

**VIDYABHARTI TRUST COLLEGE OF BUSINESS, COMPUTER
SCIENCE & RESEARCH. UMRACH**



MINI-PROJECT REPORT

**BACHELOR OF COMPUTER
APPLICATION
(B.C.A)**

SEM: V

YEAR:

2024-25

“STUDENT RESULT MANAGEMENT SYSTEM”

GUIDED BY:

Parmar Yuvrajsinh

SUBMITTED BY:

**Harsh Aalwani (7331)
Vatsal Bharodiya (7344)**



Vidyabharti Trust College of Business, Computer
Science & Research. Umrah

At & Po: Umrah, Ta: Bardoli, Dist: Surat – 394345, Gujarat, INDIA.

CERTIFICATE

*This is to certify that **Harsh Aalwani and Vatsal Bharodiya** Exam Seat Number:
7331 and 7344 has satisfactorily completed his/her mini-project work entitled **Student
Result Management System** as a partial fulfillment of the requirements for **5th Semester –
B.C.A. (Bachelor of Computer Application)**, during the academic Year **2024**.*

Date:

Principal

Dr. Snehal H. Mistry

Place:

**Vidyabharti Trust College of Business,
Computer-Science & Research.
Umrah, Bardoli, Surat**

SEMINAR OF B.C.A.
Academic Year _____
Approved by: _____ _____ _____
(Examiners)

ACKNOWLEDGEMENT

It gives us great pleasure in presenting this project report titled “***Student Result Management System***” and we wish to express our immense gratitude to the people who provided invaluable knowledge and support in the completion of this project. Their guidance and motivation has helped in making this project a great success.

We express our gratitude to our project guide **Parmar Yuvrajsinh** who provided us all the guidance and encouragement throughout the project development. We would also like to express our sincere gratitude to the respective Project coordinators.

We are eager and glad to express our gratitude to the Head of the BCA Dept. **Prof. Amit Patel** for his approval of this project. We are also thankful to him for providing us the needed assistance, detailed suggestions and also encouragement to do the project.

We would like to express our sincere gratitude to our respected principal **Dr. Snehal Mistry**, vice principal **Dr. Payal Mahida** and the management of our College for providing such an ideal atmosphere to build up this project with well-equipped library with all the most necessary reference materials and up to date IT Laboratories. We are extremely thankful to all staff and the management of the college for providing us all the facilities and resources required.

Thanking All,

7331

7344

ABSTRACT

The main goal of this project is to provide students with their examination results in an easy and straightforward manner. This system benefits both students and educational institutions by allowing results to be accessed quickly and securely. Students can view and print their results by entering their Student ID. The results will be analyzed and displayed with subject statuses and marks. The entire system is managed by an administrator, who has full control over reading, writing, and executing results. The admin also grants students access to their results.

AALWANI HARSH U.

SEAT NO: 7331

BHARODIYA VATSAL A.

SEAT NO: 7344

STUDENT RESULT MANAGEMENT SYSTEM

[SRMS]

Index

Sr. No	Topics	Page no
1	Introduction	1
2	Project Description	1
3	Project Profile	5
4	Objective	6
5	System Design	7
6	Activity Diagram	7
7	Use case Diagram	9
8	ER Diagram	10
9	Database Design	11
10	Interface Design	13
11	Reference	18

INTRODUCTION

Project Description:

The Student Result Management System is a web-based application built using React.js. The primary goal of this system is to simplify the process of managing and accessing student academic results for both administrators and students. This system provides a streamlined platform for handling student records, ensuring efficient result entry and secure access to academic performance details.

Overview:

The Student Result Management System allows educational institutions to efficiently handle their student result processes online, eliminating the need for traditional paper-based result management. The system provides distinct functionalities for administrators and students:

- **Administrators** (such as teachers or school staff) have full control over adding and managing student information, entering grades, and publishing results.
- **Students** can securely log in, view their individual results, and print them for future reference.

