Jorhat Institute of Science & Technology

Jorhat-785010 (Assam)

Department of Information Technology(B.Sc.)

Session (2020-2021)

Assignment Report on

Student Record Management System

SUBMITTED BY

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Roll No. 40

CERTIFICATE

The Project on Student Result management system website submitted by Pranay Kalita (Roll no 40) in partial fulfilment of requirements for the 5th semester web technology project of BSc.IT of JIST, under ASTU.

……..	……..
Signature of the guide	Signature of the HOD
Mr . Rajeev Kalita	Mr . Jameson Mushahary
CS &IT Department ,JIST	CS &IT Department ,JIST

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ACKNOWLEDGEMENT

I students of BSc.IT 5th semester of Jorhat Institute of Science & Technology, Jorhat undertake a project work on "**Student Record Management System**" as our assignment project for 5th semester, Web Technology under the guidance of **Mr. Rajiv Kalita**.

It is indeed with a great pleasure and immense sense of gratitude that acknowledge the help of these individuals. I highly indebted **Mr Jameson Musahary**, and **Miss Himadri Neog** to for their guidance and their encouragement to accomplish this project.

I would like to thank our guide Prof. **Hsuvas Borkakoty** for his constructive criticism throughout our project.

At last but not the least I would like to extend our special thanks to all our friends whose cooperation and help during the project is ought to be noted without whom the project would be incomplete.

Thanking you all

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B.Sc. IT 5th semester
Jorhat Institute of Science & Technology,
Jorhat

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Contents

Introduction

Student record management system is designed to help manage the daily school activities of recording and maintaining by automating it. It is also known as the student information system (SIS) or school records system (SRS).

The system is equipped with a robust set of features like attendance tracking, library management, parent's portal, etc. These tools help in managing the institute efficiently and accurately. In other words, it saves time, cut fees loss, and other wastages.

It is developed using PHP, CSS, JavaScript, and Bootstrap. Talking about the project, it contains an admin side from where a user can maintain student marks records easily. The Admin plays an important role in the management of this system. In this project, the user has to perform only registration.

The user has to provide various information such as his/her name, gender, D.O.B. After this, the user can easily manage student's record and can update, remove if he/she wants.

Objective and Functionalities

The main objective at the end of the day for school is to provide student exam report card. Such that the student can view or download it easily.

Here are some of the goals and roles of **SRMS**:

- Easy Registration
- Easy mark sheet download
- For admin easy to assign marks
- Add new semester
- Add new course
- View edit assigned marks data

Tools and Technique

A. PHP

B. MySQL

C. Html

D. CSS

E. JavaScript

F. Bootstrap

G. Xampp

PHP

Hypertext Pre-processor (or simply PHP) is a server-side scripting language designed for Web development, but also used as a general-purpose programming language. It was originally created by Rasmus Lerdorf in 1994,] the PHP reference implementation is now produced by The PHP Group. PHP originally stood for Personal Home Page,] but it now stands for the recursive acronym PHP. PHP code may be embedded into HTML code, or it can be used in combination with various web template systems, web content management systems, and web frameworks. PHP code is usually processed by a PHP interpreter implemented as a module in the web server or as a Common Gateway Interface (CGI) executable. The web server combines the results of the interpreted and executed PHP code, which may be any type of data, including images, with the generated web page. PHP code may also be executed with a command-line interface (CLI) and can be used to implement standalone graphical applications.

MySQL

MySQL Workbench is a unified visual tool for database architects, developers, and DBAs. MySQL Workbench provides data modelling, SQL development, and comprehensive administration tools for server configuration, user administration, backup, and much more. MySQL Workbench is available on Windows, Linux and Mac OS X.

HTML

Hypertext Mark-up Language (HTML) is the standard mark-up language for creating web pages and web applications. With Cascading Style Sheets (CSS) and JavaScript, it forms a triad of cornerstone technologies for the World Wide Web. Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.
HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects such as interactive forms may be embedded into the rendered page. HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items.

CSS

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a mark-up language like HTML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript.
CSS is designed to enable the separation of presentation and content, including layout, colours, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple web pages to share formatting by specifying the relevant CSS in a separate CSS file, and reduce complexity and repetition in the structural content.

JavaScript

JavaScript often abbreviated as JS, is a high-level, interpreted programming language. It is a language which is also characterized as dynamic, weakly typed, prototype-based and multi-paradigm.
Alongside HTML and CSS, JavaScript is one of the three core technologies of the World Wide Web. JavaScript enables interactive web pages and thus is an essential part of web applications. The vast majority of websites use it, and all major web browsers have a dedicated JavaScript engine to execute it.

Bootstrap

Bootstrap is a free and open-source front-end framework for designing websites and web applications. It contains HTML- and CSS-based design templates for typography, forms, buttons, navigation and other interface components, as well as optional JavaScript extensions. Unlike many web frameworks, it concerns itself with front-end development only

Xampp

XAMPP is a free and open source cross-platform web server solution stack package developed by Apache Friends, consisting mainly of the Apache HTTP Server, Maria DB database, and interpreters for scripts written in the PHP and Perl programming languages. XAMPP stands for Cross-Platform (X), Apache (A), Maria DB (M), PHP (P) and Perl (P). It is a simple, lightweight Apache distribution that makes it extremely easy for developers to create a local web server for testing and deployment purposes. Everything needed to set up a web server – server application (Apache), database (Maria DB), and scripting language (PHP) – is included in an extractable file. XAMPP is also cross-platform, which means it works equally well on Linux, Mac and Windows. Since most actual web server deployments use the same components as XAMPP, it makes transitioning from a local test server to a live server extremely easy as well.

Module of SRMS

- **Dashboard** to keep all track
- **Assign result**: assign results to individual registered user
- **Semester**: add new semester or delete semester
- **Subjects**: add new subjects or delete
- **Settings**: Generate pin to register a new admin
- **Results**: select and download declared results
- **Account**: update semester

Requirement Analysis

REQUIREMENTS GATHERING:

During the design of the project, proper given guidelines has been followed.

FUNCTIONAL REQUIREMENTS:

The application is designed to computerize the process of managing student report card. For a student it's easy to access the site from anywhere in the world and for admin it's easy to keep track of all declared results.

NON-FUNCTIONAL REQUIREMENTS:

A. Security

Security tests have been conducted to determine how secure the login system is. These tests verify that the unauthorized user access to confidential data (database) is prevented

B. Compatibility

The application is compatible with all modern Operating Systems having a latest Web Browser. Also compatible with mobile as it is responsive

C. Modifiable

The application can be easily modified by any admin or a web developer who has access and knowledge to it.

HARDWARE REQUIREMENTS

The minimum hardware facilities, which are required in order to cope up with, the proposed system, are as follows:

