

Title: ASP.NET MVC Application for Student Marks Statistics

Introduction:

Rainbow School needs to analyze and display statistics on the performance of their students based on the marks obtained. To achieve this, we will create an ASP.NET MVC application that uses LINQ to retrieve and process the data from the database. This application will allow administrators and teachers to access statistics about student performance, helping them make informed decisions to improve the quality of education.

Application Features:

Data Source:

We assume that Rainbow School has a database containing student records with the following relevant information: Student ID, Student Name, Subject Name, Marks Obtained.

MVC Architecture:

- We will follow the Model-View-Controller (MVC) architecture to ensure a clean and organized codebase.
- Statistics Page:
 - Create a web page where users (administrators and teachers) can access various statistics.
 - The page will include options to filter statistics by subject, date, or other relevant parameters.
- Data Retrieval using LINQ:
 - Utilize LINQ queries to retrieve data from the database.
 - Aggregate and analyze data to generate statistics.

Student to Display:

- Average Marks: Display the average marks obtained by students.
- Top Performers: Show a list of top-performing students based on their marks.
- Subject-wise Analysis: Display statistics for each subject, such as average marks and the number of students who passed or failed.
- Date-wise Analysis: Provide insights into student performance over time, including trends and improvements.

User Authentication:

Implement user authentication to ensure that only authorized users can access the student page.

Responsive Design:

Ensure that the application is responsive, making it accessible on various devices and screen sizes.

Conclusion:

Creating an ASP.NET MVC application for student marks statistics will help Rainbow School gain valuable insights into their students' performance. By utilizing LINQ and MVC architecture, the application will provide an efficient and organized way to process and present data. The ability to filter, visualize, and export statistics will assist school administrators and teachers in making data-driven decisions to enhance the educational experience at Rainbow School.

GitHub Repository Link:

https://github.com/rastogi102/Phase3_Practice-Projects.git