This system is designed to be responsive and easy to use, ensuring that users can access it across different devices (**desktops, tablets, and mobile phones**).

List Of Modules:

1) Admin Side:

In the Admin Side of the Student Result Management System (focused on results management), the administrator's main responsibility is to manage and control the academic results of students. This streamlined version of the system focuses solely on inputting, modifying, and managing student results.

➤ Dashboard:

- **Manage Courses:**

This section allows administrators to manage the list of courses offered. Admins can add new courses, edit existing ones, and delete obsolete courses. Proper course management ensures that students are assigned to the right subjects for accurate result entry.

- **View Marksheets:**

Admins can view detailed marksheets of students, organized by class and subject. This feature allows for easy access to individual and class-wide performance data, enabling quick reviews and analysis of student progress.

- **Add Admin:**

This feature lets the current admin add new administrators to the system. Multiple admins can share the workload, ensuring that results management and other administrative tasks are efficiently handled. Admins can be granted various levels of access based on their role.

Result Management:

- **Add Results:**

- Admins can input subject-wise marks and grades for students, categorized by class and term.
- Results can be added for multiple subjects at once, ensuring that all students in a class receive their results accurately.

- **Delete Results:**

- Admins can delete erroneous or unnecessary result entries from the system to maintain data accuracy.
- This feature helps ensure that only valid data is kept in the system.

2. Student Side:

The Student Side of the Student Result Management System website built in React.js is focused on providing students with a simple and secure way to view their academic results. The primary function of this side is to allow students to search their serial number, check their results, and print or save them if needed.

Key Features of the Student Side:

Enter Student ID:

- A simple input field allows students to enter their **Student ID**.
- No additional information (such as passwords or class details) is required, streamlining the process.

View Results:

- Once the Student ID is entered, the system retrieves the student's results from the backend using an API call.
- The results are displayed in a clean, organized format, showing subject-wise marks, grades, and overall performance.

Responsive and User-Friendly Design:

- The student result page is designed to be responsive, ensuring it works seamlessly across various devices (desktop, mobile, tablet).
- The interface is minimal and easy to navigate, making it accessible even for non-technical users.

Project profile:

Project Title:	Student Result Management System (SRMS)
Frontend:	React js
Backend:	Mongo, Express js, Node js
Browser:	Google Chrome, Microsoft Edge, Brave
Platform:	VS Code, Notepad++, Postman
Documentation Tool:	Microsoft word 2021
Internal Guide:	Parmar Yuvrajsinh
Submitted To:	Parmar Yuvrajsinh

