice options, correct answers, and detailed explanations. The number of questions per exam is flexible.

- **Leaderboard generation** – A leaderboard displays student scores, sortable by exam, while detailed analytics and graphical distributions provide insights into student performance in each subject

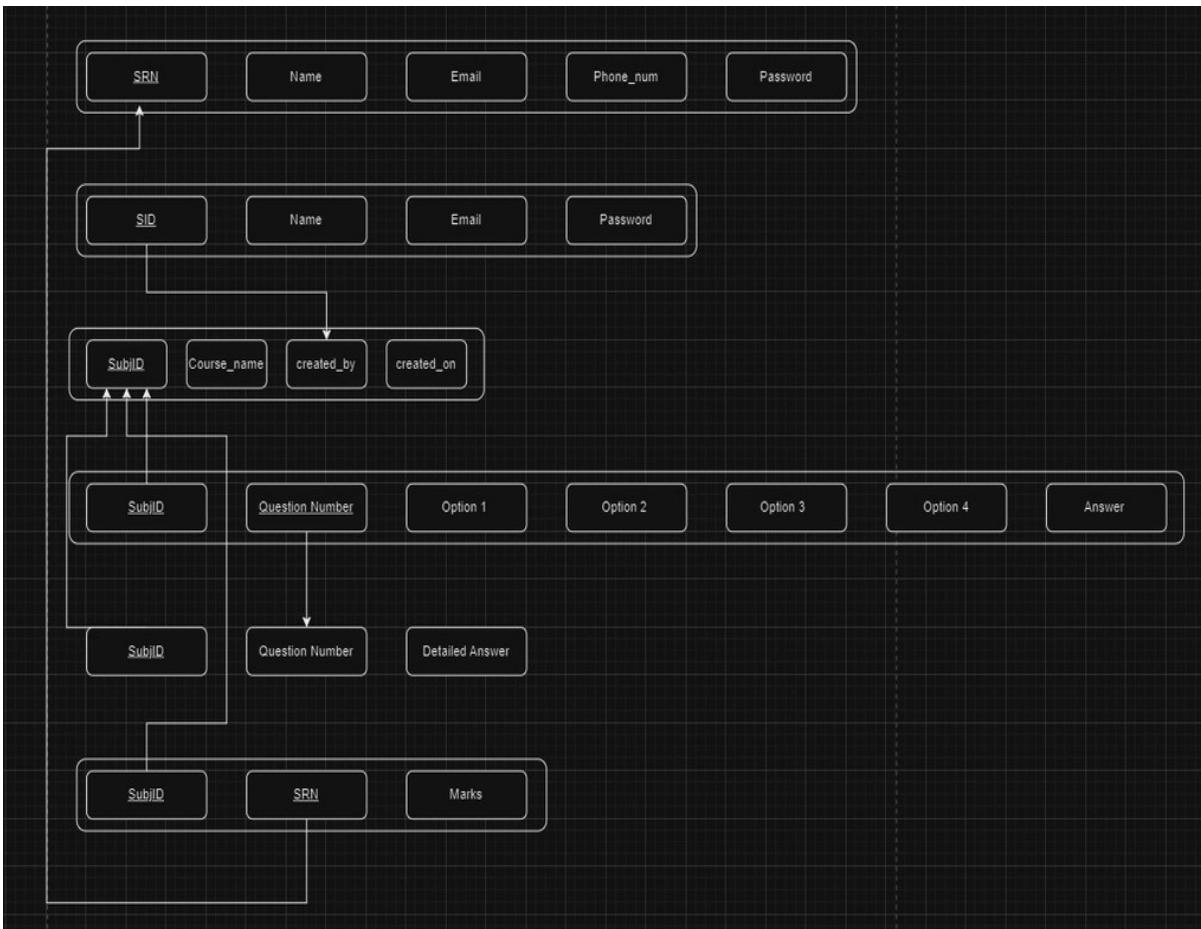
3. LIST OF SOFTWARES/TOOLS/PROGRAMMING LANGUAGES USED

Server OS	Windows/ Unix based systems
Programming Language	JavaScript
Frontend / UI	ReactJS
Middleware	NodeJS (ExpressJS)
Database	MySQL

