Project Report

On

STUDENTS RESULTS MANAGEMENT SYSTEM

Submitted by

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Under the guidance of

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DECLARATION

We hereby declare that the report of the B.Tech Major Project Work entitled **"STUDENTS RESULTS MANAGEMENT SYSTEM"** which is being submitted to Rajiv Gandhi University of Knowledge Technologies, RK Valley, in partial fulfillment of the requirements for the award of Degree of Bachelor of Technology in Computer Science and Engineering, is a bonafide report of the work carried out by us. The material contained in this report has not been submitted to any university or institution for award of any degree.

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CERTIFICATE

This is to certify that the project work titled **"STUDENTS RESULTS MANAGEMENT SYSTEM"** is a bonafied project work submitted by J.Keerthivallika(R171143), N.Meghana(R171150) in the department of COMPUTER SCIENCE AND ENGINEERING in partial fulfillment of requirements for the award of degree of Bachelor of Technology in Computer science and engineering for the year 2021-2022 carried out the work under the supervision

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HEAD OF THE DEPARTMENT

P.HARINADHA

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My sincere thanks to all the members who helped me directly and indirectly in the completion of project work. I express my profound gratitude to all our friends and family members for their encouragement.

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Abstract

The Students Results Management System is a web based program that was created to keep track of students results. The server side language in this program is python, the back end design is sqlite3, and the front end tools are HTML, CSS, and Bootstrap.

The main objective of the project is to provide the examination result to the student in a simple way. This project is useful for students and institutions for getting the results in simple manner. By a result analyzer with subject status and marks is an application tool for displaying the results in secure way.

The system is intended for the student. And the privileges that are provided to student are to view their resultss by providing the student roll number.The Admin can login and access to view the student database and add and delete the students in the database The whole result analyzer will be under the control of the admin as the full privileges to read, write and execute the result. And admin gives the privileges to the student.

Introduction

The major role of the Students Results Management System project to improve and automate the management declaration of the students results. It contains the students academic results information including their registration number, subjects, each subject internal and external marks and total marks and total percentage.

The application is reduced as much as possible to avoid erros while entering the data. It also provide error message while entering invalid data. No formal language is needed for the user to use this system, it is user friendly.

Students Results Management System, as described above can lead to error free, secure, reliable and fast management system. It can assist to the user to concentrate on the record keeping.

This is designed to assistent strategic planning and will help you to ensure that your organization is with the right information and details for future goals. These system allow you to better manage student records.

Purpose

The main purpose of the project is to build an application program to reduce the manual work for managing the student result subject.The purpose of the project is contains the students academic results information including their registration number, subjects, each subject internal and external marks and total marks and total percentage. The project is totally bulit at administrative ends and thus only the administrator is guaranteed the access.s

Scope

The main objective of the Students Results Management System is to manage the grades/results of various examinations, courses etc. It manage all the details about the result, exam and grades etc. The poject is totally built at the administrative end and thus the adminstrator can be accessed by login ID and password.

Requirement Specification

Software Requirements:

Front end	HTML, CSS, bootstrap
Server side Language	Python
Database Server	SQLITE3, ORM
Web Browser	Chrome, firefox
Operating System	Ubuntu, windows
Software	Django

HTML: HTML is the standard markup language for documents designed to be displayed in a web browser.

CSS: Cascading Style Sheets is a style sheet language used for describing the presentation of a document written in a markup language such as HTML or XML.

Bootstrap: Bootstrap is a free, open source front end development framework for the creation of websites and web apps. Designed to enable responsive development of mobile first websites, Bootstrap provides a collection of syntax for template designs.

SQLITE3: Python SQLITE3 module is used to integrate the SQLITE database with Python. It is a standardized Python DBI API 2.0 and provides a straight forward and simple to use interface for interacting with SQLITE databases. There is no need to install this module separately as it comes along with python after the 2.5x version.

Object Relational Mapping(ORM): ORM is a programming technique for converting data between type systems using object oriented programming languages. This creates, in effect, a virtual object database that can be used from within the programming language.

Analysis and Design

Analysis:

The classification and tabulation transform the raw data collected into useful information by organizing and compiling the bits of data into graphically understandable manner, it was done with the help of a UML modelling tool.

Design:

Design is the first step in the development phase for any techniques and principles for the purpose of defining a device, a process or system in sufficient detail to permit its physical realization. Once the software requirements have been analyzed and specified the software design involves three technical activities - design, coding, implementation and testing that are required to build and verify the software.

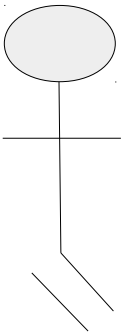
The design activities are of main importance in this phase, because in this activity, decisions ultimately affecting the success of the software implementation and its ease of maintenance are made. These decisions have the final bearing upon reliability and maintainability of the system. Design is the only way to accurately translate the customer’s requirements into finished software or a system.

Design is the place where quality is fostered in development. Software design is a process through which requirements are translated into a representation of software. Software design is conducted in two steps. Preliminary design is concerned with the transformation of requirements into data.

