Project Design Phase-I
Solution Architecture

Date	
Team ID	NM2023TMID03215
Project Name	Project – Unleashing The Potential Of Our Youth: A Student Performance Analysis
Maximum Marks	4 Marks
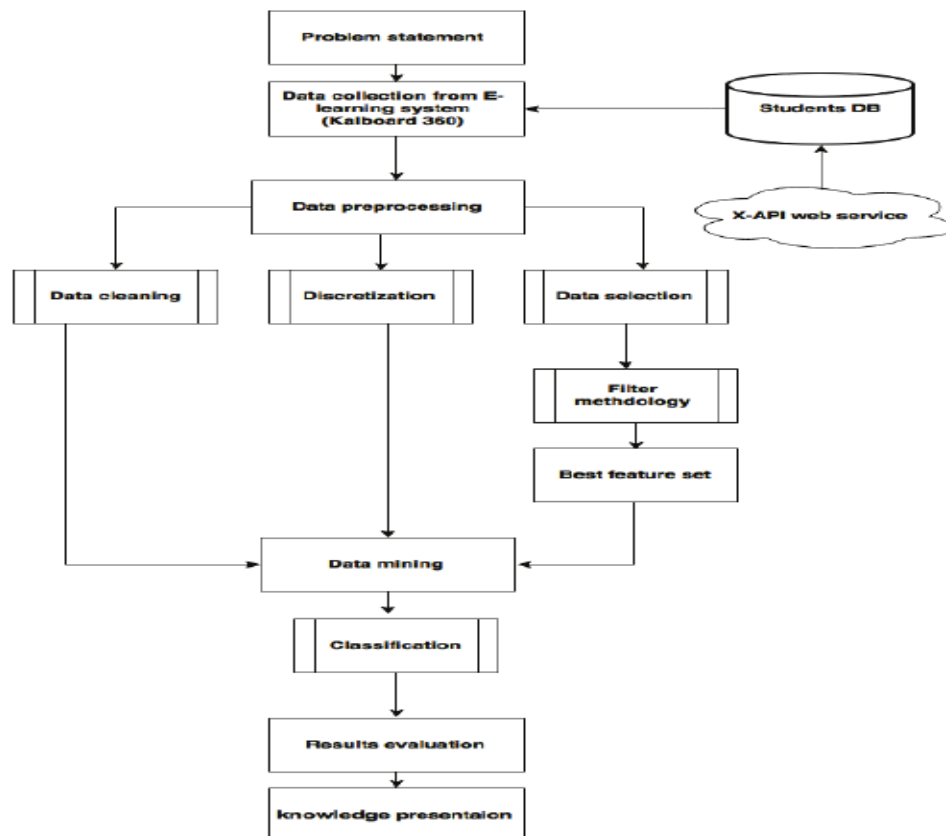
1. Identifying Business Problems:

The solution architect's first task is to understand and identify the business problems or challenges that need to be addressed. This requires close collaboration with business stakeholders to gather their requirements and goals.

2. Selecting the Best Technology Solution:

Once the business problems are defined, the solution architect is responsible for selecting the most suitable technology solutions to solve those problems. This may involve evaluating existing technologies, recommending the use of specific software or systems, or even custom development.

### 3. Describing Software Structure and Characteristics:

Solution architecture involves creating a detailed description of the software and systems that will be used to implement the solution. This includes defining the structure, components, and characteristics of the software, such as databases, modules, interfaces, and APIs.

4. Behavior and Interaction:

Solution architects describe how the software components will interact with each other and with external systems or users. This includes defining the flow of data, user interactions, and business processes that the solution will support.

5. Defining Features and Development Phases:

Solution architects work closely with project stakeholders to define the features and functionality that the solution must deliver. They may also outline the development phases, which can help in project planning and resource allocation.