4. ER MODEL



5. RELATIONSHIP SCHEMA



6. DDL STATEMENTS

```
create database aceisa;

use aceisa;

show tables;

CREATE TABLE students (
    SRN VARCHAR(13) PRIMARY KEY,
    Name VARCHAR(100) NOT NULL,
    Email VARCHAR(100) UNIQUE NOT NULL,
    Phone_num VARCHAR(15),
    Password VARCHAR(100) NOT NULL
);

CREATE TABLE staff (
    SID VARCHAR(20) PRIMARY KEY,
    Name VARCHAR(100) NOT NULL,
    Email VARCHAR(100) UNIQUE NOT NULL,
    Password VARCHAR(100) NOT NULL
);

CREATE TABLE courses (
    SubjID VARCHAR(20) PRIMARY KEY,
    Course_name VARCHAR(100) NOT NULL,
    created_by VARCHAR(20) NOT NULL,
    created_on DATE NOT NULL,
    CONSTRAINT fk_courses_staff FOREIGN KEY (created_by) REFERENCES staff(SID)
);

CREATE TABLE mcqs (
    QuestionID INT,
    SubjID VARCHAR(20),
    Option1 VARCHAR(255),
    Option2 VARCHAR(255),
    Option3 VARCHAR(255),
    Option4 VARCHAR(255),
    Answer ENUM('A', 'B', 'C', 'D'),
    PRIMARY KEY (SubjID, QuestionID),
    CONSTRAINT fk_mcqs FOREIGN KEY (SubjID) REFERENCES courses(SubjID)
);
```

```
43
44 • Ⓜ CREATE TABLE detailed_answer (
45     SubjID VARCHAR(20),
46     QuestionID INT,
47     Detailed_Answer VARCHAR(255),
48     PRIMARY KEY (SubjID, QuestionID),
49     CONSTRAINT fk_detailed_answers FOREIGN KEY (SubjID, QuestionID) REFERENCES mcqs(SubjID, QuestionID)
50 );
51
52 • Ⓜ CREATE TABLE marks (
53     SubjID VARCHAR(20),
54     SRN VARCHAR(20),
55     Marks INT,
56     PRIMARY KEY (SubjID, SRN),
57     CONSTRAINT fk_marks FOREIGN KEY (SubjID) REFERENCES courses(SubjID),
58     CONSTRAINT fk_marks_2 FOREIGN KEY (SRN) REFERENCES students(SRN)
59 );
60
```

```
Ⓜ CREATE TABLE student_srns (
    SRN VARCHAR(20) PRIMARY KEY,
    CONSTRAINT fk_student_srn FOREIGN KEY (SRN) REFERENCES students(SRN)
);
```

7. DML STATEMENTS (CRUD OPERATION SCREENSHOTS)

The tables created in the previous section were populated. This exam management system contains the following tables:

- students – stores all the information of the student

```
app.post('/signup', (req, res) => {
  console.log(req.body);

  const sql = "INSERT INTO students (`srn`, `name`, `email`, `Phone_num`, `password`) VALUES (?)";
  const values = [
    req.body.srn,
    req.body.name,
    req.body.email,
    req.body.number,
    req.body.password,
  ];
});
```

67 • `select * from students;`

	SRN	Name	Email	Phone_num	Password
▶	PES2UG22CS001	Shrijittttt	shrijittttt@gmail.com	798789779	shrijit123
	PES2UG22CS100	Shrijit2	shrijitt04@gmail.com	9108221968	123
	PES2UG22CS101	shrini	shrinihuns@gmail.com	45645645	shri123
	PES2UG22CS291	Madhura HB	madhurahb@gmail.com	9156487456	madhura123
	PES2UG22CS338	Sashank N	nsashank2510@gmail.com	5456465456	sas123
	PES2UG22CS521	Shashank P	patali.shashank@gmail.com	123456789	sha123
	PES2UG22CS524	Shaun Navnit DCosta	shaun.ndc@gmail.com	9544561354	shaun123
	PES2UG22CS543	SHRIJIT S HUNSIKATTI	shrijitsh@gmail.com	9108221968	shrijit123
	PES2UG22CS545	Shripad Amol Parchure	shripadamolparchure@gmail.com	9108221968	shripad123
	PES2UG22CS547	shriyansh	shriyans.gandhi@gmail.com	56456464	shr123
	PES2UG22CS551	Siddharth K	fashbooster@gmail.com	65645644	sid123
	PES2UG22CS553	Sidharth K	tribolt987@gmail.com	8789798798	sid123
	PES2UG22CS554	Simran Das	das.simran0403@gmail.com	9108221968	simran123
*	PES2UG22CS661	Vignesh	vignesh.palanirajan31@gmail.com	123321123	vignesh123
	NULL	NULL	NULL	NULL	NULL

- staff – contains all the information about the staff members

69 • `select * from staff;`

	SID	Name	Email	Password
▶	PESSTA1	Prof Niveditha	niveditha@gmail.com	niveditha123
	PESSTA2	Dr Arti Arya	arti@gmail.com	arti123
	PESSTA3	Dr Sudeepa	sud@gmail.com	sud123
	PESSTA4	Dr Vinodha	vin@gmail.com	vin123
✳	PESSTA5	Dr Chavan	cha@gmail.com	cha123
	NULL	NULL	NULL	NULL