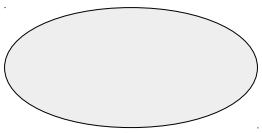
UML Diagrams:

UML: UML stands for Unified Modeling Language. UML is a language for specifying, visualizing and documenting the system. This is the step while developing any product after analysis. The goal from this is to produce a model of the entities involved in the project which later need to be built. The representation of the entities that are to be used in the product being developed need to be designed.

Actor: A coherent set of roles that users of use cases play when interacting with the use cases.an observable result of value of an actor.



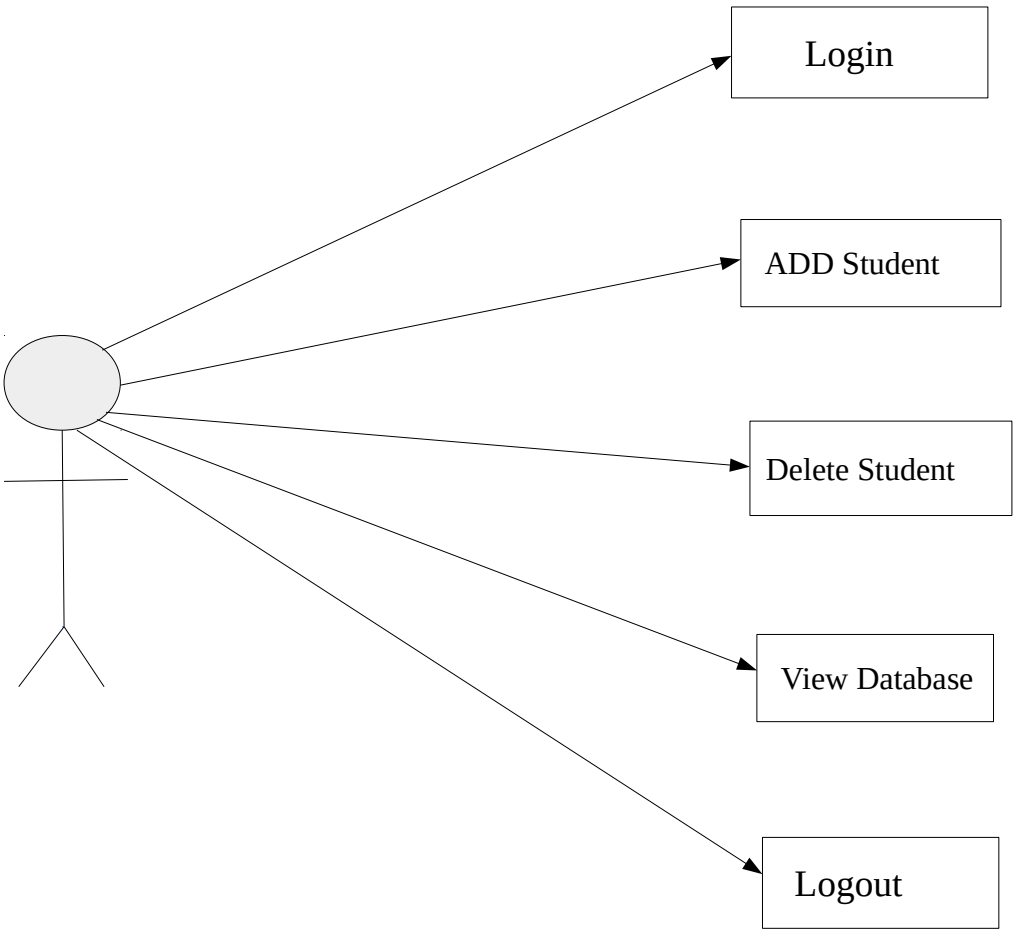
Use case: A description of sequence of actions, including variants, that a system performs yields an observable result of value of an actor. actor diagram is drawned in a eclipse shape



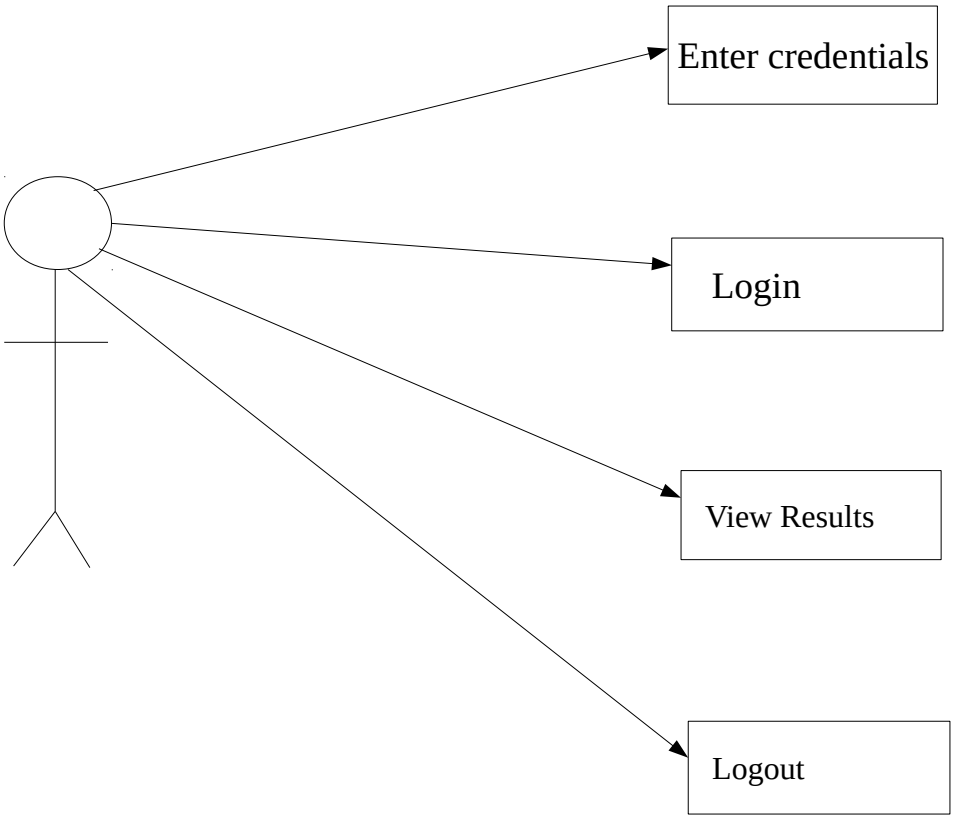
USECASE DIAGRAMS:

Use case diagrams model behavior within a system and helps the developers understand of what the user require. The stick man represents what's called an actor. Use case diagram can be useful for getting an overall view of the system and clarifying that can do and more importantly what they can't do.Use case diagram consists of use cases and actors and shows the interaction between the use case and actors.The purpose is to show the interactions between the use case and actor.To represent the system requirements from user's perspective.An actor could be the end-user of the system or an external system.

Admin

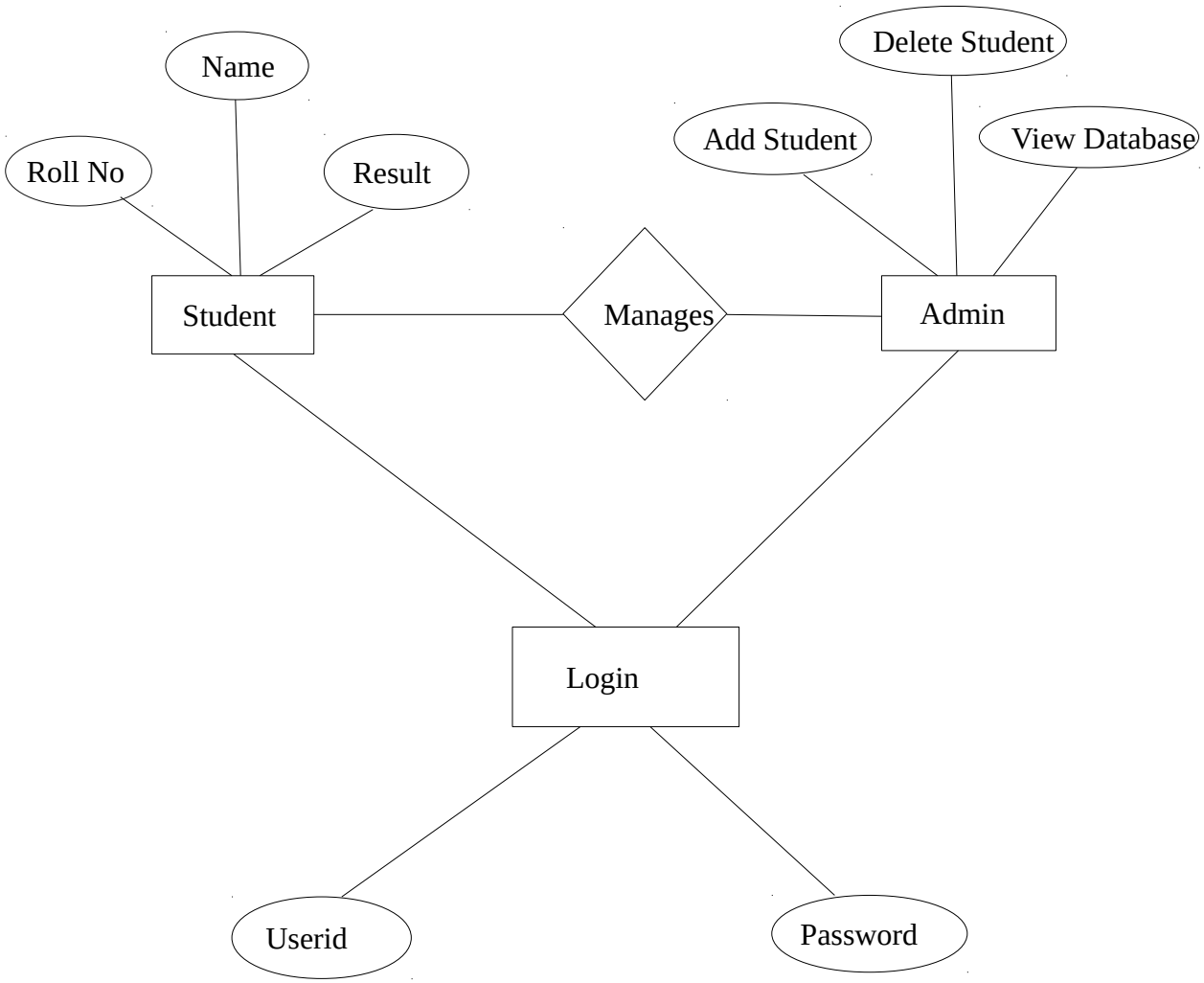


Student



ER Diagram:

The Entity-Relationship (ER) model was originally proposed by Peter as a way to unify the network and relational database views. Simply stated the ER model is a conceptual data model that views the real world as entities and relationships. A basic component of the model is the Entity-Relationship diagram which is used to visually represent data objects. SinceChen wrote his paper the model has been extended and today it is commonly used for database design for the database designer.



