

# **Student Management System Project Report**



**CS232**

## **Group Members**

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## Introduction

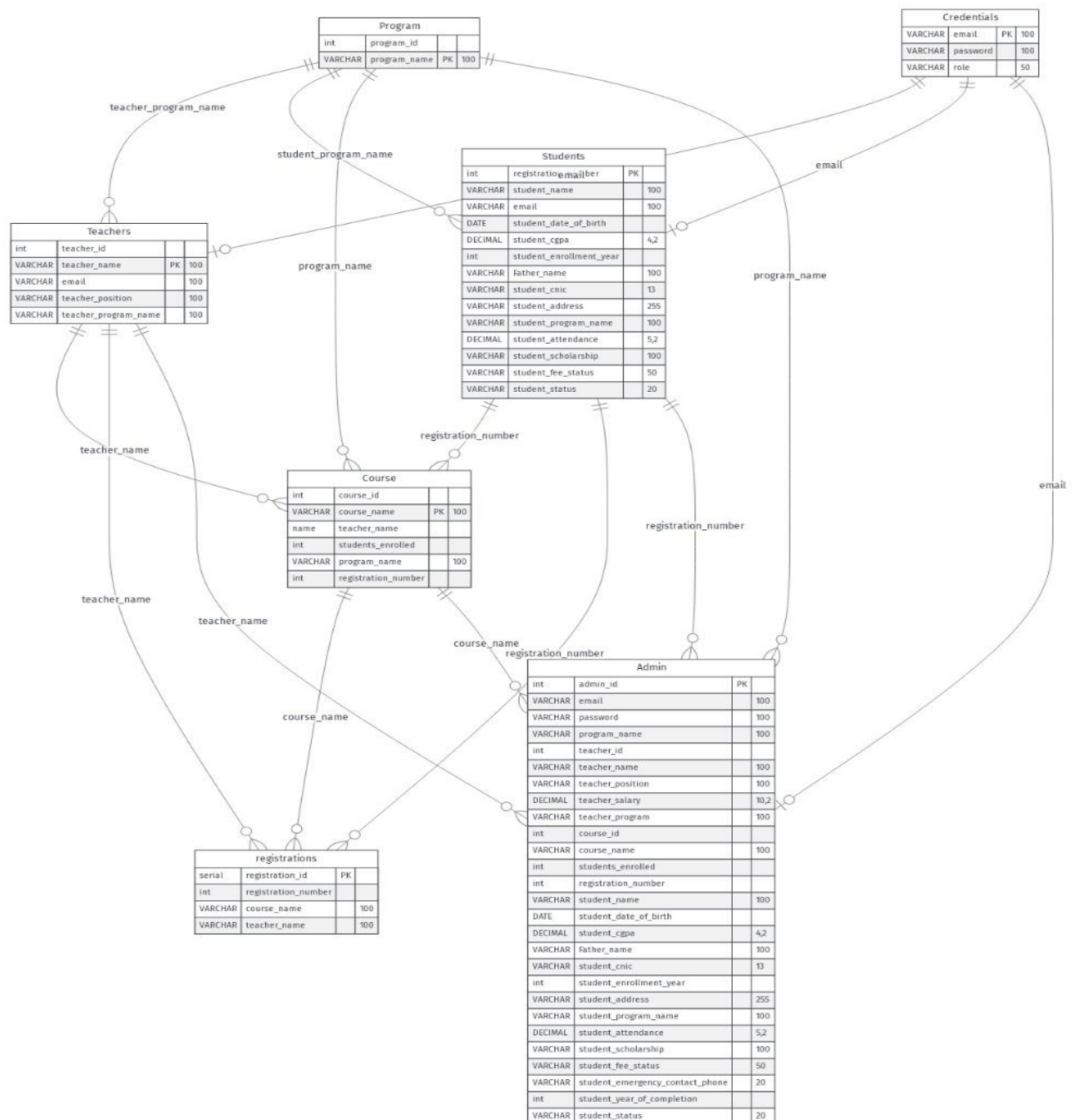
### Purpose of the Report:

The reason and motivation of making this management system was the poor functionality of GIKI's Student Management System.