- mcqs – contains the list of all the questions along with their answers

```
app.post('/add-question', (req, res) => {
  console.log(req.body);
  const values = [
    req.body.QuestionID,
    req.body.SubjID,
    req.body.Question,
    req.body.Option1,
    req.body.Option2,
    req.body.Option3,
    req.body.Option4,
    req.body.Answer
  ];

  const sql = `INSERT INTO mcqs (QuestionID, SubjID, Question, Option1, Option2, Option3, Option4, Answer) VALUES (?)`;
  ``
```

71 • `select * from mcqs;`

	QuestionID	SubjID	Question	Option1	Option2	Option3
▶	1	UE22CS341A	Define Agile scrum methodology.	project management that emphasizes increment...	project management that emphasizes decrem...	project management that empha...
1	UE22CS351A	Who created the first DBMS?	Edgar Frank Codd	Charles Bachman	Charles Babbage	
1	UE22CS352A	K-Nearest Neighbors (KNN) is classified as what...	Instance-based learning	Parametric learning	Non - Parametric learning	
2	UE22CS341A	What is a Functional Requirement?	specifies the tasks the program must complete	specifies the tasks the program should not com...	specifies the tasks the program r...	
2	UE22CS351A	Which type of data can be stored in the datab...	Image oriented data	Text, files containing data	Data in the form of audio or vide...	
2	UE22CS352A	Which of the following is not a supervised machi...	Naive bayes	KNN	SVM	
3	UE22CS341A	What does SDLC stands for?	System Design Life Cycle	Software Design Life Cycle	Software Development Life Cyc...	
3	UE22CS351A	In which of the following formats data is stored...	Image	Text	Graph	
3	UE22CS352A	Which algorithm is best suited for a binary classi...	KNN	Decision tress	Random forest	
4	UE22CS341A	What are agile manifesto principles?	Customer satisfaction	Face-to-face communication within a developme...	Changes in requirements are wel...	
4	UE22CS351A	Which of the following is a function of the DBMS?	Storing data	Providing multi-users access control	Data Integrity	
4	UE22CS352A	What is Machine learning?	The selective acquisition of knowledge through ...	The selective acquisition of knowledge through ...	The autonomous acquisition of kn...	
5	UE22CS341A	_____ is not suitable for accommodating ...	RAD Model	Waterfall model	Build & Fix	
5	UE22CS351A	_____ is a set of one or more attributes taken c...	Primary Key	Super Key	Candidate Key	
5	UE22CS352A	Which type of machine learning algorithm falls u...	Linear regression	KNN	Decision tree	

Option3	Option4	Answer
project management that emphasizes neutral pr...	project management that emphasizes no progress	A
Charles Babbage	Sharon B. Codd	B
Non - Parametric learning	Model-based learning	A
specifies the tasks the program must not work	All of the mentioned	A
Data in the form of audio or video	All of the above	D
SVM	Decision trees	B
Software Development Life Cycle	System Development Life cycle	C
Graph	Table	D
Random forest	Linear regression	B
Changes in requirements are welcome	All of the mentioned	D
Data Integrity	All of the above	D
The autonomous acquisition of knowledge throu...	The autonomous acquisition of knowledge throu...	C
Build & Fix	Prototyping Model	B
Candidate Key	Foreign Key	B
Decision tree	Random forest	B

- courses – List of all the exams / courses

```
app.post('/create-test', (req, res) => {
  console.log(req.body)
  const values = [
    req.body.SubjID,
    req.body.Course_name,
    req.body.Created_by,
    req.body.Created_on,
  ];

  const sql = "INSERT INTO courses (`SubjID`, `Course_name`, `Created_by`, `Created_on`) VALUES (?, ?, ?, ?)";
});
```

73 ● `select * from courses;`

	SubjID	Course_name	Created_by	Created_on
▶	UE22CS341A	Software Engineering	PESSTA3	2024-10-16
	UE22CS342AA3	Internet of Things	PESSTA4	2024-10-16
	UE22CS343AB2	Big Data	PESSTA5	2024-10-16
	UE22CS351A	Database Management System	PESSTA1	2024-10-16
*	UE22CS352A	Machine Learning	PESSTA2	2024-10-16
	NULL	NULL	NULL	NULL

- marks – stores the marks obtained by all the students

```
app.post('/marks', (req, res) => {
  const sql = "INSERT INTO marks (`SubjID`, `SRN`, `marks`) VALUES (?)";
  const values = [
    req.body.examCode,
    req.body.srn,
    req.body.correct_answers
  ];
});
```