Objective

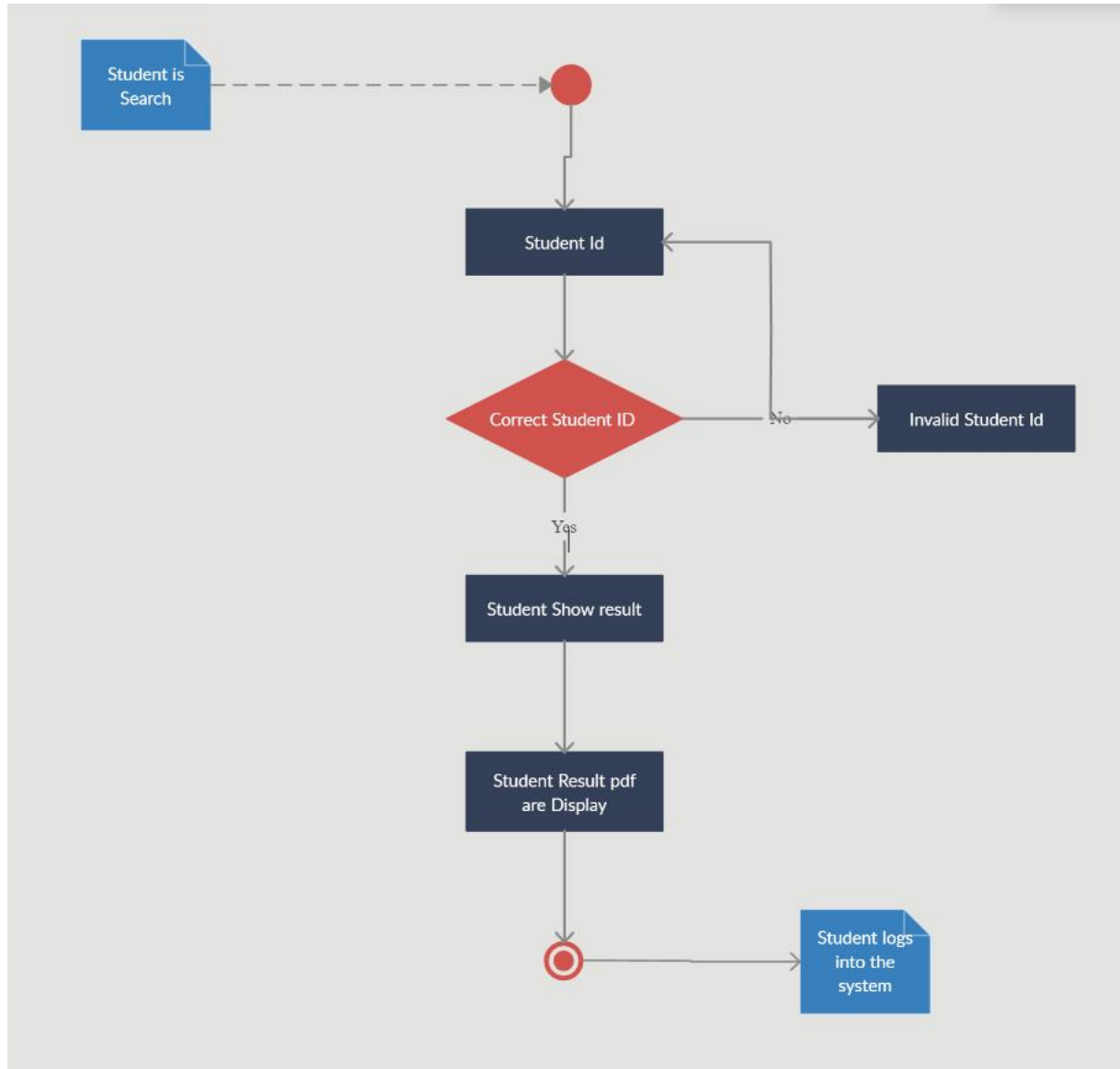
The objective of the **Student Result Management System** website, built using **React.js**, is to provide a streamlined and user-friendly platform for students to view their academic results. This system focuses solely on enabling students to access their results efficiently using their **Student ID**.

