Project Report

On

ROLE BASED STUDENT ACTIVITY MANAGEMENT SYSTEM

Submitted by

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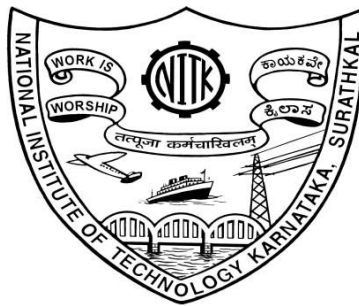**M. Tech (CSE) Roll no. 202CS021**

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ABSTRACT

The main objective of developing Role based Student Activity Management System is to present an efficient and secure way to manage the various activities of the students. This project work focuses on the role-based login access and their specific rights like add, delete, update. In this we have implemented role-based access model by using which a user based on their role either student or admin can go to the allowed pages and module.

Role Based Student Activity Management System is essential for an institution or a college or a university, which utilizes secure role base login system, also which reduces manpower. Student Activity Management System manages various student activities like in which game he/she wants to register etc. in a secure way.
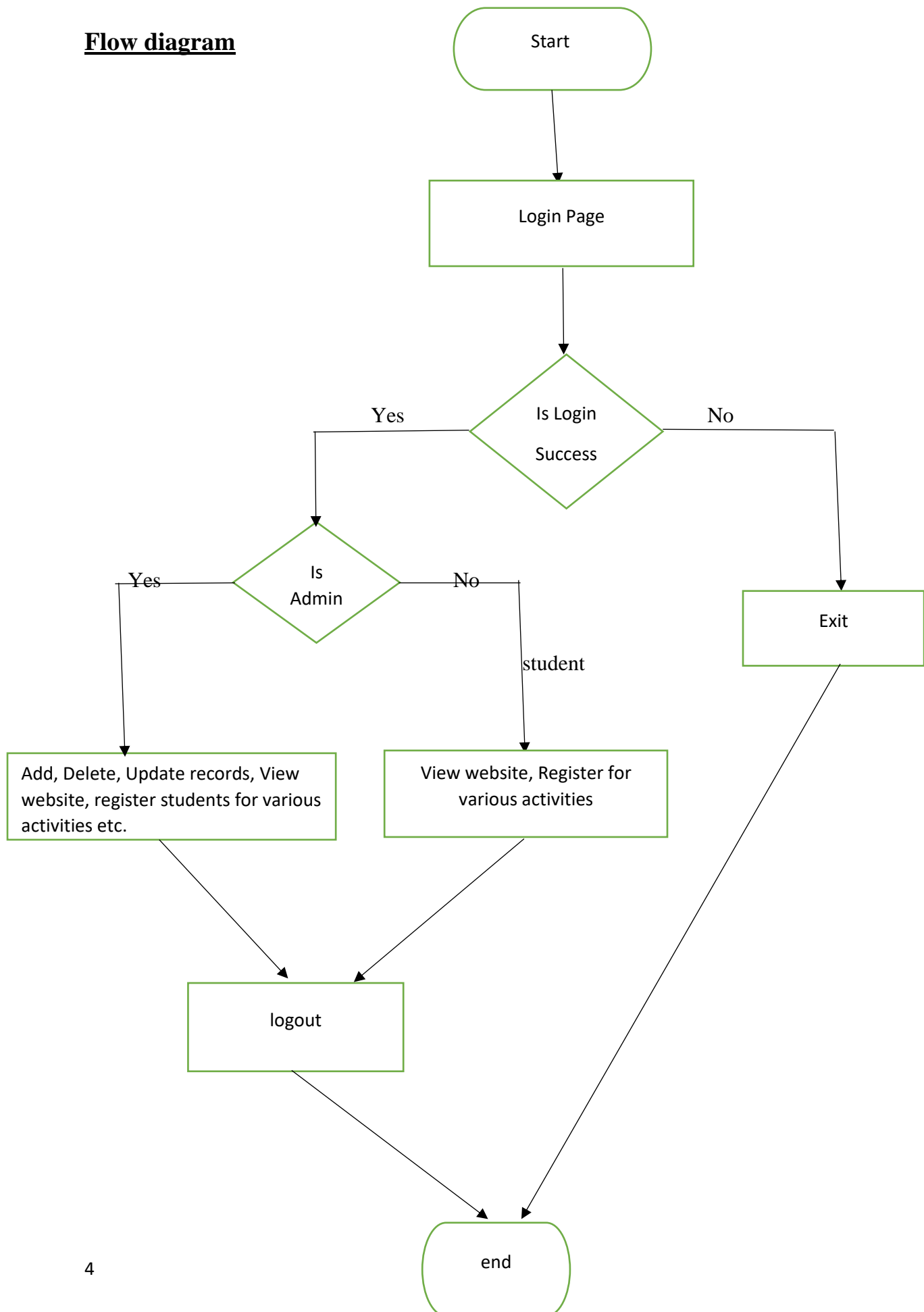
INTRODUCTION