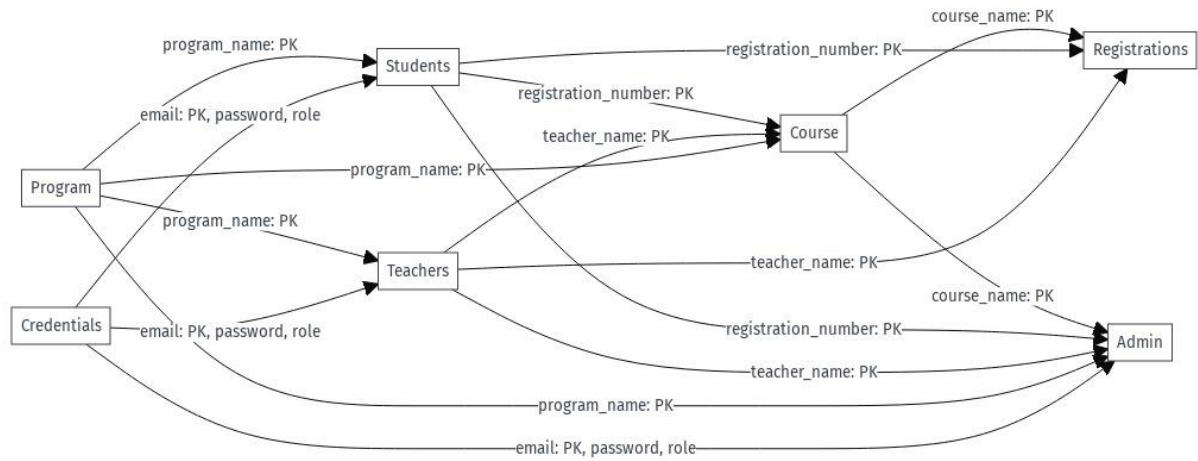
### System Overview

### Database Schema Design:

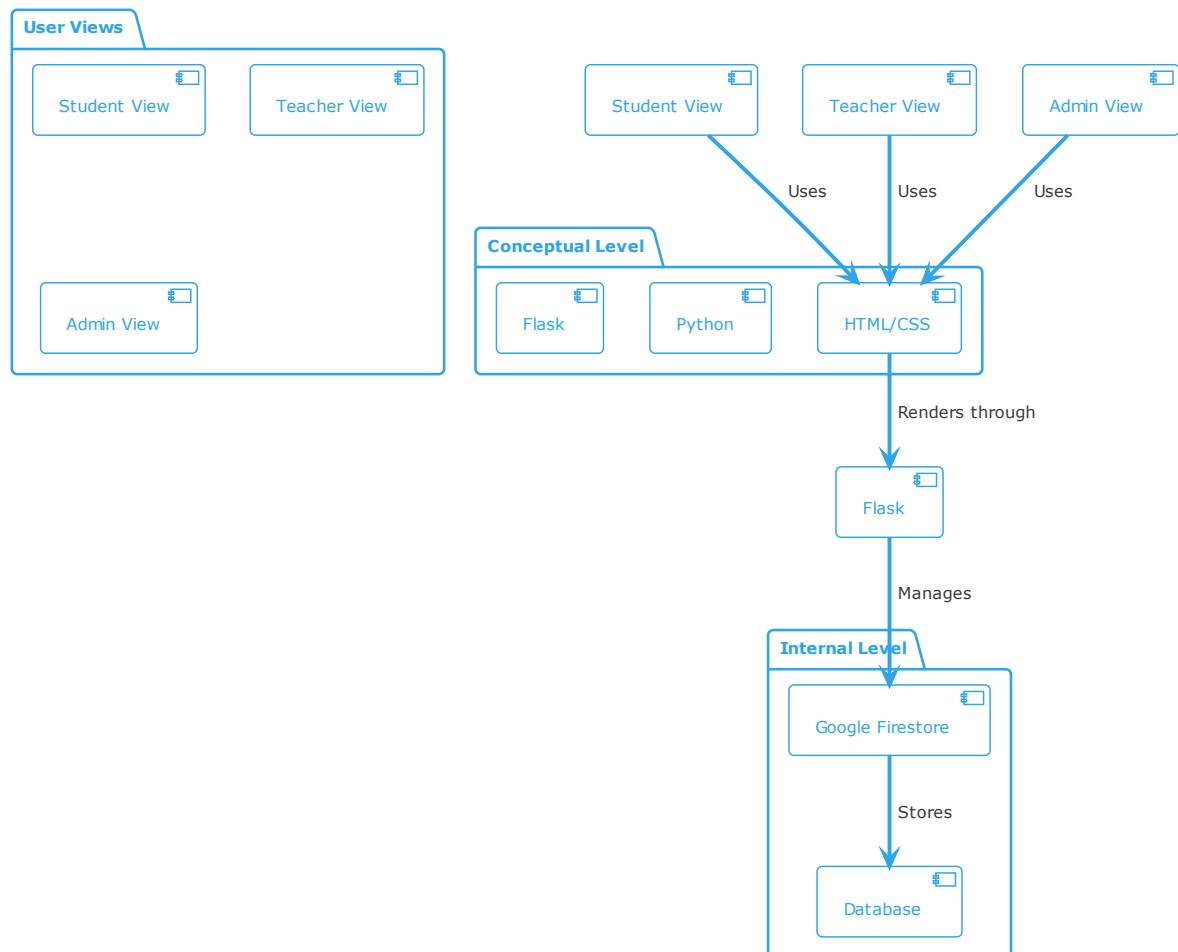
#### ERD



## Semantic Object Model Diagram



## Architecture Diagram



## Normalization Process:

When we started construction