

Project Design Phase-II

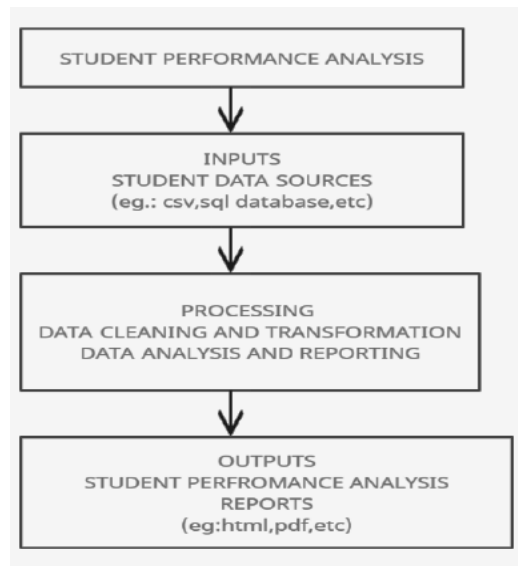
Data Flow Diagram & User Stories

Date	21 October 2023
Team ID	NM2023TMID07497
Project Name	Project - Unleashing The Potential Of Our Youth: A Student Performance Analysis
Maximum Marks	4 Marks

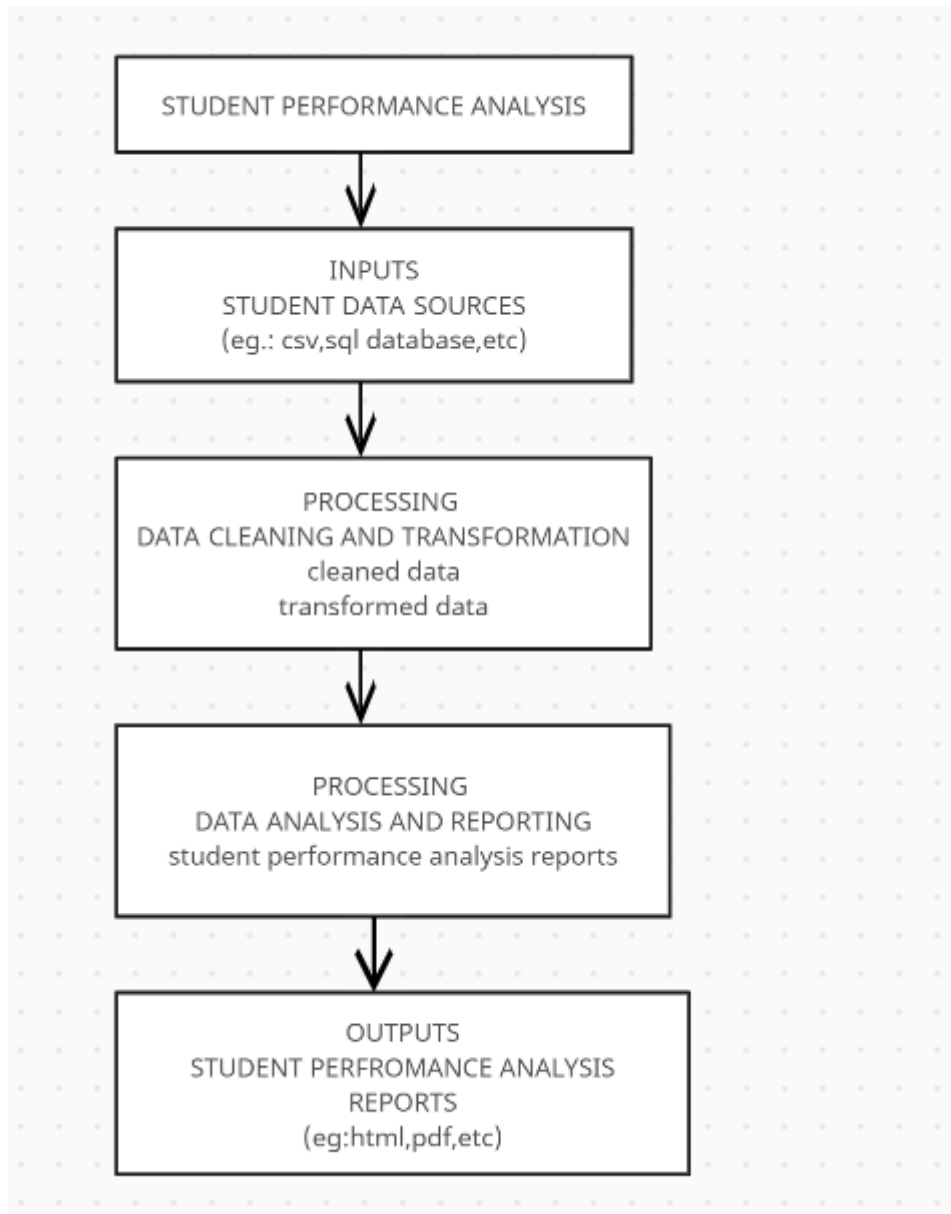
Data Flow Diagrams:

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

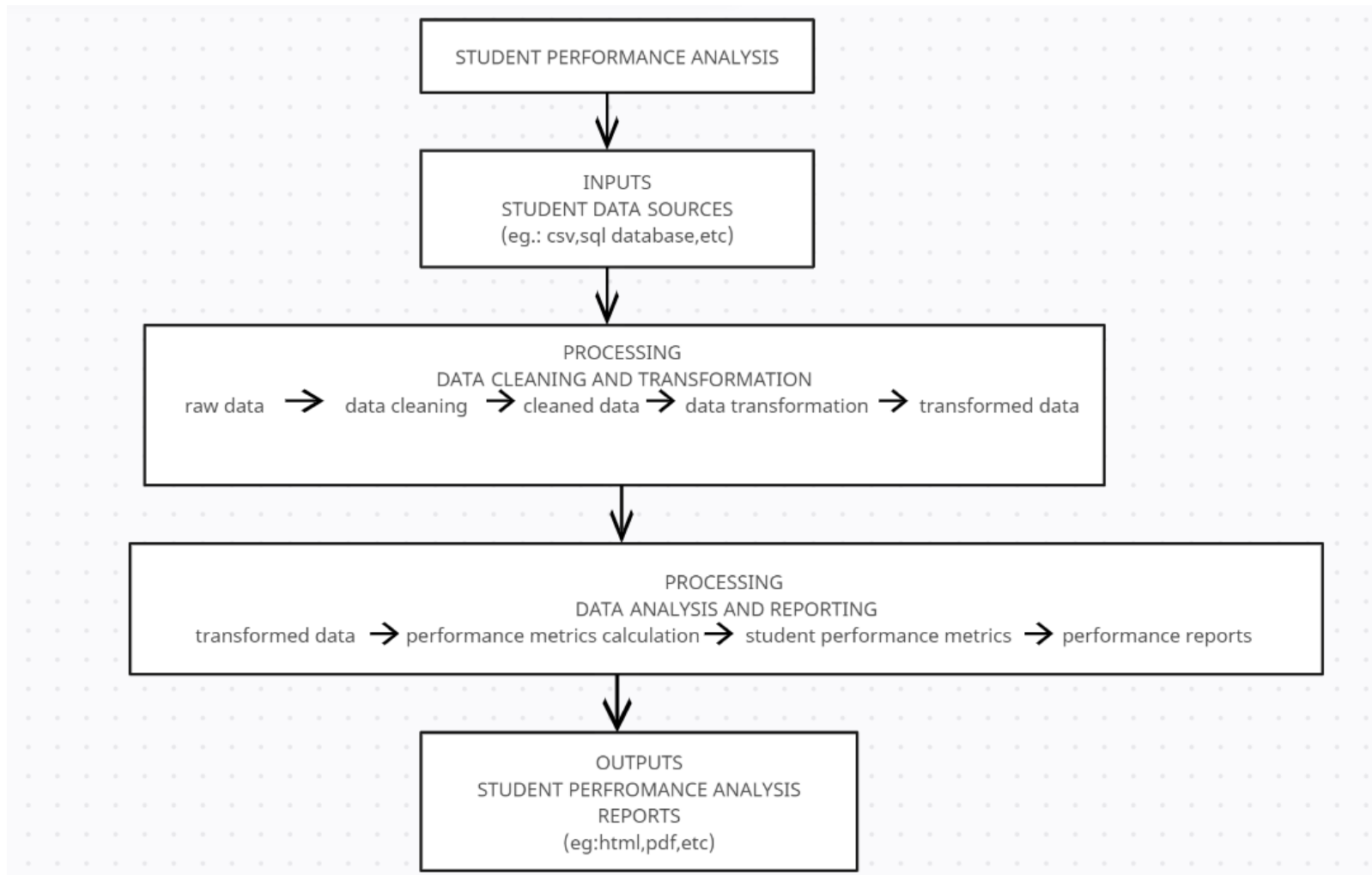
DFD LEVEL 0



DFD LEVEL 1



DFD LEVEL 2



User Stories

Use the below template to list all the user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Administrator	User Account Management	USN-1	<p>1. As a user, I want to register an account by providing my name, email address, and creating a password. After registration, I should receive a confirmation email to verify my account.</p> <p>2. As a user, I want to log in to my account securely using my registered email and password. Once logged in, I should have access to features based on my role. I can also log out.</p>	<p>1. The registration form should include fields for name, email address, and password.</p> <p>2. After registration, the user should receive a confirmation email. The confirmation link in the email should successfully activate the user's account.</p> <p>3. Users should be able to log in using their registered email and password.</p> <p>4. After successful login, users should be directed to the appropriate landing page based on their role. Logging out should terminate the user's session and require re-authentication for access.</p>	High	Sprint-1
Teacher	Data Input and Management	USN-2	<p>1. As a teacher, I want to create and update student profiles by entering their personal information, such as name, contact details, and class information. This ensures that the system has up-to-date student data.</p>	<p>1. Teachers should be able to add, update, or delete student profiles.</p> <p>2. Student profiles should</p>	High	Sprint-2

			<p>2. As a teacher, I want to enter or upload students' academic scores, extracurricular achievements, and behavioral observations. I should be able to attach supporting documents or notes for context.</p>	<p>include fields for personal information, contact details, and class information.</p> <p>3. Teachers should be able to enter or upload academic scores, extracurricular achievements, and behavioral observations for students.</p> <p>4. The system should validate and process uploaded data without errors.</p> <p>5. Administrators should be able to upload student data in bulk using common formats such as Excel or CSV.</p> <p>6. The system should provide feedback on the success or failure of the import process.</p>		