75 • `select * from marks;`

	SubjID	SRN	marks
▶	UE22CS341A	PES2UG22CS338	5
	UE22CS341A	PES2UG22CS543	4
	UE22CS343AB2	PES2UG22CS554	0
	UE22CS351A	PES2UG22CS100	5
	UE22CS351A	PES2UG22CS101	5
	UE22CS351A	PES2UG22CS521	4
	UE22CS351A	PES2UG22CS524	0
	UE22CS351A	PES2UG22CS543	5
	UE22CS351A	PES2UG22CS547	4
	UE22CS351A	PES2UG22CS554	5
	UE22CS351A	PES2UG22CS661	5
	UE22CS352A	PES2UG22CS543	5
	UE22CS352A	PES2UG22CS551	1
*	NULL	NULL	NULL

- detailed_answers – Stores the detailed answers of every question

```
const sql2 = `INSERT INTO detailed_answers (SubjID, QuestionID, detailed_answer) VALUES (?)`;
db.query(sql2, [values_detailed], (err2, result2) => {
  if (err2) {
    console.log(err2);
  }
});
```

• `select * from detailed_answers;`

	SubjID	QuestionID	detailed_answer
▶	UE22CS341A	1	Agile scrum methodology is a style of project m...
	UE22CS341A	2	A functional requirement is a specification that ...
	UE22CS341A	3	The Software Development Life Cycle (SDLC) is ...
	UE22CS341A	4	Principles of the agile manifesto are: i) Custome...
	UE22CS341A	5	Real-world projects seldom follow the Waterfall ...
	UE22CS351A	1	Charles Bachman along with his team invented t...
	UE22CS351A	2	The reason for creating the database managem...
	UE22CS351A	3	The data is stored in a table format intended to ...
	UE22CS351A	4	The purpose of creating DBMS was to store the ...
	UE22CS351A	5	Foreign key creates a relationship between two...
	UE22CS352A	1	KNN doesn't build a parametric model of the da...
	UE22CS352A	2	Decision tree, SVM (Support vector machines) f...
	UE22CS352A	3	Decision Trees are versatile and can be used fo...
	UE22CS352A	4	Machine learning is the autonomous acquisition ...
	UE22CS352A	5	K-means Clustering is an example of unsupervis...
	HULL	HULL	HULL

- student_srns – stores all the srns of the students

```
select * from student_srns;
```

	SRN
▶	PES2UG22CS001
*	NULL

- Updating the student details using ‘update’ command

```
app.post('/change_email',(req,res)=>[
  // console.log("Inside API ")
  const {srn, currentEmail , newEmail} = req.body
  let sql = `UPDATE students SET Email = (?) where SRN=(?)` 

  db.query(sql,[newEmail,srn],(result,err)=>{
```

```
app.post('/change_password',(req,res)=>{  
    // console.log("Inside API ")  
    const {srn, currentPassword , newPassword} = req.body  
    let sql = `UPDATE students SET Password = (?) where SRN=(?)`  
  
    db.query(sql,[newPassword,srn],(result,err)=>{
```

- Deleting an exam

```
const query = 'DELETE FROM courses WHERE SubjID = ?';  
  
db.query(query, [examCode], (err, result) => {
```

8. QUERIES (JOIN QUERY, AGGREGATE FUNCTION QUERIES AND NESTED QUERY)

- JOIN Query – Joining the *mcqs* and *detailed_answers* tables to retrieve the question and the detailed answer for each subject.

```
db.query(`SELECT q.Question, d.detailed_answer
  FROM mcqs q
  JOIN detailed_answers d
  ON q.QuestionID = d.QuestionID AND q.SubjID = d.SubjID
  WHERE q.SubjID = ?,
  [examCode],`)
```

- Nested Query, function call and aggregate functions

```
app.get('/leaderboard', (req, res) => {
  const { examCode } = req.query;
  console.log("Received examCode:", examCode);

  const subjId = examCode;
  const query = `SELECT SRN, marks,
    | | | | (SELECT GetAverageMarks(?)) AS average_marks
    | | | | FROM marks
    | | | | WHERE SubjID = ?
    | | | | ORDER BY marks DESC
  `;

  db.query(query, [subjId, subjId], (error, results) => {
```

9. STORED PROCEDURE, FUNCTIONS AND TRIGGERS

- Function definition

```
• CREATE FUNCTION GetAverageMarks(subj_id INT)
  RETURNS DECIMAL(10, 2)
  DETERMINISTIC
  BEGIN
    DECLARE avg_marks DECIMAL(10, 2);

    SELECT AVG(marks)
    INTO avg_marks
    FROM marks
    WHERE SubjID = subj_id;

    RETURN avg_marks;
  END $$|  
DELIMITER ;
```