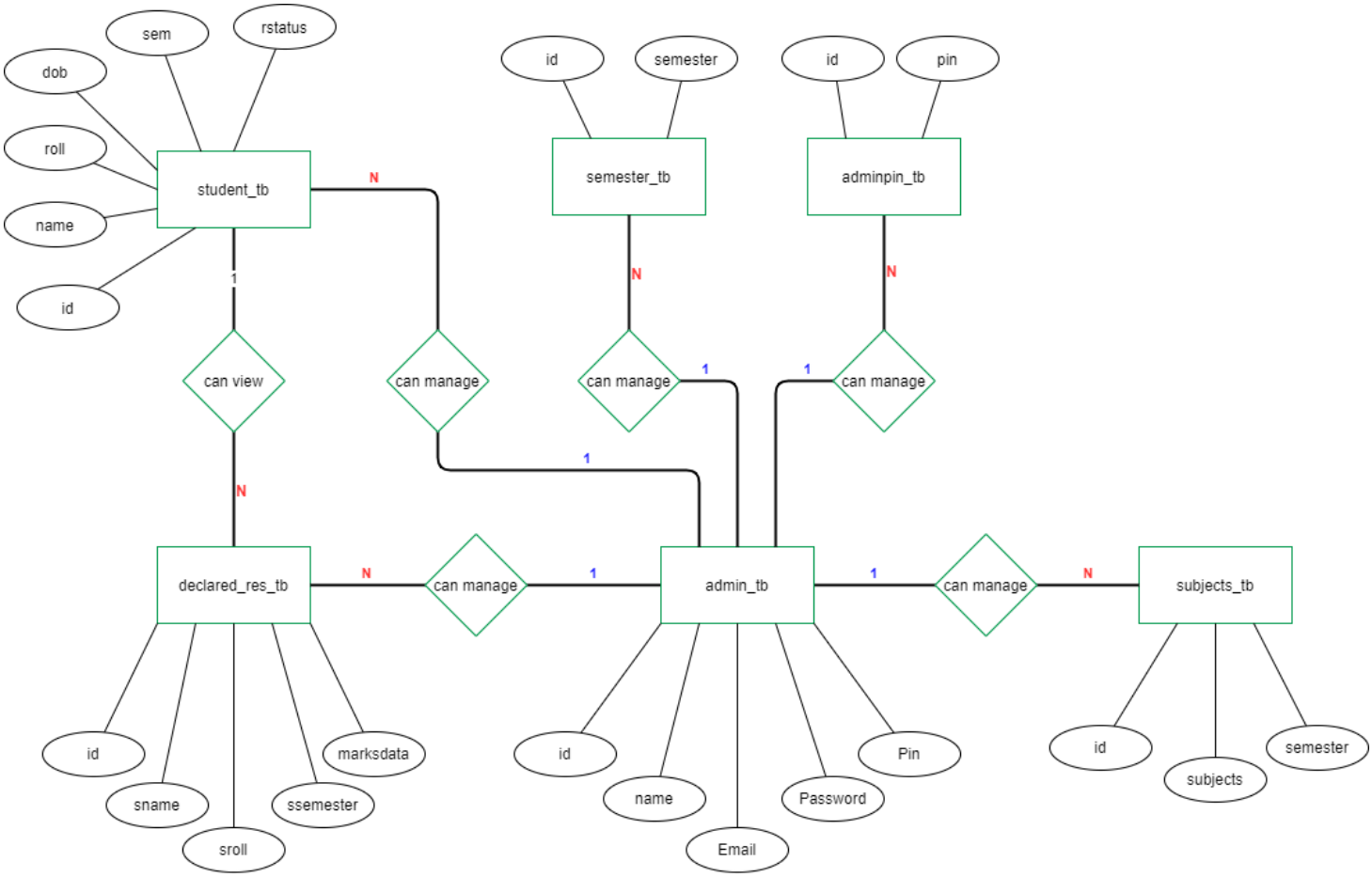
Processor: 2.0 Ghz
Storage: 10 GB
RAM: 2GB

SOFTWARE REQUIREMENTS

The various software specifications necessary for the environment in order to run the project is given below:

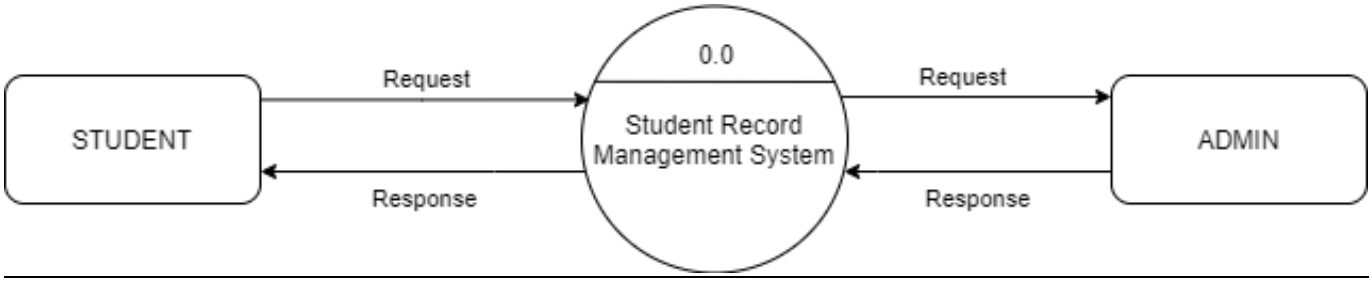
SYSTEM TYPE: 64bit- OS , X-86 Based Processor
OPARATING SYSTEM: Windows OS , Linux Based
DATABASE SOFTWRE: MySQL
WEB SERVER / SOFTWARE: Xampp or Apache
BROWSER: Best View in Chrome