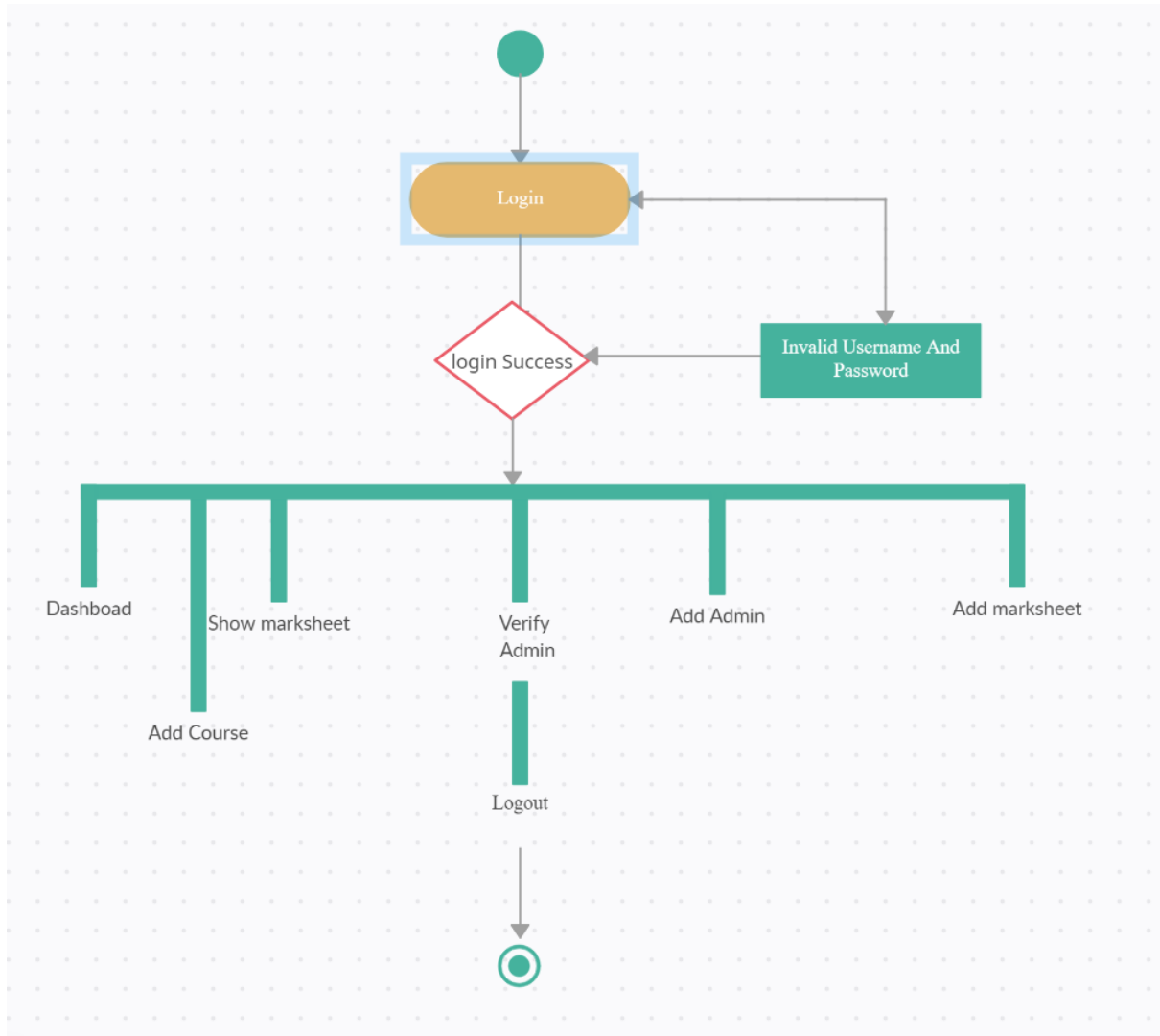
Allow students to easily view their academic results by entering only their **Student ID**, eliminating the need for complex login procedures or additional information.

Design an intuitive and responsive user interface that makes it easy for students to enter their Student ID and view their results across various devices (desktop, tablet, mobile).