Comparison of Student Attributes
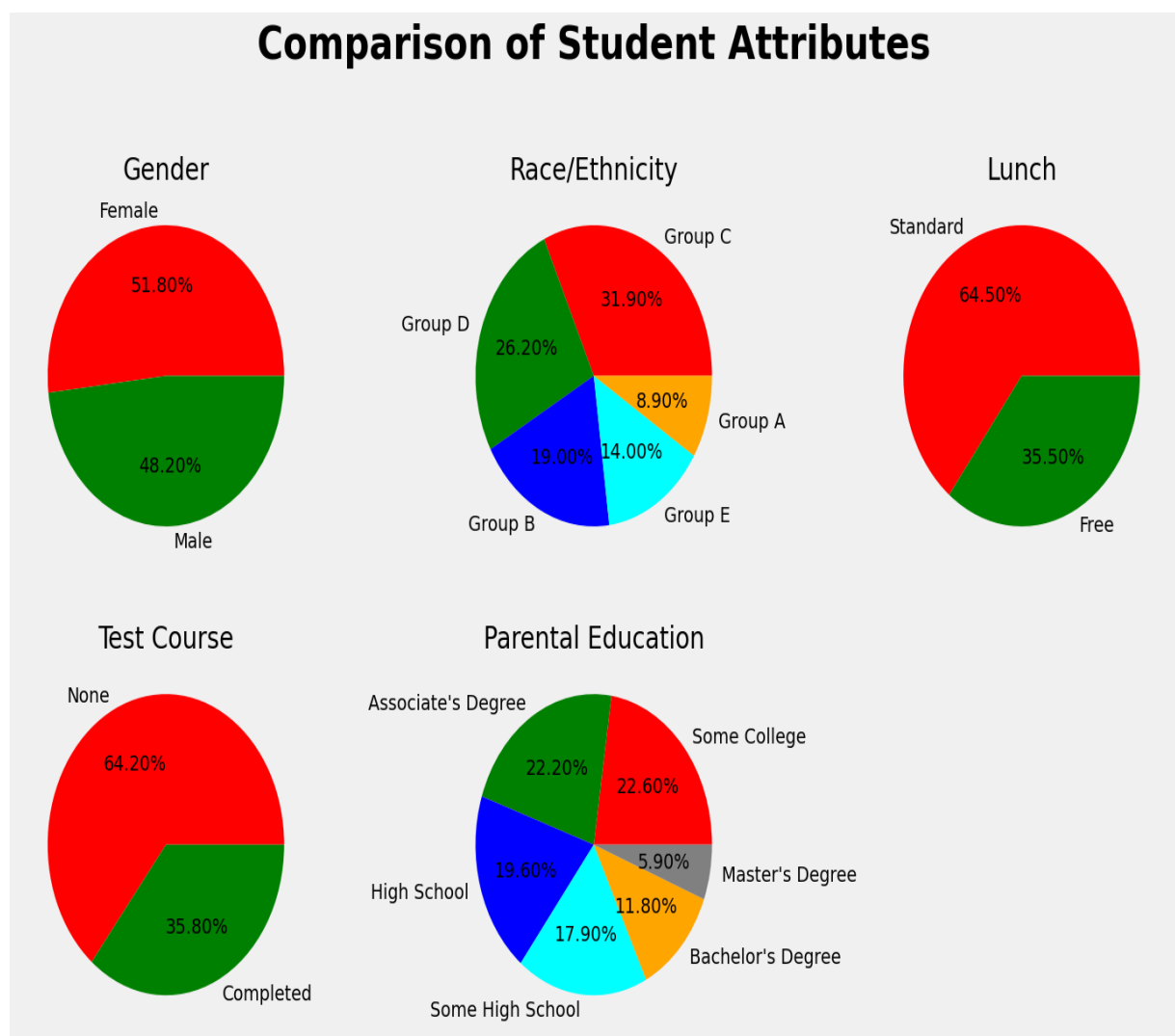
6. Solution Requirements:

Solution architecture defines the technical requirements that the project must meet. This can include hardware specifications, software dependencies, performance expectations, and security requirements.

7. Specifications for Development and Management:

Detailed specifications are provided to development teams, project managers, and other stakeholders. These specifications serve as a blueprint for building, managing, and delivering the solution.

8. Alignment with Business Goals:

Throughout the solution architecture process, it's critical to ensure that the proposed technology solution aligns with the overarching business goals and objectives. This alignment is essential for project success.

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