Entity Relationship Diagram

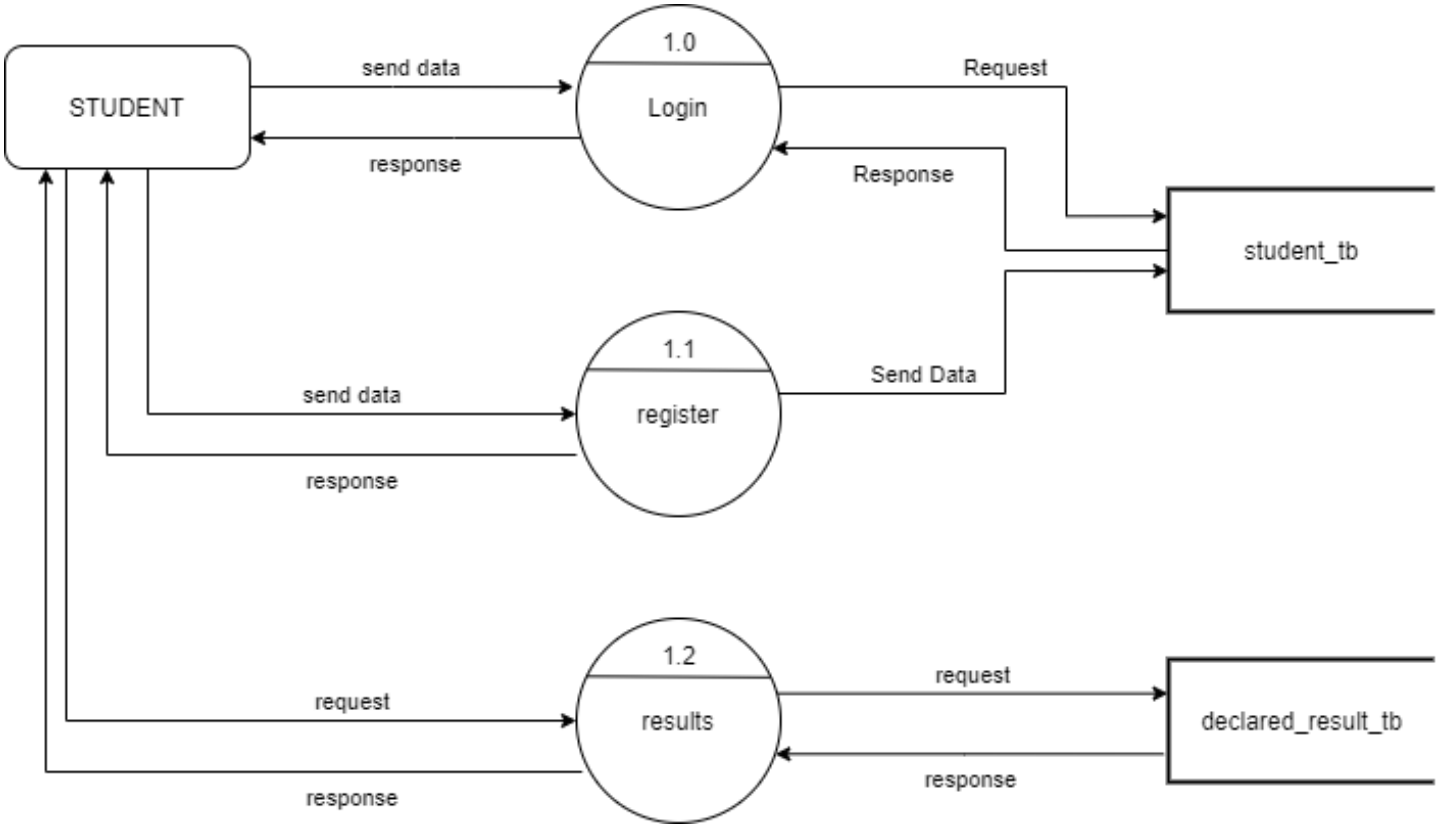


Dataflow Diagram

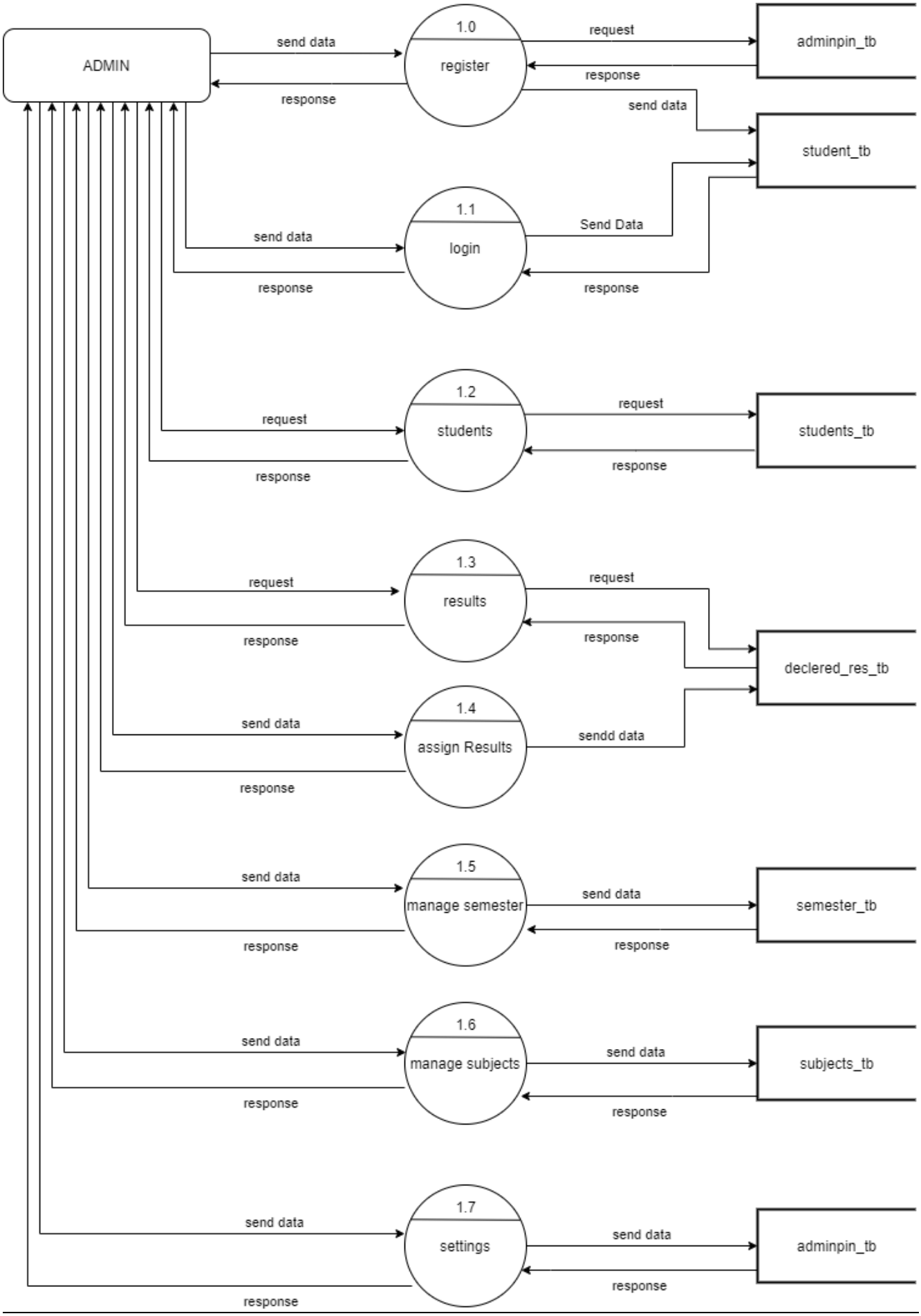
Level 0



Level 1 **STUDENT**



Level 1 **ADMIN**



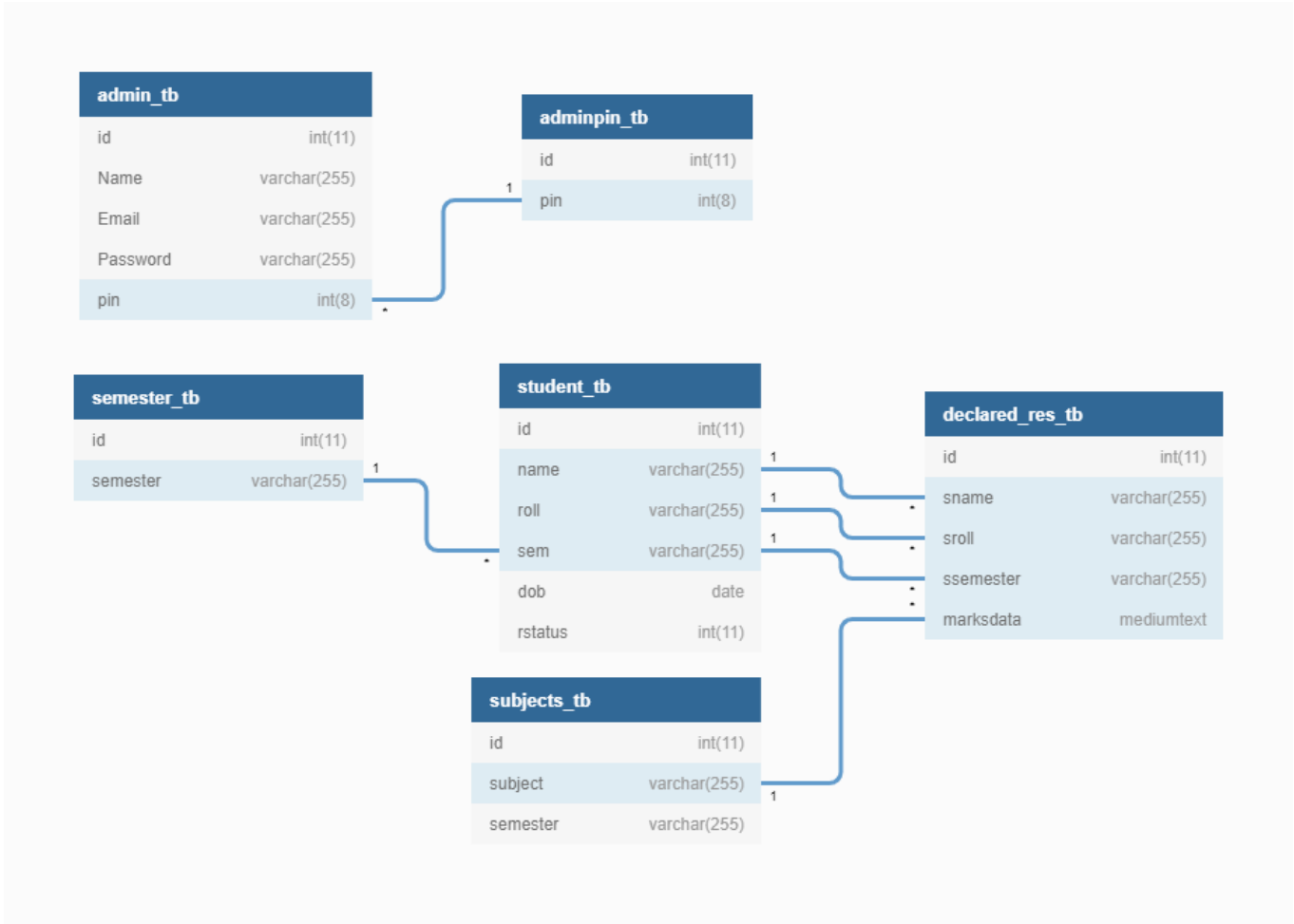
Database

database name: **"srms_p"**

Tables:

	Table	Action	Rows	Type	Collation	Size	Overhead
☐	adminpin_tb	Browse Structure Search Insert Empty Drop	1	InnoDB	utf8mb4_general_ci	16.0 KiB	-
☐	admin_tb	Browse Structure Search Insert Empty Drop	1	InnoDB	utf8mb4_general_ci	16.0 KiB	-
☐	declared_res_tb	Browse Structure Search Insert Empty Drop	1	InnoDB	utf8mb4_general_ci	32.0 KiB	-
☐	semester_tb	Browse Structure Search Insert Empty Drop	6	InnoDB	utf8mb4_general_ci	16.0 KiB	-
☐	student_tb	Browse Structure Search Insert Empty Drop	1	InnoDB	utf8mb4_general_ci	16.0 KiB	-
☐	subjects_tb	Browse Structure Search Insert Empty Drop	4	InnoDB	utf8mb4_general_ci	16.0 KiB	-
	6 tables	Sum	14	InnoDB	utf8mb4_general_ci	112.0 KiB	0 B

Database Relationship



Plugins

DataTables

DataTables is a plug-in for the jQuery JavaScript library. It is a highly flexible tool, built upon the foundations of progressive enhancement, that adds all of these advanced features to any HTML table.

