

Digital Result Management Solution for Secondary Schools

BACKGROUND:

A local secondary school has approached us to develop a digital solution for managing student results. The school wants to transition from manual result compilation to an automated, digital system. To evaluate our capability, they have provided sample data for SS2 in CSV format, which we will use to demonstrate our solution.

PROJECT OBJECTIVES:

To create a functional digital result management system by:

- Importing the provided CSV files into **MySQL Databases**.
- Building an interactive **POWER BI dashboard** to analyze and present student performance data.
- Demonstrating the solution's ability to efficiently manage and report results.

SCOPE OF WORK:

Data Preparation:

- Import the provided CSV files into the appropriate tables in the MySQL database.

The CSV files will contain:

- Names, student IDs, and other personal information.
- Course names, codes, and other relevant details.
- Scores, grades, and other assessment details.

DATABASE DEVELOPMENT:

create a database with the following structure:

- Stores student details (names, IDs, etc.).
- Stores course information (codes, names, etc.).
- Stores results (scores, grades, etc.).

- Establish relationships between the tables (e.g., linking students to courses and assessments).

POWER BI DASHBOARD DESIGN:

- Import data from the MySQL database into Power BI.
- Build interactive visualizations that provide insights into:
 - Individual student performance.
 - Average scores by course.
 - Performance trends across subjects.
 - Pass and fail rates by subject or student.
- Include features for filtering by student, course, and assessment type.

TESTING AND DEMOSTRATION:

- Test the system with the provided data to ensure accuracy and functionality.
- Create a demo to showcase the database, dashboard, and its capabilities for result management.

DELIVERABLES:

- A fully populated database with the imported student, course, and assessment data.
- An interactive **POWER BI** dashboard that visualizes the data effectively.
- A project report that includes the methodology, data flow, and key insights from the dashboard.

EVALUATION CRITERIA:

- Successful import of data into MySQL.
- Quality and usability of the Power BI dashboard.
- Relevance and accuracy of visualizations and reports.

- Clear and concise report demonstrating the solution.