SYSTEM DESIGN

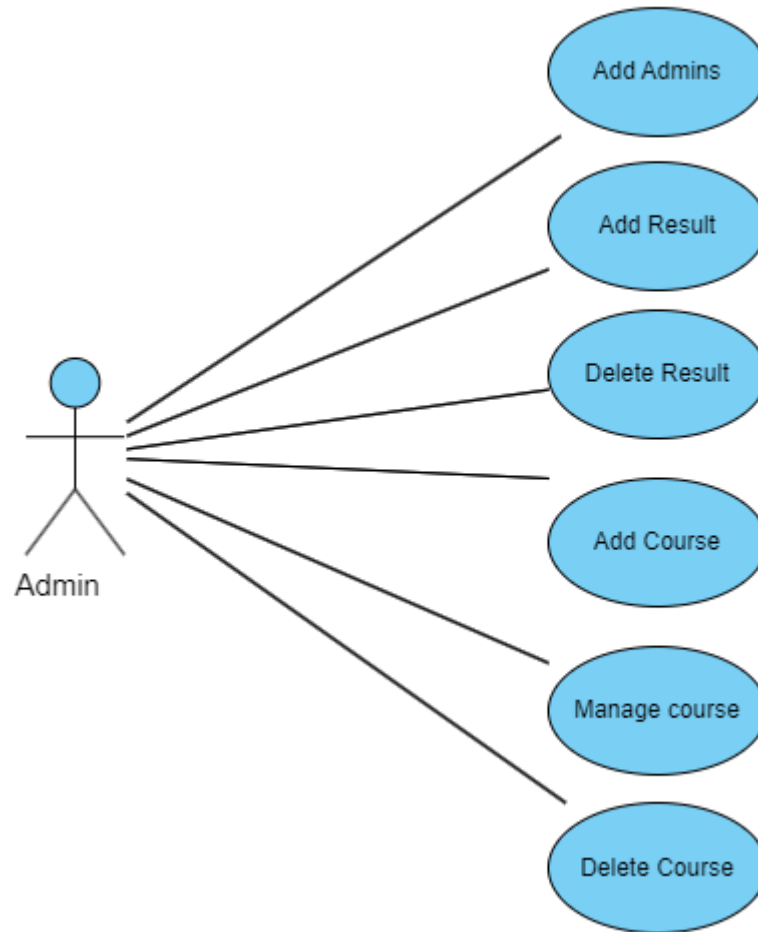
ACTIVITY DIAGRAM





USECASE DIAGRAM

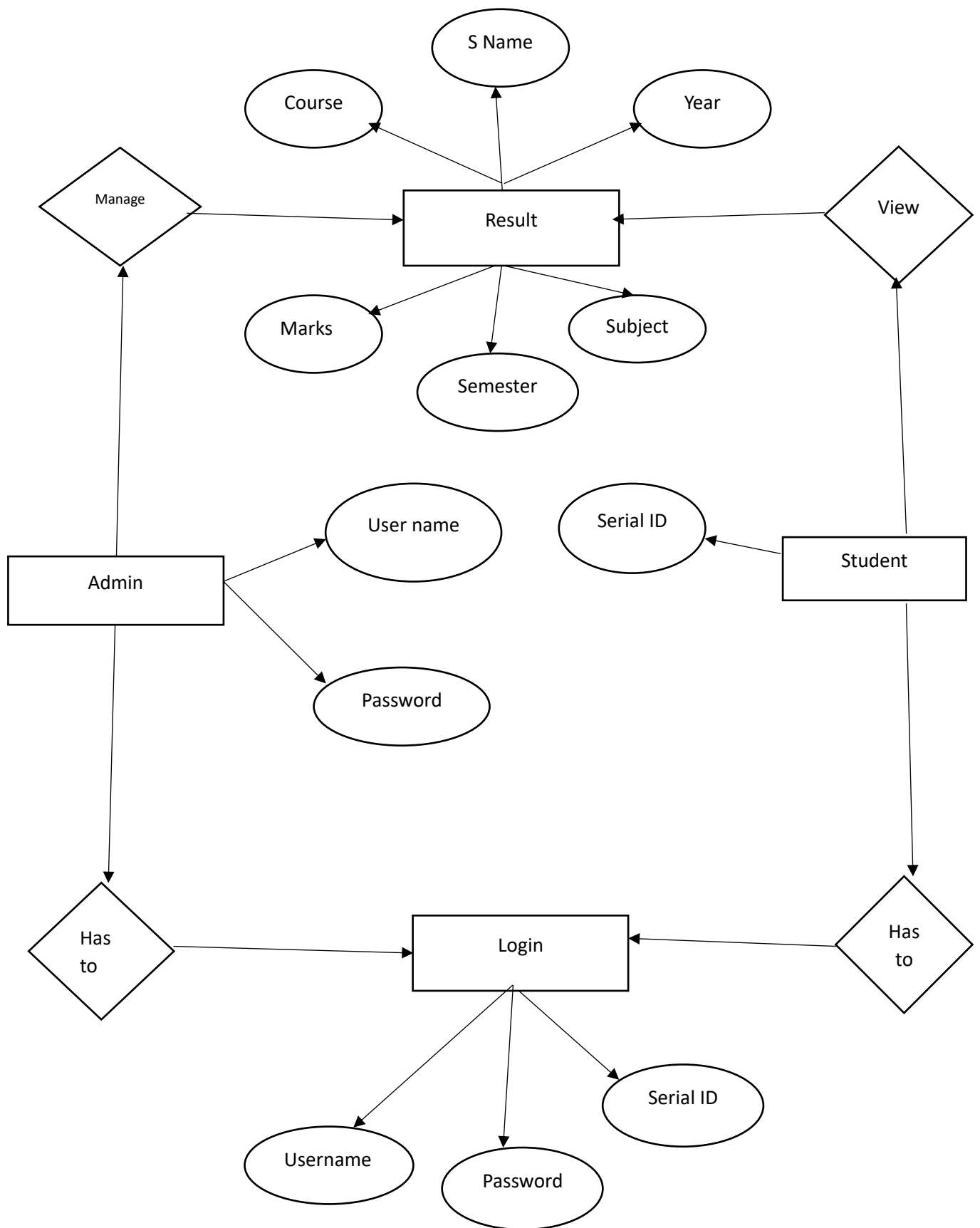
Admin



Student



ER Diagram



DATABASE DESIGN

Admin		
No.	Field Name	Data Type
1	username	String
2	email	String
2	password	String

Course		
No	Field Name	Data Type
1	courseName	String
2	semester	String