- Function call

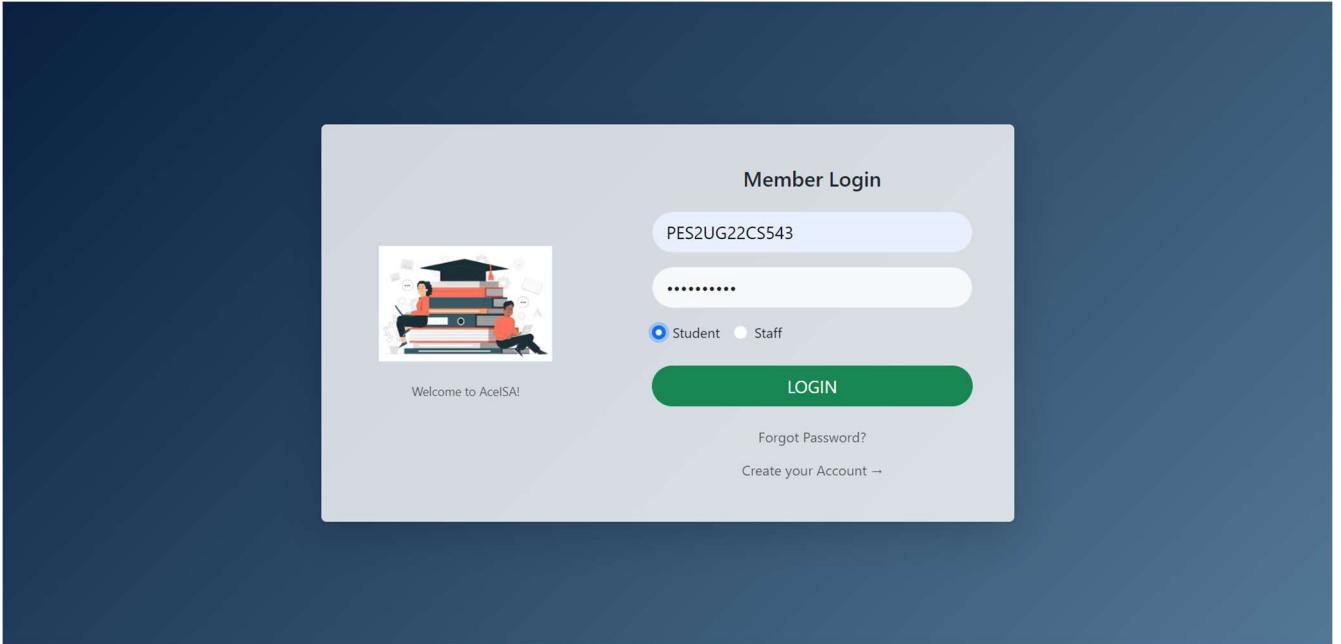
```
const query = `SELECT SRN, marks,
  | | | | (SELECT GetAverageMarks(?)) AS average_marks
  | | | | FROM marks
  | | | | WHERE SubjID = ?
  | | | | ORDER BY marks DESC
`;
```

- Trigger

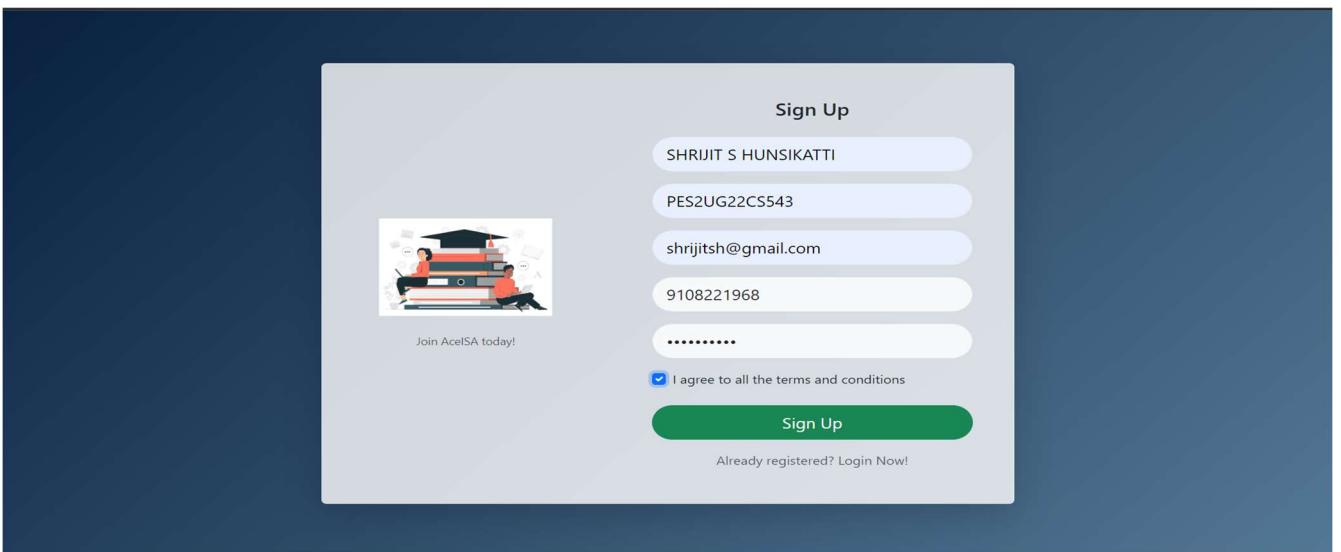
```
DELIMITER $$  
• CREATE TRIGGER student_SRN  
AFTER INSERT ON students  
FOR EACH ROW  
BEGIN  
    INSERT INTO student_srns (SRN)  
    VALUES (NEW.SRN);  
END $$  
DELIMITER ;
```