Implementation and System Testing

After all phase have been perfectly done, the system will be implemented to the server and the system can be used.

System Testing

The goal of the system testing process was to determine all faults in our project .The program was subjected to a set of test inputs and many explanations were made and based on these explanations it will be decided whether the program behaves as expected or not. Our Project went through two levels of testing

1. Unit testing

2 .Integration testing

Unit Testing

Unit testing is commenced when a unit has been created and effectively reviewed .In order to test a single module we need to provide a complete environment i.e. besides the section we would require The procedures belonging to other units that the unit under test calls Non local data structures that module accesses .A procedure to call the functions of the unit under test with appropriate parameters

1. Test for the admin module

Testing admin login form-This form is used for log in of administrator of the system. In this form we enter the username and password if both are correct administration page will open otherwise if any of data is wrong it will get redirected back to the login page and again ask the details.

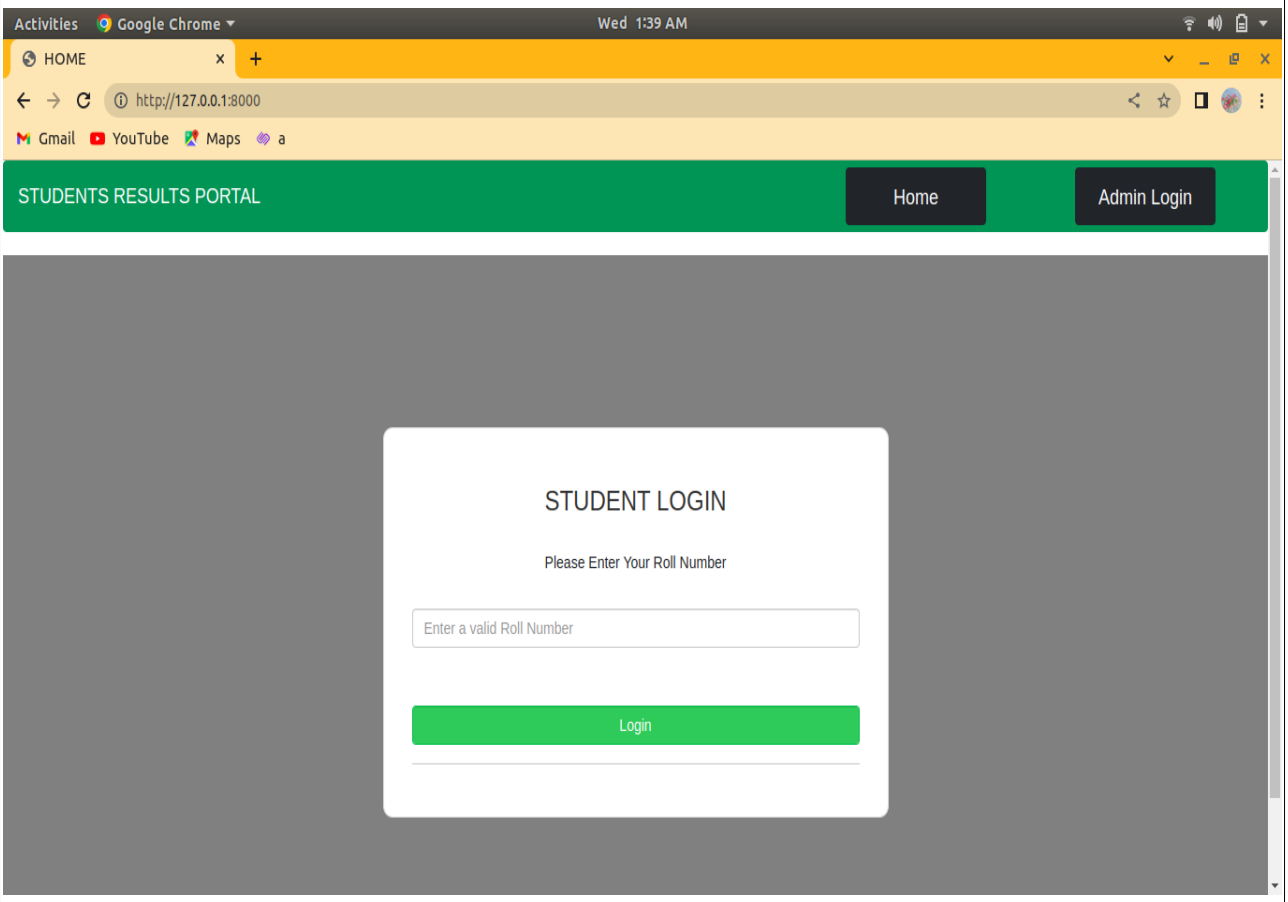
Integration Testing

In the Integration testing we test various combination of the project module by providing the input.