As colleges got expanded the number of students also gets increased and also the student related content increases. This project titled "Role Based Student Activity Management System" managing all activities like sports, cultural, coding in the college in a secure way. Due to complexity, it's a difficult task to maintain their details manually. So, this system can help in making the work of the administrator easier and faster. The purpose of this developed system is to reduce the manual work of the administrator by helping in maintenance all the activity records computerised which is safe and secure. The system does several things such as student can login and can register for any activity listed in the sport, cultural and programming and coding and can also view college website. User with admin role along with login and password can manage the student activities such as can add, update, delete records and can also register student for various activities.

IMPLEMENTATION

The basic requirements for the design of the "Role Based Student Activity Management" System are:

Every user should have their own login credentials which can be for an admin or student. Here we have two types of role one is **student** and the other is **admin**. The admin can update/delete any user information and also, he can register student for various activities such as cricket, carrom etc.

Flow diagram

```
                          ( Start )
                             |
                             v
                       [ Login Page ]
                             |
                             v
                        < Is Login
              Yes          Success >          No
          +-------------------+-------------------+
          |                                       |
          v                                       v
      < Is                                    [ Exit ]
 Yes   Admin >   No                              |
  +------------+ student                         |
  |                  |                           |
  v                  v                           |
[ Add, Delete,   [ View website,                 |
  Update records,   Register for                 |
  View website,     various activities ]         |
  register students                              |
  for various                                    |
  activities etc. ]                              |
       |                 |                        |
       v                 v                        |
          [ logout ]                              |
               |                                  |
               v                                  v
                    ( end )
```

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SOFTWARE TOOLS USED

Web Browser- Google Chrome, Mozilla Firefox

The whole project is divided in to two parts the front end and the back end.

1. FRONT END

The front end is designed using:

HTML – Page layout has been designed in HTML.

CSS – CSS has been used for all style and design part.

JAVASCRIPT – It is used to program the behaviour of web pages.

2. BACK END

MySQL – MySQL database is used as database for the project.

APACHE – Project will be run over the Apache Server.

XAMPP SERVER – It is an abbreviation for cross-platform, Apache, MySQL, PHP

3.VERSION CONTROL

GITHUB – It is used for the version control.

FUNCTIONAL SPECIFICATION

The functions and working of this system are described below-

1. User Interface

Home – This is the root page of the website. It includes the information of the various activities and have other option to select and navigate.

Activity – In activity we have 3 tabs that is Sports, Cultural, Programming and coding by clicking on these we go to the respective activities and from there the student can register themselves for respective activities.

NITK – This will help to go the NITK website.

REC SONBHADRA – This will help to go the REC Sonbhadra website

AICTE – This will help to go the AICTE website.

Logout – By clicking on logout button student/admin return back to starting page that is login page means the user have to login again to access the website.

2-Admin Interface

Admin Interface has following component and its access-

> **Admin dashboard-** It manages the all registered user information and their roles and also can update, add, and delete.
>
> **Sports Activity-** Here admin can manage the sports related information.
>
> **Cultural Activity-** Here admin can manage the cultural activity related information.
>
> **Coding and Programming Activity-** Here admin can manage the Coding and Programming related information.

TECHNICAL SPECIFICATION

We have used different languages and tools to implement this project according to the requirement. The property of these tools and languages are described below –

1. HTML – Hypertext Mark-up Language (HTML) is the standard mark-up language for documents designed to be displayed in a web browser.

2. CSS - Cascading Style Sheets (**CSS**) is a style sheet language used for describing the presentation of a document written in a mark-up language such as HTML. **CSS** is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript.