To implement DataTables

```
CSS //cdn.datatables.net/1.10.23/css/jquery.dataTables.min.css
JS //cdn.datatables.net/1.10.23/js/jquery.dataTables.min.js
```

```
1 $(document).ready( function () {
2 $('#myTable').DataTable();
3 } );
```

Html2pdf

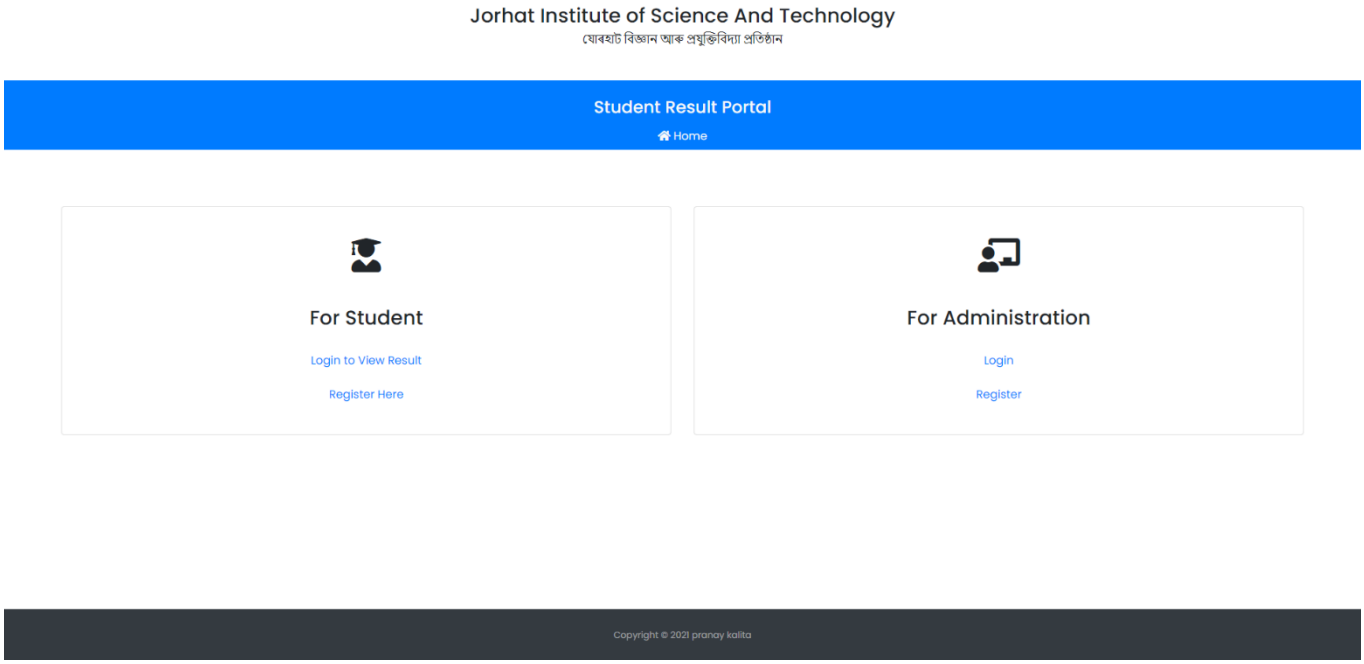
html2pdf.js converts any webpage or element into a printable PDF entirely client-side using html2canvas and jsPDF.

```
JS raw.githack.com/eKoopmans/html2pdf/master/dist/html2pdf.bundle.js
```

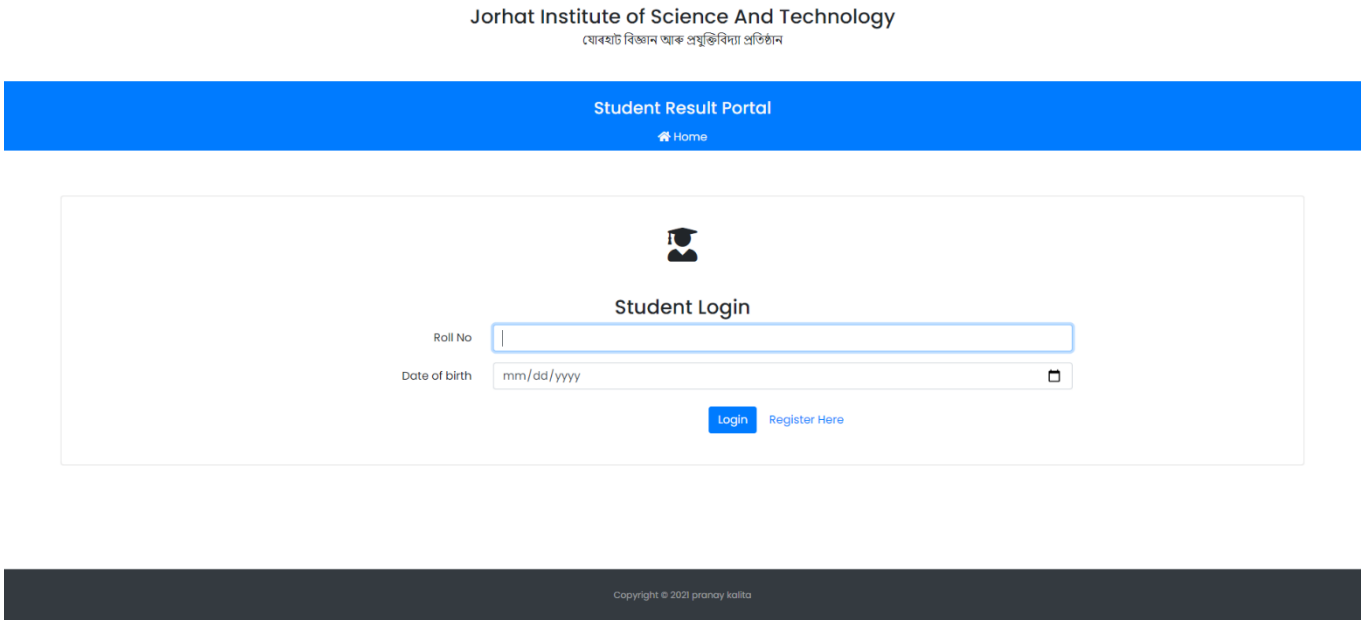
```
1 var element = document.getElementById('element-to-print');
2 html2pdf(element);
```