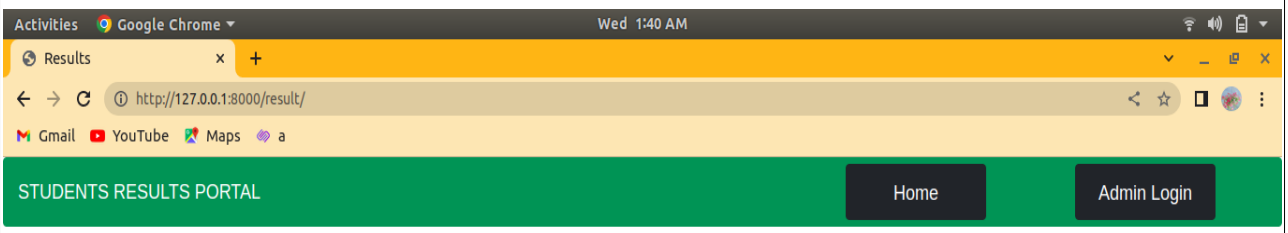
The primary objective is to test the module interfaces in order to confirm that no errors are occurring when one module invokes the other module.

Evaluation

STUDENT LOGIN

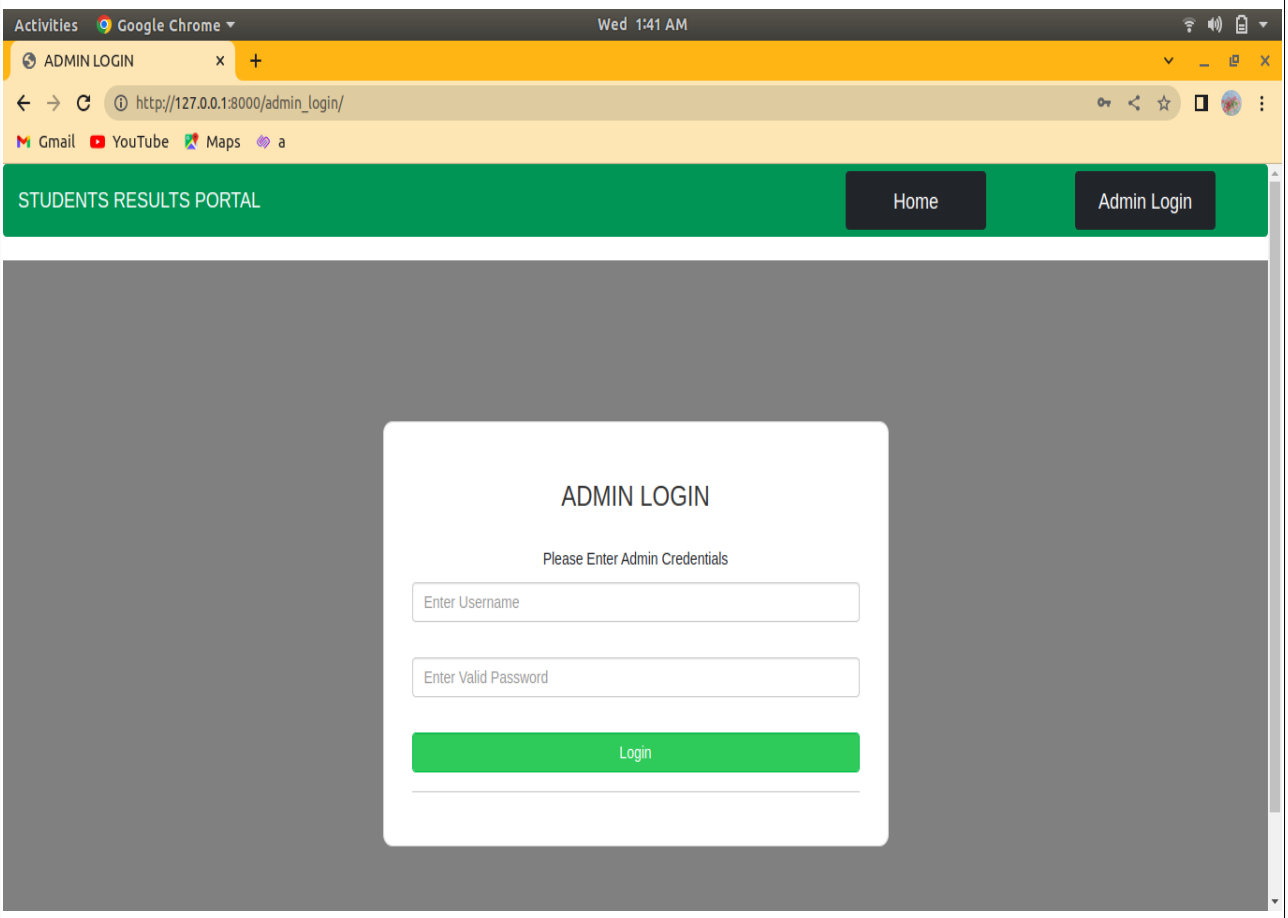


STUDENT RESULT