3	description	String

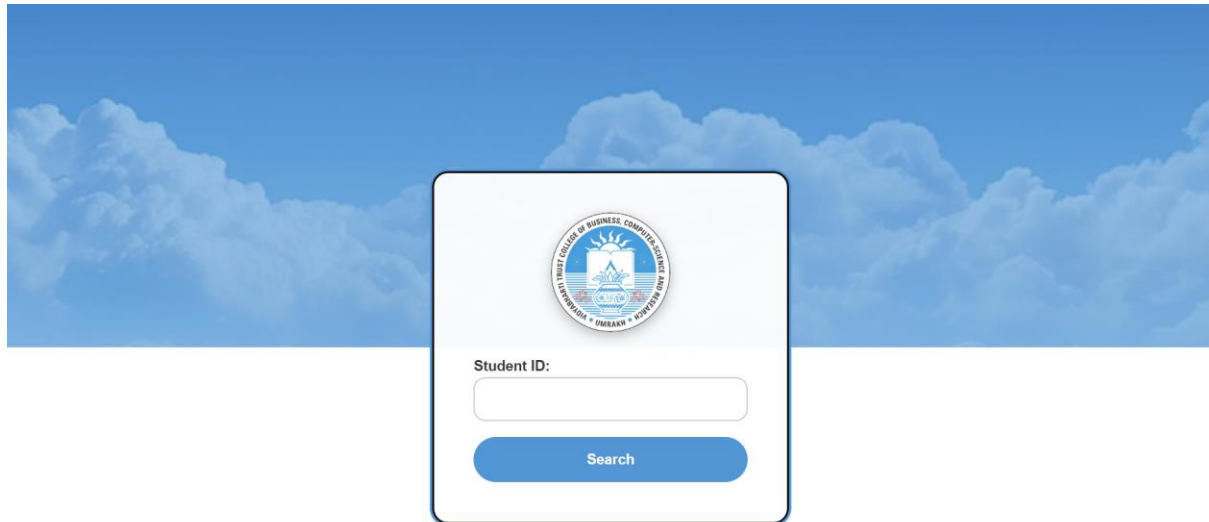
Subject		
No	Field Name	Data Type
1	name	String
2	marks	Number

Marksheet		
No	Field Name	Data Type
1	serialId	String
2	studentName	String
3	subjects	subjectSchema
4	totalMarks	Number
5	percentage	Number
6	grade	String
7	course:	String
8	semester	String
9	year	String
10	marksheet_title	String