of our database, we made sure that we normalize our tables to 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> form.

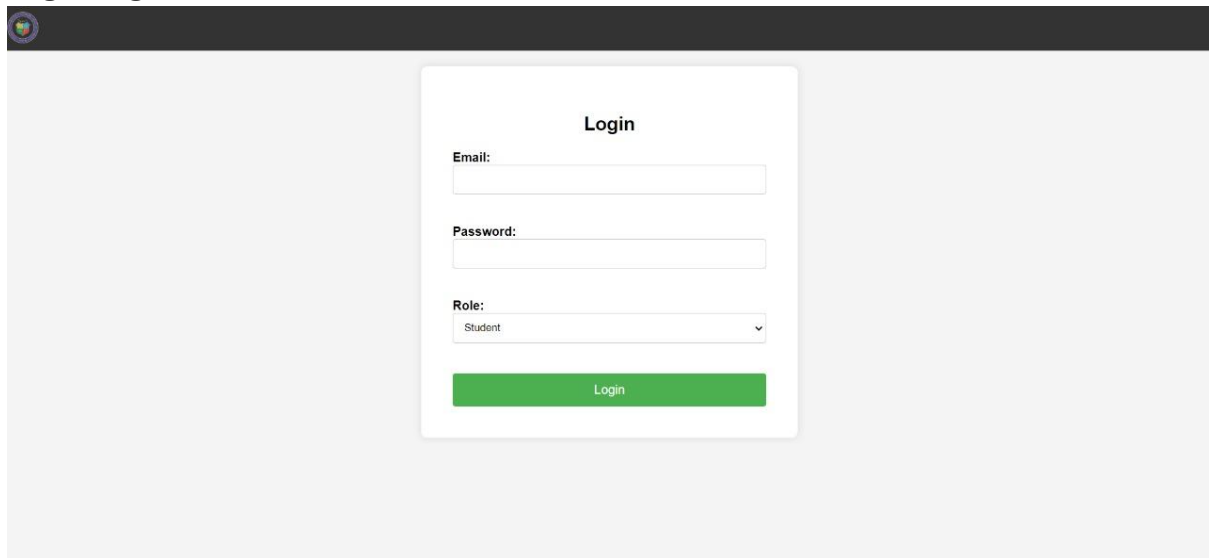
## Database Technology Used:

Database management technology PostgreSQL & Google Firebase.