3. JAVASCRIPT - JavaScript (JS) is a lightweight, interpreted, or just-in-time compiled programming language with first-class functions. While it is most well-known as the scripting language for Web pages, many non-browser environments also use it, such as Node.js, Apache CouchDB and Adobe Acrobat.
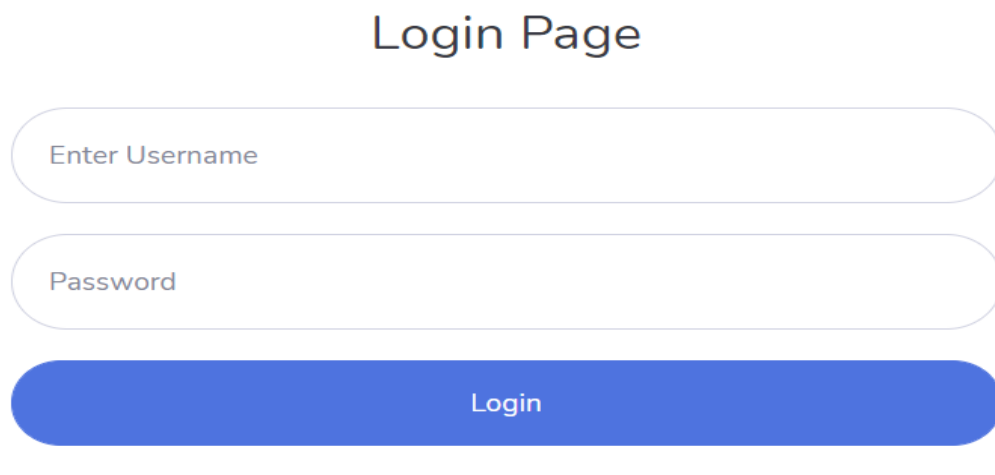
4. BOOTSTRAP - Bootstrap is a powerful and popular front-end framework for building responsive sites on the web by using HTML, CSS and JS framework.

5. PHP – PHP is a server side scripting language that is used to develop Static websites or Dynamic websites or Web applications.

6. MySQL – MySQL is an open source relational database management system. It runs as a server and allows multiple users to manage and create numerous databases.
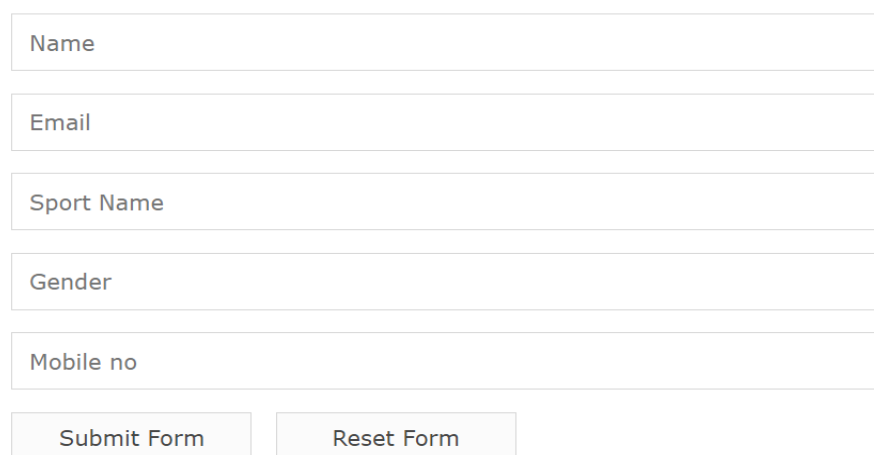
RESULTS

1) Login Form: The system starts with the login page where the registered user can enter username and password to be able to access.