10. FRONT END DEVELOPMENT (FUNCTIONALITIES/FEATURES OF THE APPLICATION)

- Login Page



- SignUp Page



- Student Home Page

Welcome to AceISA, PES2UG22CS543

UE22CS341A Software Engineering Created By: PESSTA3 Created On: 10/16/2024 Take Test	UE22CS342AA3 Internet of Things Created By: PESSTA4 Created On: 10/16/2024 Take Test	UE22CS343AB2 Big Data Created By: PESSTA5 Created On: 10/16/2024 Take Test	UE22CS351A Database Management System Created By: PESSTA1 Created On: 10/16/2024 Take Test	UE22CS352A Machine Learning Created By: PESSTA2 Created On: 10/16/2024 Take Test
--	--	--	--	--

- Student Exam Page

UE22CS351A

1. Who created the first DBMS?

<input checked="" type="radio"/> Edgar Frank Codd	<input checked="" type="radio"/> Charles Bachman
<input checked="" type="radio"/> Charles Babbage	<input checked="" type="radio"/> Sharon B. Codd

2. Which type of data can be stored in the database?

<input checked="" type="radio"/> Image oriented data	<input checked="" type="radio"/> Text, files containing data
<input checked="" type="radio"/> Data in the form of audio or video	<input checked="" type="radio"/> All of the above

3. In which of the following formats data is stored in the database management system?

<input checked="" type="radio"/> Image	<input checked="" type="radio"/> Text
--	---------------------------------------

After submitting –

A screenshot of a web browser window. At the top, there are several tabs: Gmail, YouTube, Netflix, Disney+ Hotstar, and Jio. Below the tabs, there are two sections of questions. The first question is: "4. Which of the following is a function of the DBMS?" It has four options: "● Storing data", "● Data Integrity", "● Providing multi-users access control", and "○ All of the above". The third option is highlighted with a blue background. The second question is: "5. _____ is a set of one or more attributes taken collectively to uniquely identify a record." It has four options: "● Primary Key", "● Candidate Key", "○ Super Key", and "● Foreign Key". The first option is highlighted with a blue background. At the bottom center of the page is a blue button labeled "Submit Test". A dark overlay covers the bottom half of the screen.

localhost:3000 says
Test submitted successfully!

OK

4. Which of the following is a function of the DBMS?

● Storing data ● Providing multi-users access control

● Data Integrity ○ All of the above

5. _____ is a set of one or more attributes taken collectively to uniquely identify a record.

● Primary Key ○ Super Key

● Candidate Key ● Foreign Key

Submit Test

Thank you for your participation

The marks have been sent to your email and submitted to the respective faculty

[← Go back to home screen](#)

On pressing ‘Go back to home page’, an email will be sent to the user before redirecting to the home page again

Test Results and Answers ➔ [Inbox](#)

aceisa.pesu@gmail.com
to me

Dear SHRIJIT S HUNSIKATTI,

You scored 5 out of 5 in your UE22CS351A test.

Here are the exam questions and detailed answers:

Q1: Who created the first DBMS?
Answer: Charles Bachman along with his team invented the first DBMS known as Integrated Data Store (IDS).

Q2: Which type of data can be stored in the database?
Answer: The reason for creating the database management system was to store large data and these data can be of any form image, text, audio, or video files, etc. DBMS allows the users to store and access the data of any format.

Q3: In which of the following formats data is stored in the database management system?
Answer: The data is stored in a table format intended to manage the storage of data and manipulate stored data to generate information.

Q4: Which of the following is a function of the DBMS?
Answer: The purpose of creating DBMS was to store the data. The data stored in the database management system can be accessed by multiple users if the access is provided. The data stored will be accurate and complete hence providing data integrity.

Q5: _____ is a set of one or more attributes taken collectively to uniquely identify a record.
Answer: Foreign key creates a relationship between two relations. Super key is the superset of all the keys in a relation. A candidate key is used to identify tuples in a relation.