Snapshot

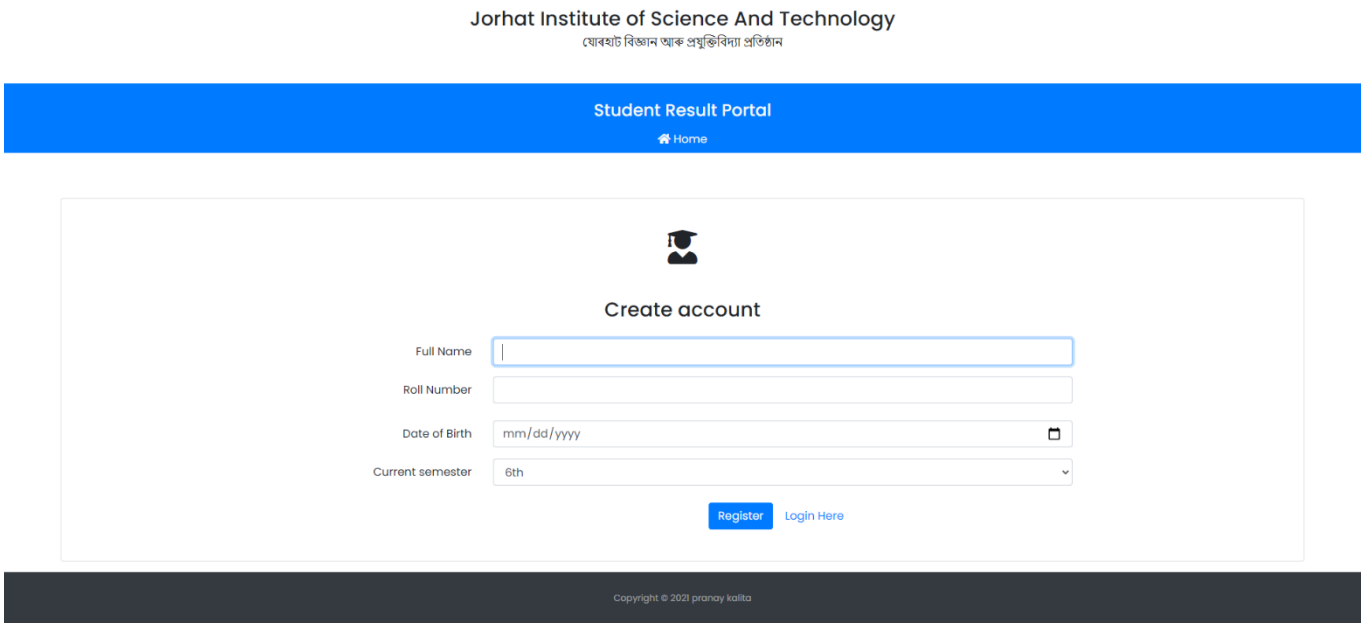
❖ Home page



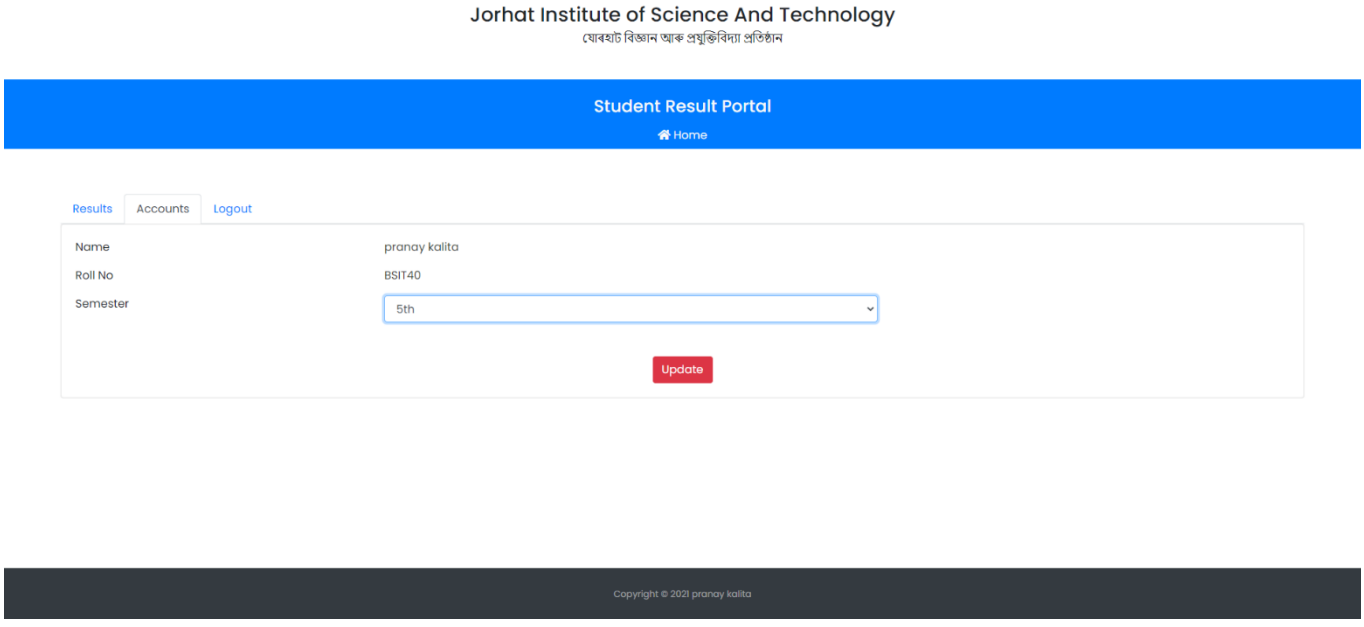
❖ Student login



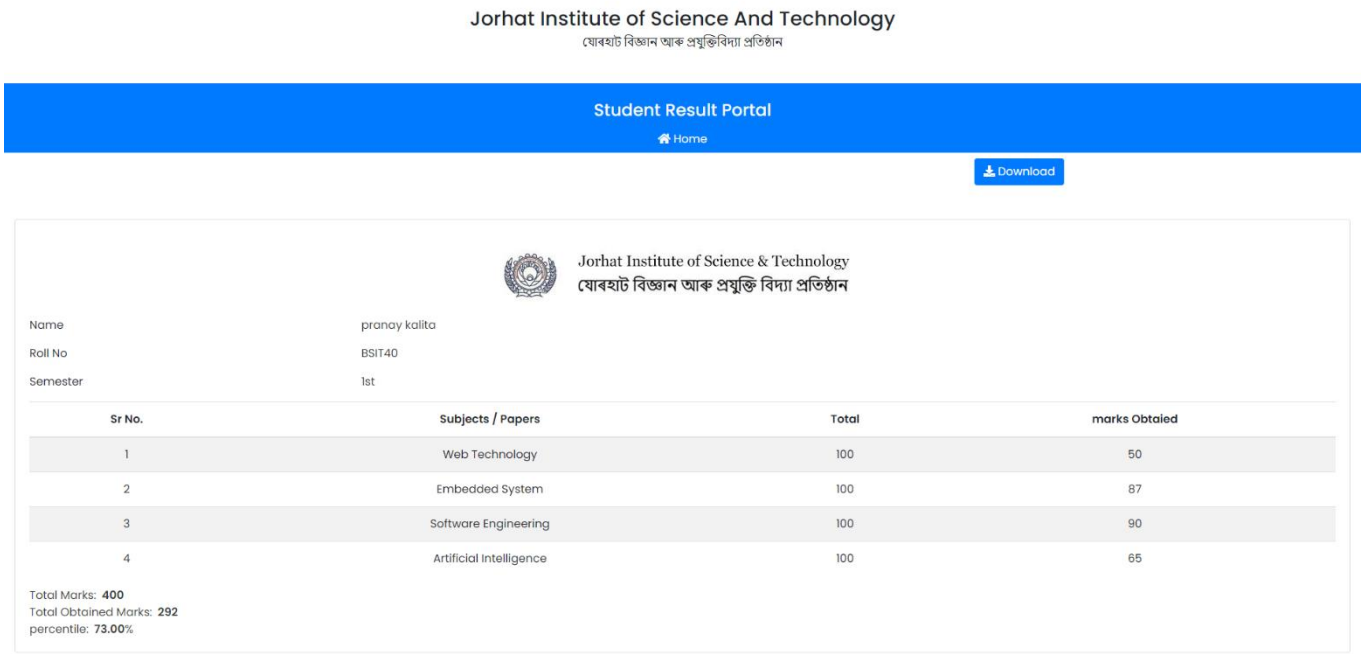
❖ Student Registration



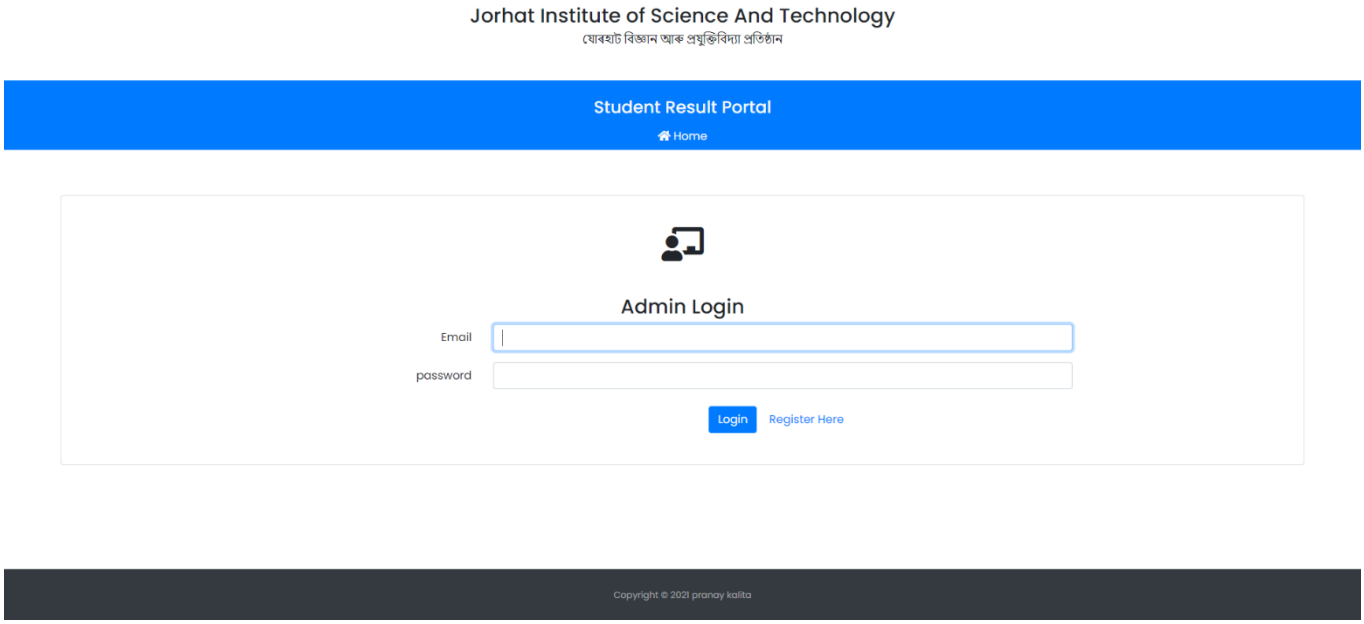
❖ Student profile and Update



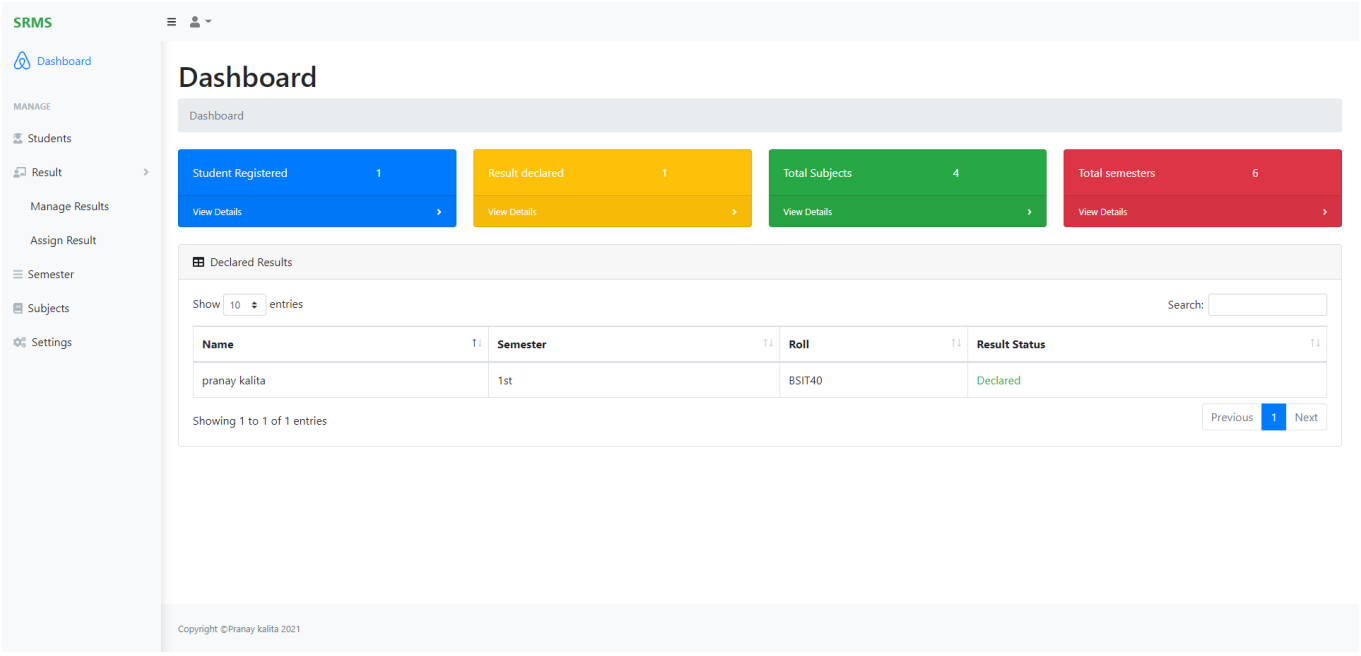
❖ Student report card



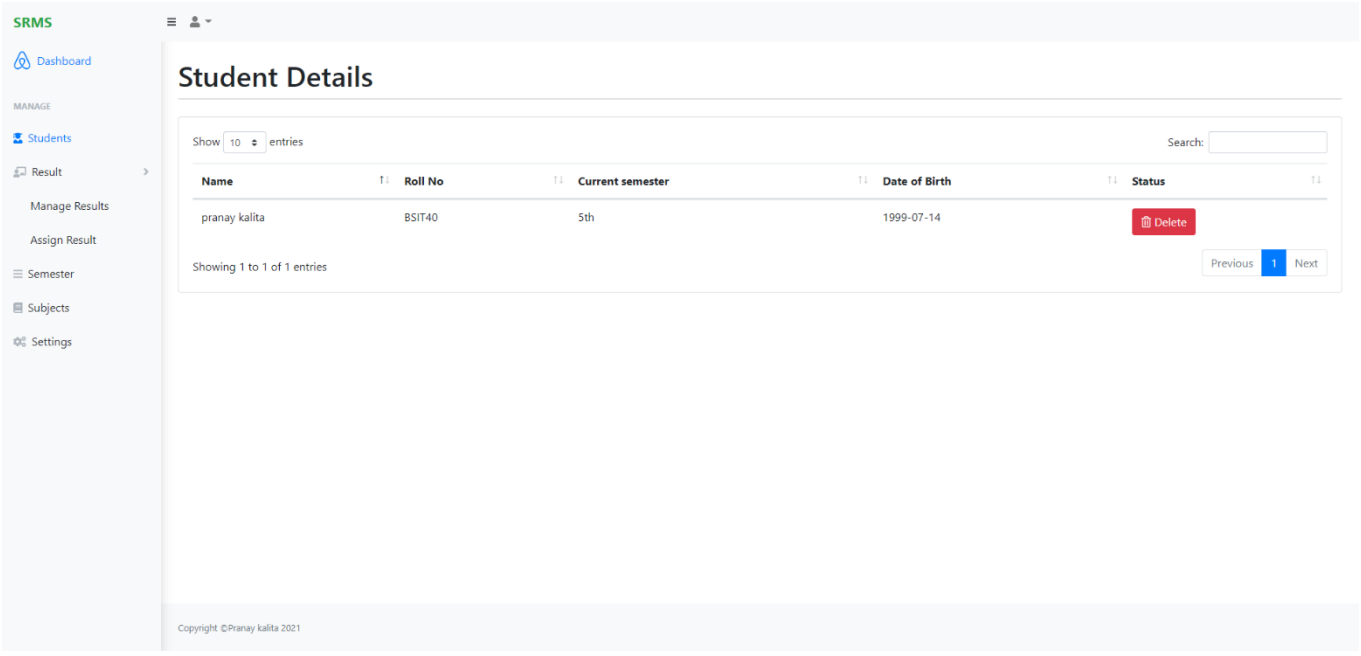
❖ Admin Login



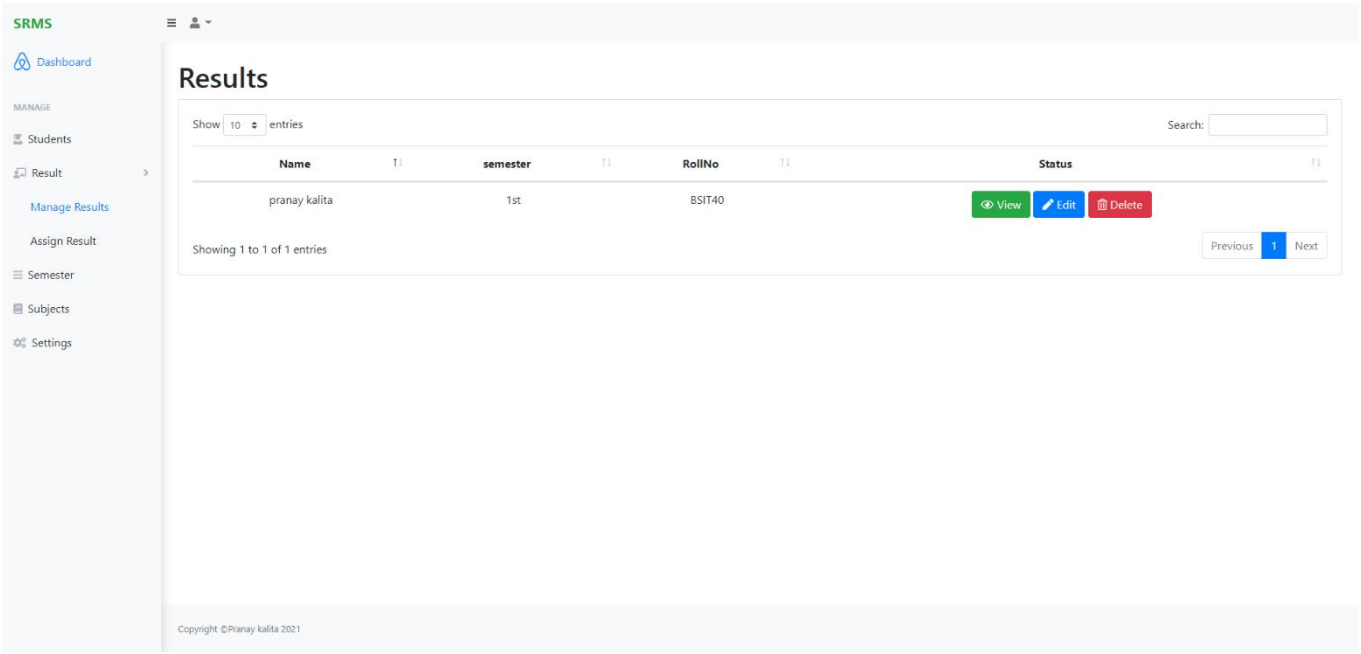
❖ Admin Dashboard



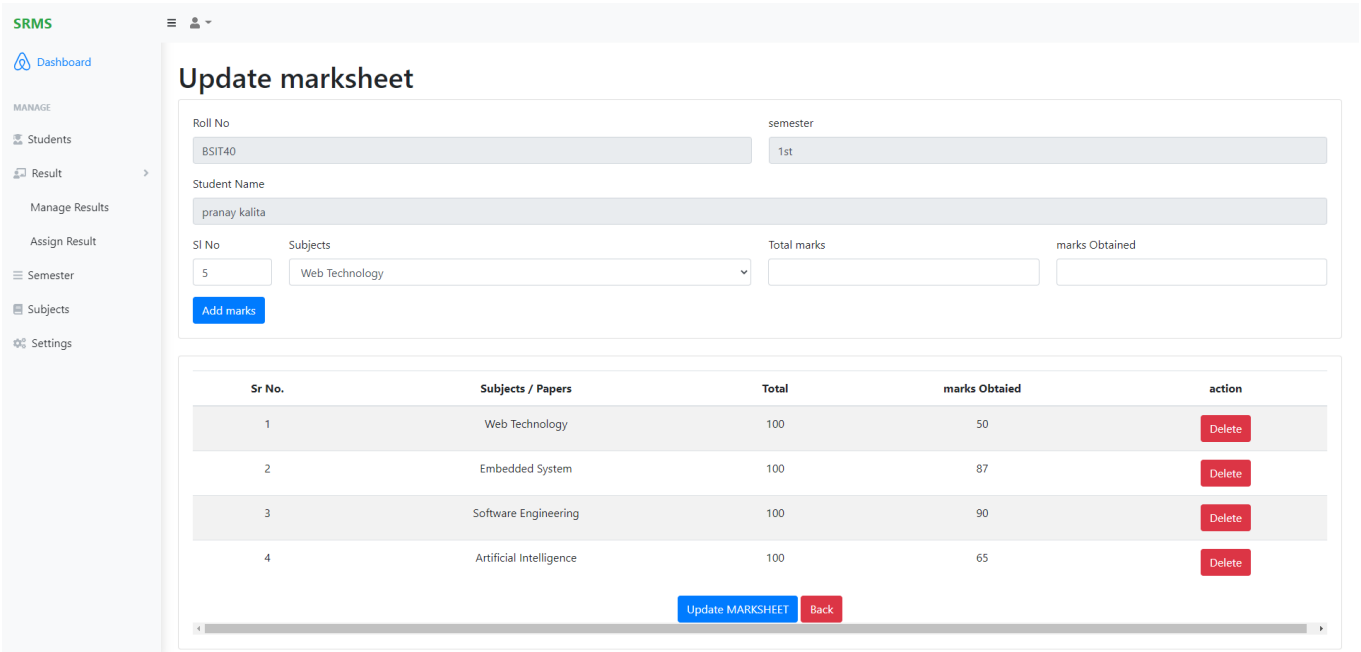
❖ Student Overview