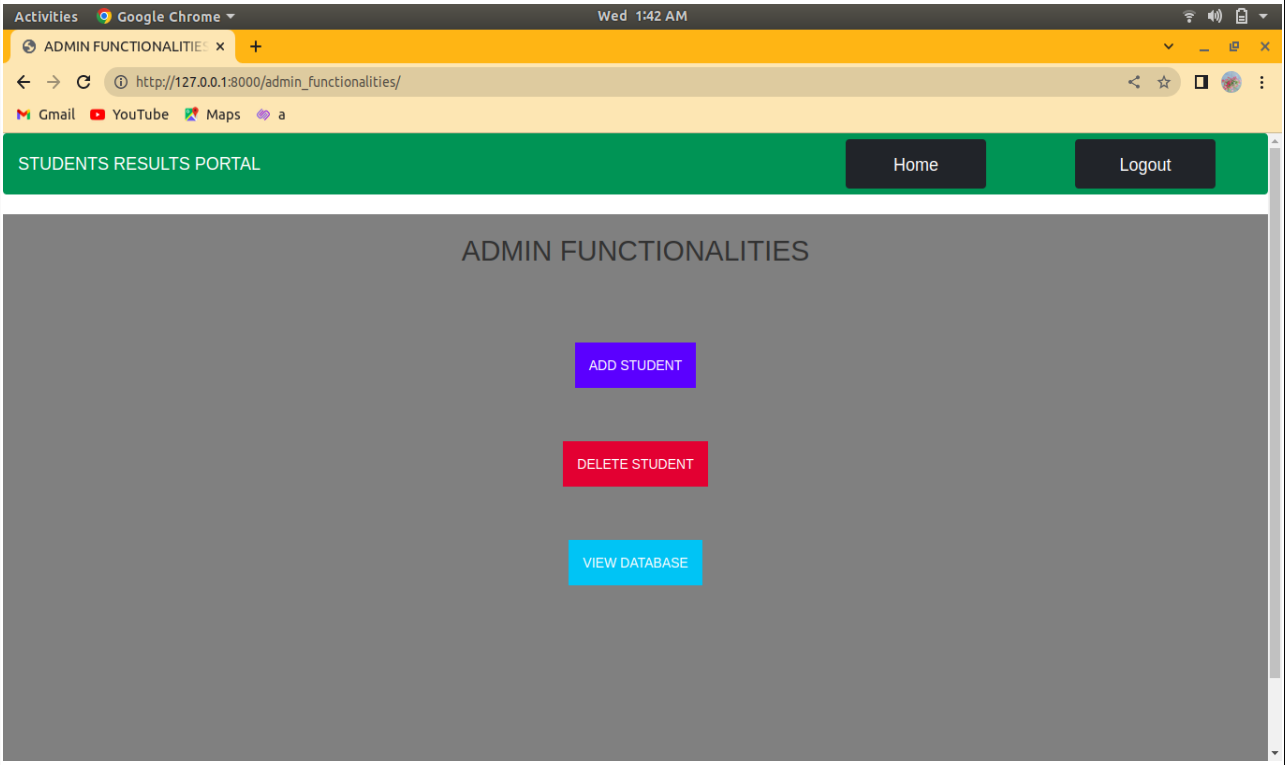


Roll No	Name	Subjects	Internal	External	Total
218U1A0401	ADDANKI DEVI PRIYANKA				
		LAC	29	25	54
		AP	25	25	50
		CE	23	30	53
		FEC	30	11	41
		ED	25	37	62
		EG LAB	25	66	91
		AP LAB	25	25	50
		CE LAB	25	66	91
		FEC LAB	30	67	97
		GRAND TOTAL			640
		PERCENTILE			71.11