All the best and thank you for participating!

Best Regards,
AcelSA Team

- Student Profile Page

PES2UG22CS543

Change Email

[Redacted input fields]
[Redacted input fields]

[Update Email](#)

Change Password

[Redacted input fields]
[Redacted input fields]

[Update Password](#)

- About Us page

About AceISA

AceISA makes learning fun and easy through online quizzes. Our platform helps teachers create quizzes and students learn from them.

What We Do

We've built a simple quiz platform that:

- Lets teachers make and manage quizzes
- Helps students practice and test their knowledge
- Shows everyone's progress on leaderboards

Why Choose Us

Easy to use
Fun and interactive
Helps track progress
Works great for both teachers and students

- Teacher Home Page

Welcome to AceISA

UE22CS341A Software Engineering Created By: PESSTA3 Created On: 10/16/2024 View Delete	UE22CS342AA3 Internet of Things Created By: PESSTA4 Created On: 10/16/2024 View Delete	UE22CS343AB2 Big Data Created By: PESSTA5 Created On: 10/16/2024 View Delete
UE22CS351A Database Management System Created By: PESSTA1 Created On: 10/16/2024 View Delete	UE22CS352A Machine Learning Created By: PESSTA2 Created On: 10/16/2024 View Delete	

- Viewing an exam

UE22CS341A

1. Define Agile scrum methodology.

project management that emphasizes incremental progress

project management that emphasizes neutral progress

project management that emphasizes decremental progress

project management that emphasizes no progress

2. What is a Functional Requirement?

specifies the tasks the program must complete

specifies the tasks the program should not complete

specifies the tasks the program must not work

All of the mentioned

3. What does SDLC stands for?

System Design Life Cycle

Software Design Life Cycle

- Deleting an exam

The screenshot shows a web browser window with the URL `localhost:3000/teacherhome`. In the center, a modal dialog box is displayed with the title "localhost:3000 says". The message inside the dialog reads: "Are you sure you want to delete exam: UE22CS341A?". Below the message are two buttons: "OK" (highlighted in blue) and "Cancel".

Below the dialog, there are two exam cards listed:

- UE22CS342AA3**
Internet of Things
Created By: PESSTA4
Created On: 10/16/2024
[View](#) [Delete](#)
- UE22CS343AB2**
Big Data
Created By: PESSTA5
Created On: 10/16/2024
[View](#) [Delete](#)

- Exam creation page

The screenshot shows a dark-themed web application interface for creating an exam. At the top, a modal window displays the message "localhost:3000 says Test created successfully, please enter the questions" with an "OK" button. Below the modal, there are four input fields: "Subject ID" (UE22CS351_1), "Course Name" (DBMS 2), "Created By" (PESSTA2), and "Created On" (14-11-2024). A green "Create Test" button is located below these fields. The main content area starts with a "Number of Questions" field containing the value "1". Following this are sections for "Question 1" and "Correct Answer (A, B, C, or D)", both of which also contain the value "1". There is also a "Enter Detailed Answer" field with the value "1". At the bottom left of the main area is a blue "Finish & Publish" button.

- Updated teacher home page after creating a new test

The screenshot shows the teacher's home page with a header "Welcome to AceISA". Below the header, there is a grid of six course cards, each with a title, description, creation details, and two action buttons ("View" and "Delete").

Course Title	Description	Created By	Created On	Action Buttons
UE22CS341A	Software Engineering	PESSTA3	10/16/2024	View Delete
UE22CS342AA3	Internet of Things	PESSTA4	10/16/2024	View Delete
UE22CS343AB2	Big Data	PESSTA5	10/16/2024	View Delete
UE22CS351_1	DBMS 2	PESSTA2	11/14/2024	View Delete
UE22CS351A	Database Management System	PESSTA1	10/16/2024	View Delete
UE22CS352A	Machine Learning	PESSTA2	10/16/2024	View Delete

- Updated Student home page after creating a new test

Welcome to AceISA |

UE22CS341A
Software Engineering
Created By: PESSTA3
Created On: 10/16/2024
[Take Test](#)

UE22CS342AA3
Internet of Things
Created By: PESSTA4
Created On: 10/16/2024
[Take Test](#)

UE22CS343AB2
Big Data
Created By: PESSTA5
Created On: 10/16/2024
[Take Test](#)

UE22CS351_1
DBMS 2
Created By: PESSTA2
Created On: 11/14/2024
[Take Test](#)

UE22CS351A
Database Management System
Created By: PESSTA1
Created On: 10/16/2024
[Take Test](#)

UE22CS352A
Machine Learning
Created By: PESSTA2
Created On: 10/16/2024
[Take Test](#)