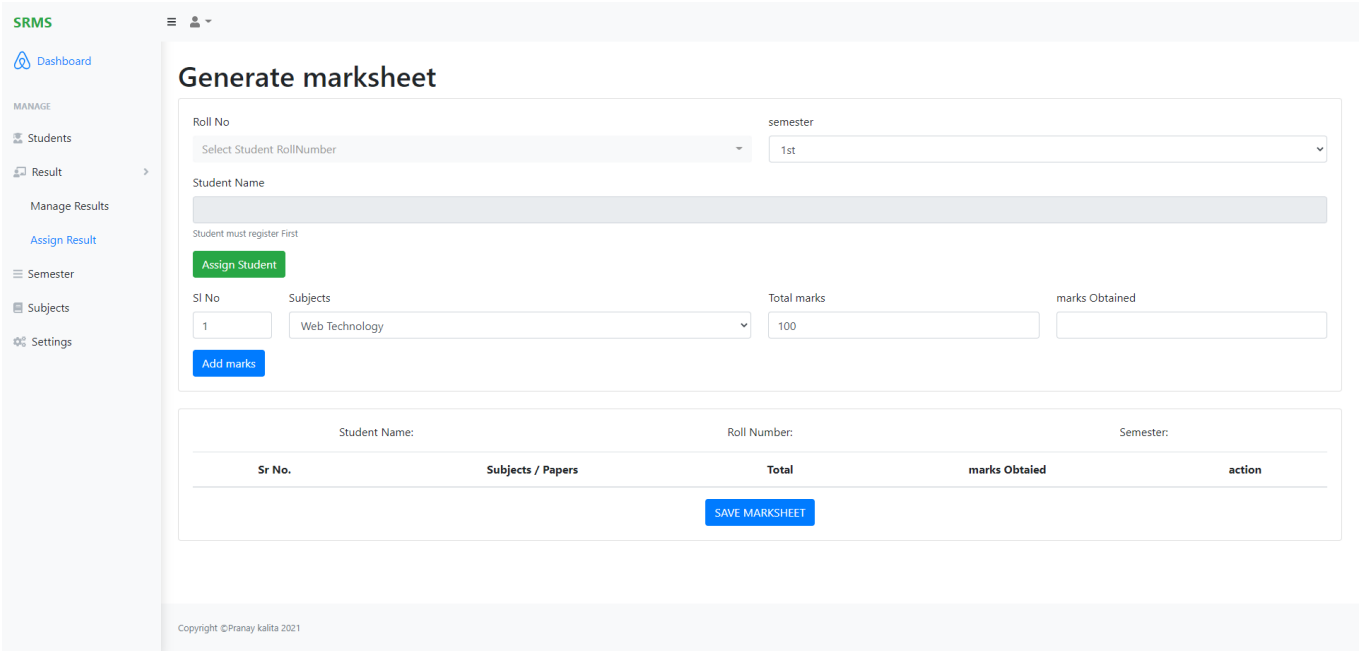
❖ View Results



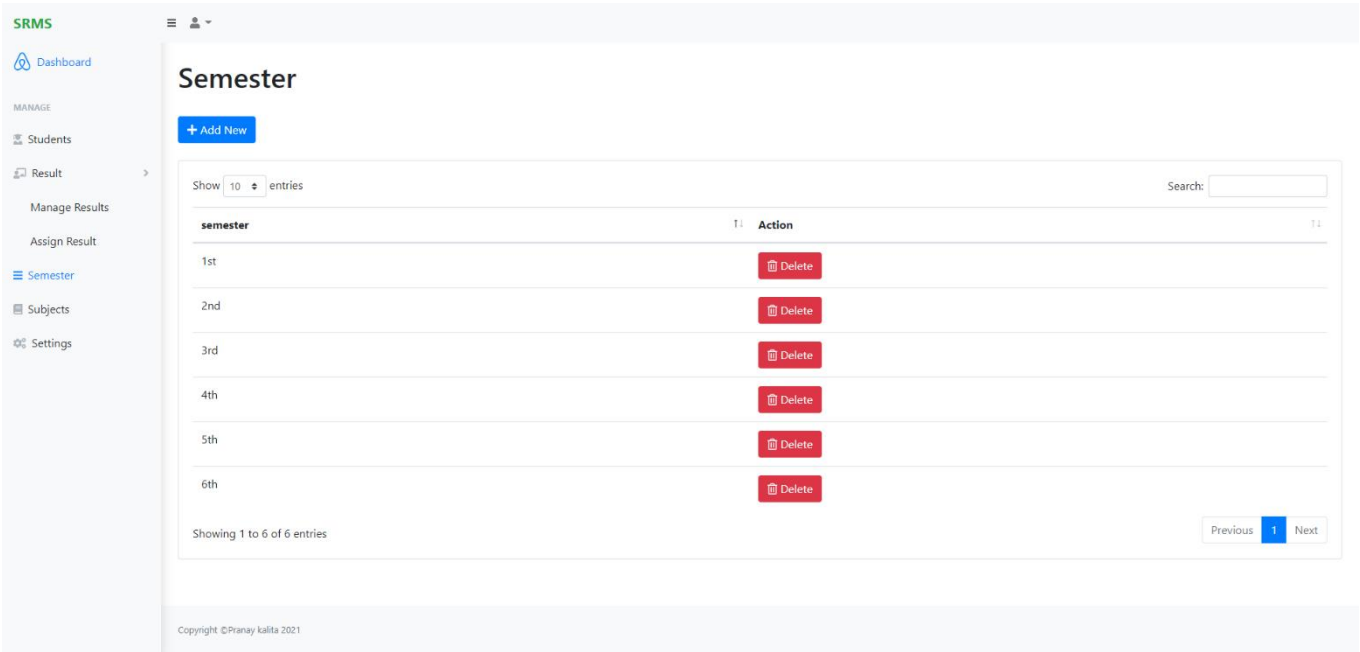
❖ Update Result



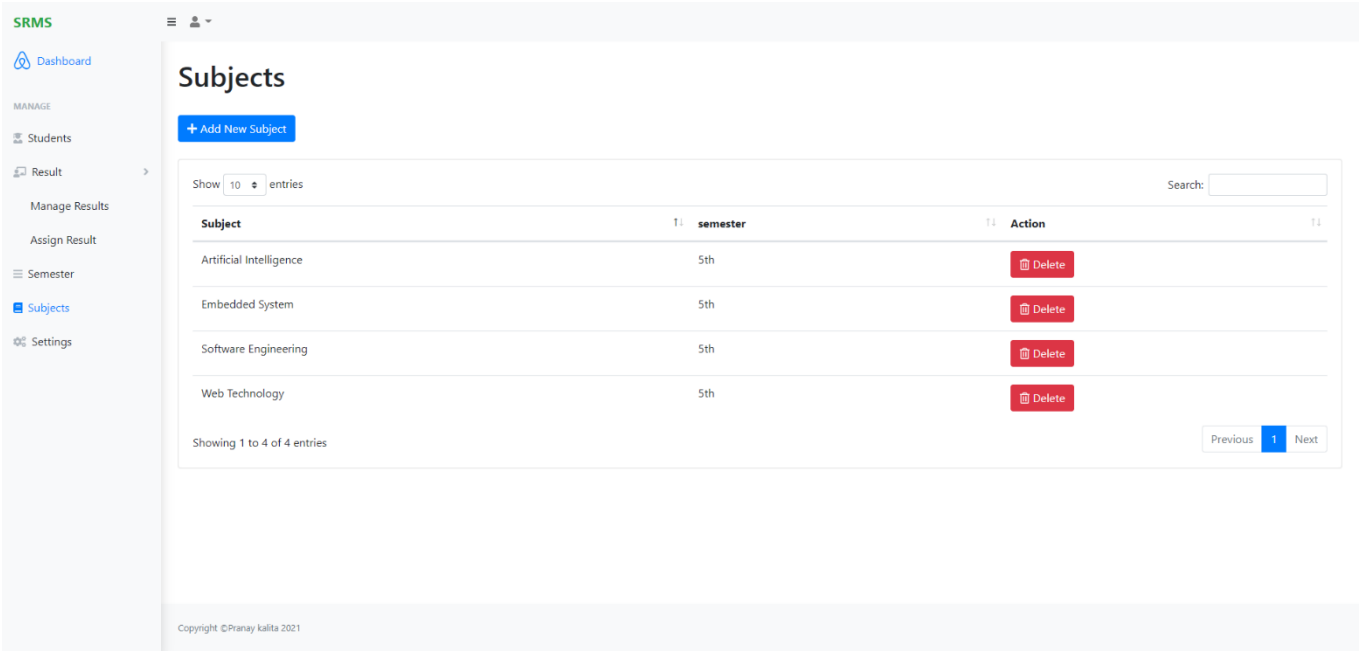
❖ Declare Result



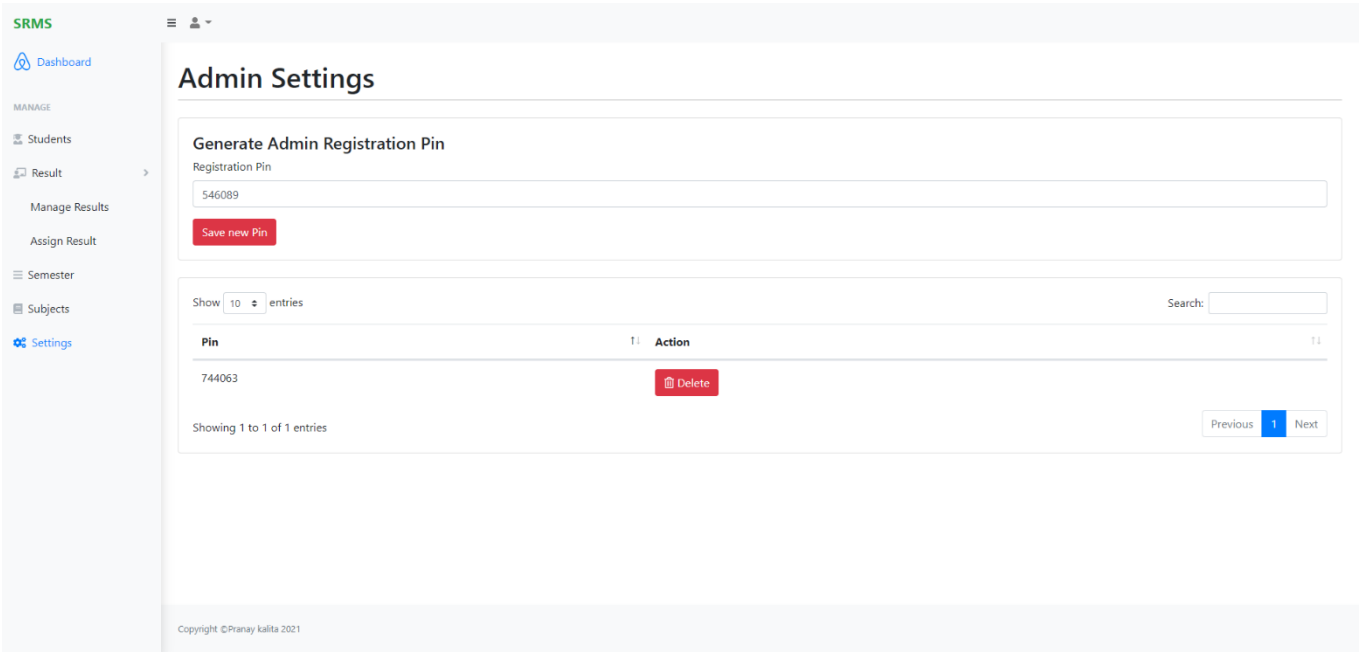
❖ Semester Management



❖ Subject Management



❖ New Admin settings



Future Scopes

The future scopes of the proposed system are: -

- ✓ Creation of Classroom Instructional resources
- ✓ Monitor the progress of the students in academic
- ✓ Teacher management and resource
- ✓ Administration, Records and Accountability
- ✓ School finance management
- ✓ Admission Management
- ✓ Attendance Management
- ✓ Parents Teachers interaction

Conclusions

The package was designed in such a way that future modifications can be done easily. The following conclusions can be deduced from the development of the project.

- Automation of the entire system improves the efficiency
- It provides a friendly graphical user interface which proves to be better when compared to the existing system
- It gives appropriate access to the authorized users depending on their permissions.
- It effectively overcomes the delay in communications.
- Updating of information becomes so easier.
- System security, data security and reliability are the striking features.
- The System has adequate scope for modification in future if it is necessary

References

[1] https://www.tutorialspoint.com

[2] http://w3schools.com/

[3] https://getbootstrap.com/

[4] https://youtube.com/

[5] https://en.wikipedia.org/