Parent	Performance Analysis	USN-3	<p>1. As a user, I want to view aggregated performance data of my child, which should include overall class averages, highest and lowest scores, and distribution of scores. This helps me assess the child's performance at a glance.</p> <p>2. As a user, I want to access various statistical analyses, including average</p>	<p>1. The class performance dashboard should show accurate data with class averages, highest and lowest scores, and score distribution.</p> <p>2. Data should update in real-time as new data is entered or uploaded.</p>	Medium	Sprint-3

			<p>scores, median scores, mode, standard deviation, and other relevant statistics to understand student performance.</p> <p>3. As a user, I want to track performance trends over time for individual students or the entire class. I should be able to see if a student's performance is improving or declining.</p>	<p>3. The system should accurately calculate average scores, median scores, mode, standard deviation, and other relevant statistics. Statistics should be updated as new performance data is added.</p> <p>4. Users should be able to view performance trends over time for individual students or classes. Trend analysis should provide clear information on improvements or declines.</p>		
Student	Visualization Tools	USN-4	<p>1. As a user, I want a dashboard that displays key performance metrics in an easy-to-understand format. It should include graphs, tables, and charts that summarize student performance and trends.</p> <p>2. As a user, I want to generate various types of graphs and charts (e.g., line graphs, bar charts, pie charts) based on specific criteria such as subject, class, or time period to visually represent data. This aids in better data interpretation.</p>	<p>1. The dashboard should display key performance metrics with updated and accurate data.</p> <p>2. Users should find the dashboard layout intuitive and easy to navigate.</p> <p>3. Users should be able to generate various types of graphs and charts based on specific criteria.</p> <p>4. Generated visualizations should be clear, legible, and accurately represent the underlying data.</p>	Medium	Sprint-4