INTERFACE DESIGN

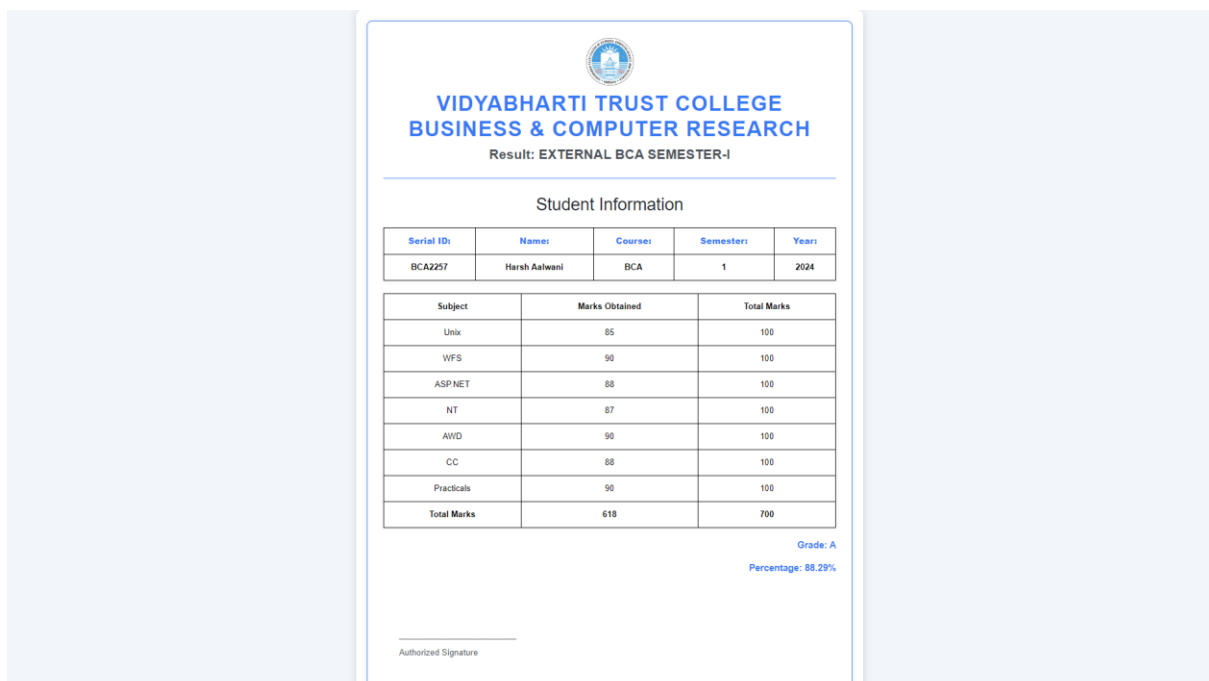
Student Side :

Student Login Id



The login interface features a blue sky background with white clouds. A central white box with a blue border contains the college logo at the top. Below the logo, the text 'Student ID:' is followed by a text input field. At the bottom of the box is a blue 'Search' button.

Result Marksheet



The result marksheet interface displays the college logo and name: VIDYABHARTI TRUST COLLEGE BUSINESS & COMPUTER RESEARCH. Below this, it states 'Result: EXTERNAL BCA SEMESTER-I'. A section titled 'Student Information' contains a table with student details. This is followed by a table showing marks for various subjects. At the bottom right, the grade 'A' and percentage '88.29%' are displayed. A line for an authorized signature is at the bottom left.

Serial ID:	Name:	Course:	Semester:	Year:
BCA2257	Harsh Aalwani	BCA	1	2024

Subject	Marks Obtained	Total Marks
Unix	85	100
WFS	90	100
ASP.NET	88	100
NT	87	100
AWD	90	100
CC	88	100
Practicals	90	100
Total Marks	618	700


Grade: A
Percentage: 88.29%

Authorized Signature

Admin Side :

Admin Login Page

Student Result Management System



Username:

Password:

Login

Dashboard

Student Result Management System

Menu

Profile

Dashboard

Add Course

Add new courses for students.