- Taking up the newly created test

UE22CS351_1

1. 1

1

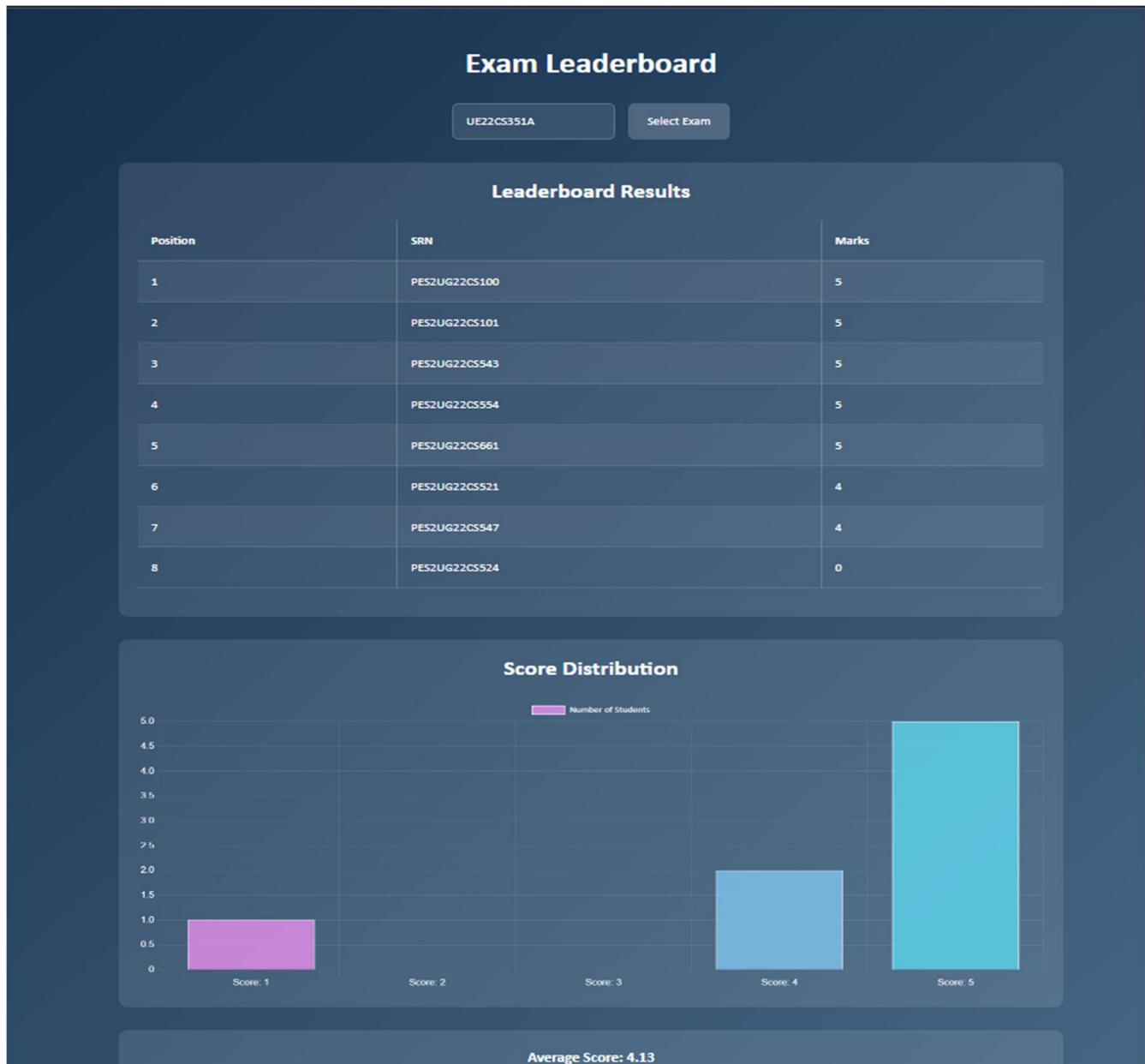
1

1

1

[Submit Test](#)

- Leaderboard



11. CONCLUSION

Overall, AceISA represents a modern, feature-rich solution for managing online exams, offering an intuitive and efficient experience for both students and educators, while also incorporating robust backend systems to handle the complexities of exam management, student tracking, and performance analysis.

13.GITHUB LINK

<https://github.com/shrijitt04/AceISA>

14. REFERENCES

ReactJS - <https://react.dev/reference/react>

ReactRouterDOM - <https://reactrouter.com/en/main>

NodeJS - <https://nodejs.org/docs/latest/api/>

ExpressJS - <https://expressjs.com/>

Axios - <https://axios-http.com/docs/intro>

MySQL - <https://dev.mysql.com/doc>