Login Page

Enter Username

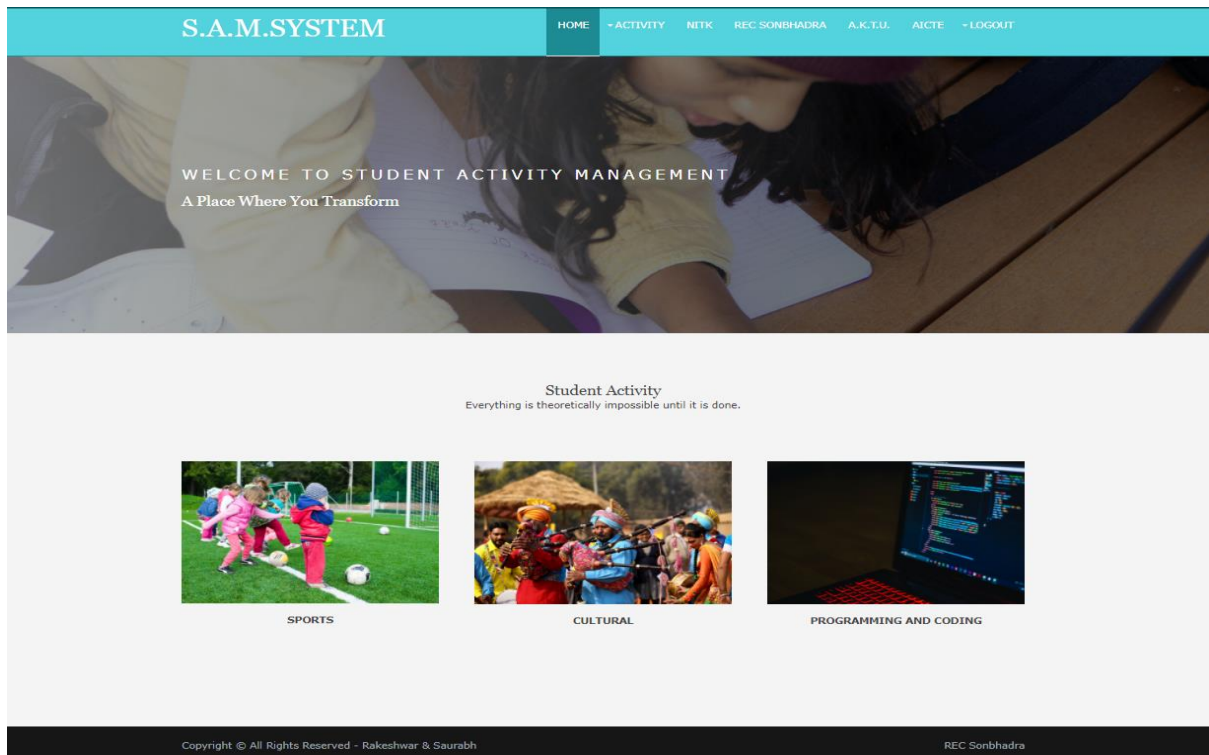| Password |
|---|

Login

2) Registration Form: The user has to go to the registration form of various activities (Sports, Cultural, Programming and Coding) for doing registration for various activities such as Cricket, Football, Dance, Competitive Programming, Web Development etc.
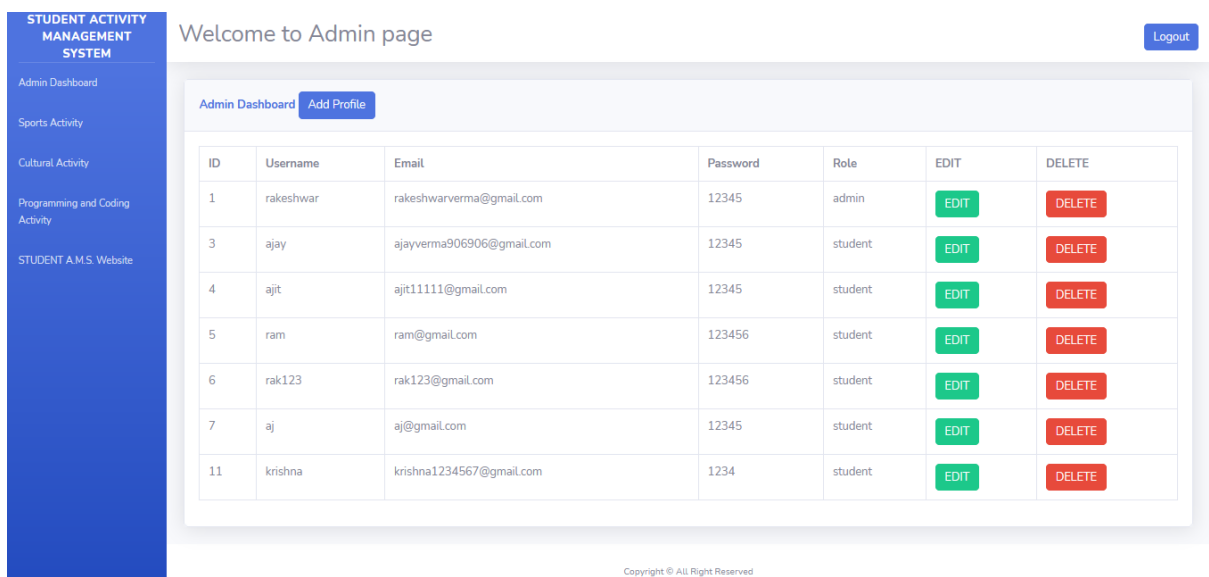
Register Here

Name

Email

Sport Name

Gender

Mobile no

Submit Form	Reset Form

3) Home Page: Homepage gives the complete overview of the "Student Activity Management System".

4) Admin Dashboard: Admin Dashboard will enable the admin to add new user and can assign new role as well.

CONCLUSION AND FUTURE SCOPE

Role Based Student Activity Management can be used by educational institutions to maintain their student activity records easily as it is more secure, efficient and convenient. Achieving this objective is difficult using the manual system as the information is scattered, can be redundant and collecting relevant information may be very time consuming that is it reduces the man power needed to perform the entire administration task by reducing the paper works needed. If all the work done by the computer there will be no chance of errors.

Role Based Student Activity Management is customizable and is very satisfactory in terms of Security, functionality, user-friendliness, usability and performance, it is implied that other colleges may adopt this system for more efficient activity information management

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REFRENCES

1) https://www.w3schools.com/

2) https://www.php.net/

3) Various opensource material from internet.