Show Marksheets

View all existing marksheets.

Add Marksheet

Create new marksheets for students.

Add Admin

Add new admin users to the system.

Marksheets

EXTERNAL BCA SEMESTER-I
EXTERNAL BCA SEMESTER-IV
EXTERNAL BCA SEMESTER-V
EXTERNAL MCA SEMESTER-II
EXTERNAL MCA SEMESTER-III
EXTERNAL MCA SEMESTER-IV

Add sheets

Student Result Management System

Menu

Profile

Home / Sheets

Sheets

Add Sheet

+

Manage Sheet

EXTERNAL BCA SEMESTER-I

EXTERNAL BCA SEMESTER-IV

EXTERNAL BCA SEMESTER-V

EXTERNAL MCA SEMESTER-II

Manage Sheet

Student Result Management System

Menu

Profile

Home / Sheets / Marksheet

EXTERNAL BCA SEMESTER-V

SID	Student Name	Subjects	Total Marks	Percentage	Grade	Delete
S244551	Neha Sharma	Unic: 85 WFS: 90 ASP.NET: 88 NT: 87 AWD: 90	440	88	A	Delete
S244552	Karan Mehta	Unic: 78 WFS: 82 ASP.NET: 80 NT: 75 AWD: 70	385	77	B	Delete
S244553	Pooja Gupta	Unic: 90 WFS: 75 ASP.NET: 80 NT: 85 AWD: 88	418	83.6	B	Delete
S244554	Ajay Singh	Unic: 92 WFS: 88 ASP.NET: 95 NT: 90 AWD: 93	458	91.6	A	Delete
S244555	Tina Rathi	Unic: 88 WFS: 79 ASP.NET: 84 NT: 82 AWD: 76	409	81.8	B	Delete

Create Marksheet Page

Student Result Management System

Menu

Profile

[Home](#) / [Sheet](#) / [Add Marksheet](#)

Create Marksheet

Title

Enter Title

Course

Select Course

Course Year

Enter Course Year

Semester

Enter Semester

Upload CSV File

Choose File | No file chosen

Add Results

Add course

Student Result Management System

Menu

Profile

[Home](#) / [Course](#)

Course

Add Course

Course

Enter Course Name

Semester

Enter Semester

Description


Enter Description

Add

Course List

Course Name	Semester	Description	Edit	Delete
MCA	4	Master of computer application	Edit	Delete
BCA	6	Bachelor of Computer Application	Edit	Delete

Add admin

 Student Result Management System

Menu

Profile

Home / Add Admin

Add Admin

Add Admin

Username

Enter Username

Email

Enter Email


Password

Enter Password

Add Admin

© 2024 Student Result Management System. All rights reserved.

Quick CSV Formatter

 Student Result Management System

Menu

Profile

Home / Quick CSV Formatter

Quick CSV Formatter

Upload CSV File

Upload File (.csv only)

Choose File

No file chosen

Format CSV

© 2024 Student Result Management System. All rights reserved.

REFERENCES

MERN Stack Tutorial - Book Store Project	https://youtu.be/-42K44A1oMA?si=jem0ADRK2VBSKHiT
Bootstrap Documentation	https://getbootstrap.com/docs/5.3/getting-started/introduction/
Print Design with CSS - mozilla.org	https://developer.mozilla.org/en-US/docs/Web/CSS/CSS_media_queries/Printing
MERN Stack Tutorial - MongoDB Resources	https://www.mongodb.com/resources/languages/mern-stack-tutorial
CSV to MongoDB - Medium	https://medium.com/@sahni_hargun/creating-a-node-js-api-to-upload-csv-files-to-mongodb-c8c4853e1fb3
Express Session	https://expressjs.com/en/resources/middleware/session.html