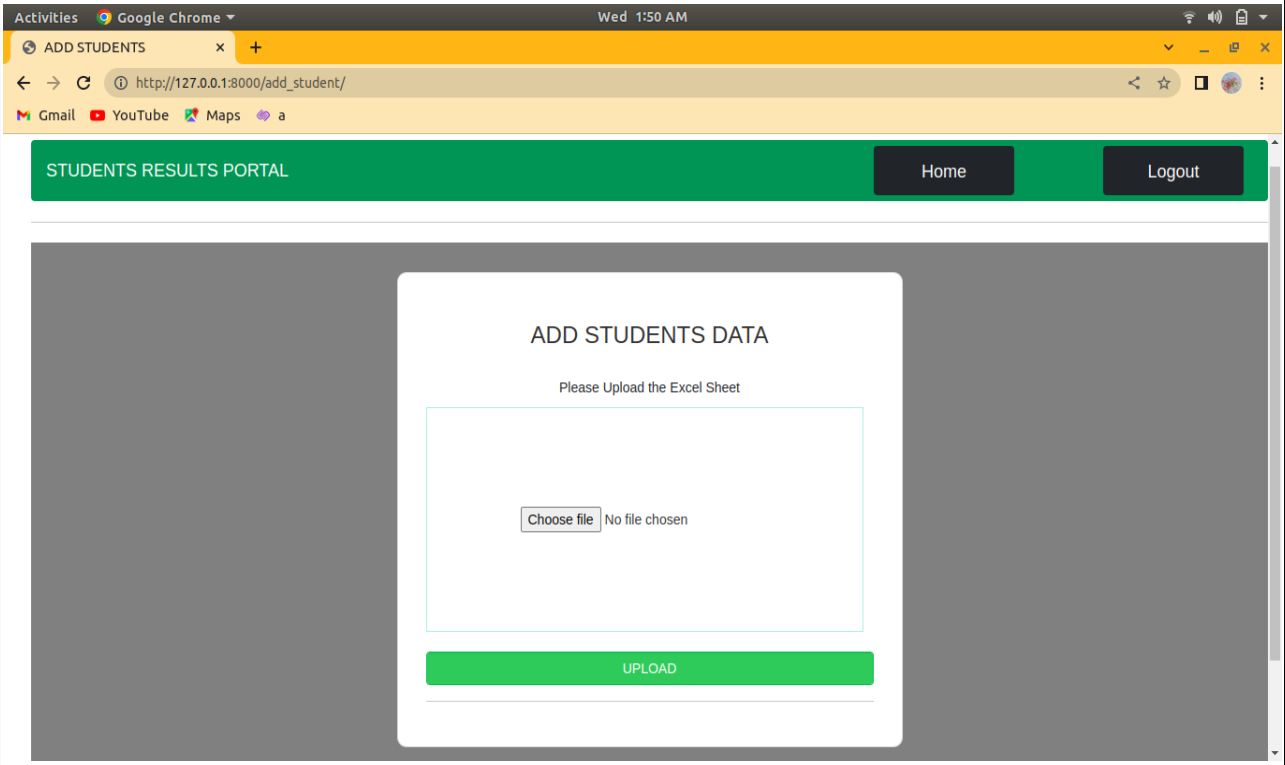
ADMIN LOGIN


Activities
Google Chrome
Wed 1:41 AM
ADMIN LOGIN
http://127.0.0.1:8000/admin_login/
Gmail
YouTube
Maps
a
STUDENTS RESULTS PORTAL
Home
Admin Login
ADMIN LOGIN
Please Enter Admin Credentials
Enter Username
Enter Valid Password
Login