## Features and Functionalities

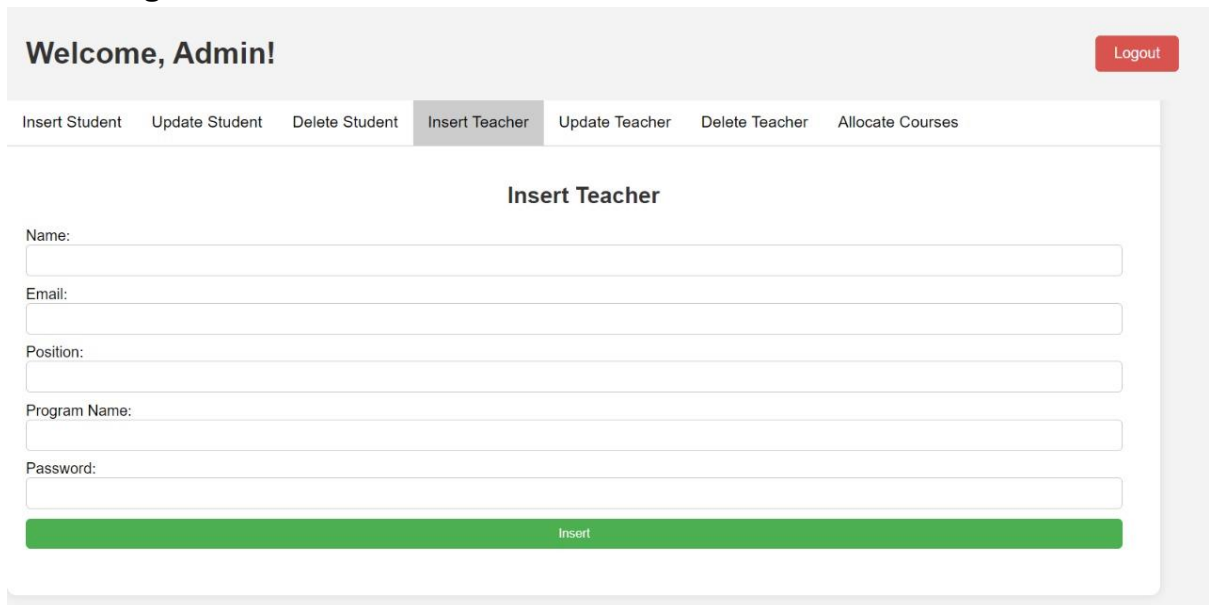
User Interface Design:

### Login Page



The Login Page features a dark grey header with a small circular logo on the left. The main content area is light grey and contains a white login form. The form is titled 'Login' and includes three input fields: 'Email:', 'Password:', and 'Role:'. The 'Role:' field is a dropdown menu with 'Student' selected. Below the input fields is a green 'Login' button.

### Admin Page



The Admin Page has a light grey header with the text 'Welcome, Admin!' on the left and a red 'Logout' button on the right. Below the header is a navigation bar with seven tabs: 'Insert Student', 'Update Student', 'Delete Student', 'Insert Teacher' (which is highlighted), 'Update Teacher', 'Delete Teacher', and 'Allocate Courses'. The main content area is white and contains a form titled 'Insert Teacher'. The form has five input fields: 'Name:', 'Email:', 'Position:', 'Program Name:', and 'Password:'. At the bottom of the form is a green 'Insert' button.

### Teachers Page

Teacher Details

View My Details

View Students

Mark Attendance

Give Grades

Logout

Name:	Qasim Riaz
Email:	qasim@giki.edu.pk
Position:	Lecturer

Enrolled Students by Course

Discrete Math

Student Name	Action
Rooshan Riaz	<div>Remove</div>

Introduction to Programming

Student Name	Action
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## Students Page

Student Details

View My Details

View My Courses

Register for Courses

Logout

Name:	Rooshan Riaz
Email:	u2022506@giki.edu.pk
Date of Birth:	2000-02-01
CGPA:	3.20
Enrollment Year:	2022
Father Name:	Riaz
CNIC:	2345678901234
Address:	DG Khan
Scholarship:	Normal Scholarship
Status:	Active

## Registered Courses

Student Details

View My Details

View My Courses

Register for Courses

Logout

Registered Courses

Course Name	Teacher Name	Action
Discrete Math	Qasim Riaz	<div>Unregister</div>

## Conclusion

In conclusion, the development of the Student Management System using a suite of powerful and modern. The front-end development utilized HTML and CSS, which were instrumental in crafting a responsive and intuitive user interface, making the system accessible to users with varying levels of technical expertise. The integration of Firebase and Fire store Cloud added a layer of real-time data synchronization and cloud storage capabilities, enhancing the system's performance and scalability across different platforms and devices.