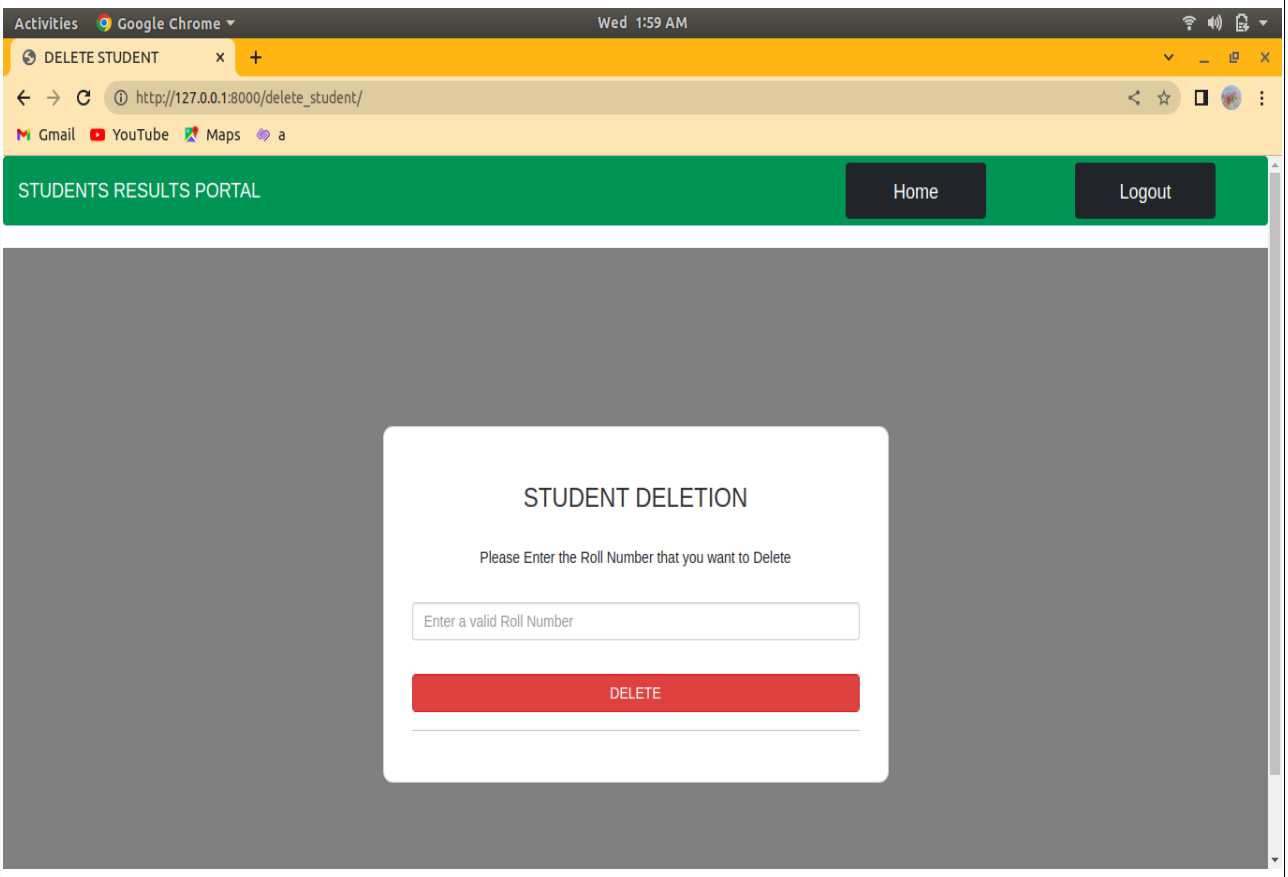
ADMIN FUNCTIONALITIES



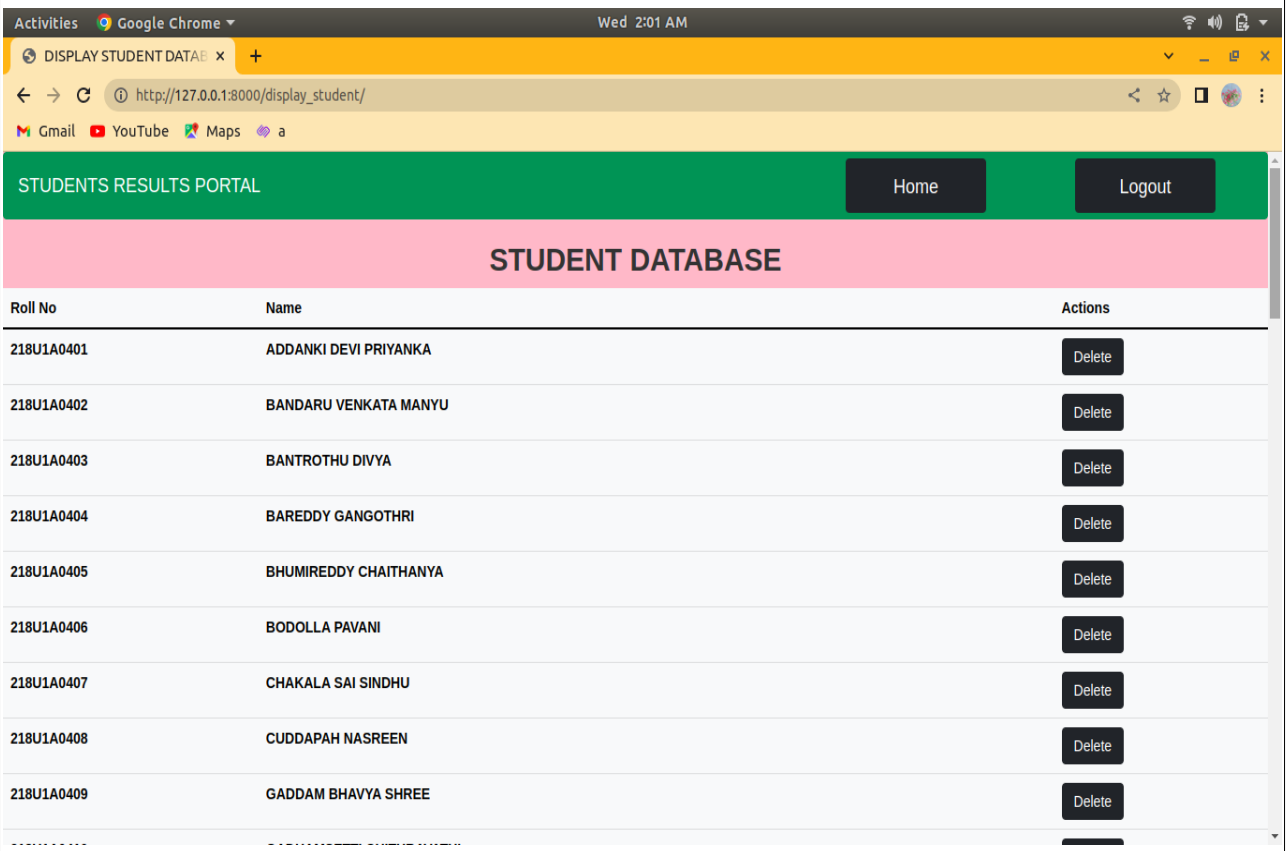
ADD STUDENT


Activities
Google Chrome
Wed 1:50 AM
ADD STUDENTS
http://127.0.0.1:8000/add_student/
Gmail
YouTube
Maps
a
STUDENTS RESULTS PORTAL
Home
Logout
ADD STUDENTS DATA
Please Upload the Excel Sheet
Choose file
No file chosen
UPLOAD

STUDENT DELETION



VIEW DATABASE



Conclusion

Students Results Management System is an online website and can be used at any place, any time by the student and admin. The main objective was to enhance and automate the management and declaration of students results using a computerized system. A well-defined, efficient, controlled and managed information system or software based on web technology storing, processing and providing information through the internet.

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