

PROFESSIONAL READINESS FOR INNOVATION, EMPLOYMENT AND ENTREPRENEURSHIP



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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

TOPIC: Unleashing the Potential of Our Youth: A Student Performance Analysis

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ABSTRACT

Educational institutions rely on student performance analysis to evaluate student achievements, progress, and areas of improvement. The primary aim of student performance analysis is to evaluate individual student learning outcomes, identify patterns, and enable data-driven decision-making by educators, administrators, and policymakers. This overview covers different methodologies used in student performance analysis, such as traditional assessment methods, standardized testing, and innovative methods such as learning analytics and educational data mining. This project explores various methodologies employed in student performance analysis, including traditional assessment methods, standardized testing, and innovative approaches such as learning analytics and educational data mining. Furthermore, this project highlights key metrics commonly used in student performance analysis, including grades, test scores, attendance records, and behavioral indicators. It emphasizes the importance of considering multiple data points to gain a holistic understanding of student performance and to identify potential factors influencing academic success or challenges. The findings of this review emphasize the significance of student performance analysis in driving evidence-based educational practices. It underlines the need for data-driven decision-making to enhance teaching strategies, curriculum design, and educational policies. The abstract concludes by acknowledging the ongoing advancements in data analytics and technology that continue to reshape student performance analysis, paving the way for more effective and personalized educational experiences.

Project Report Format

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- 1.2 Purpose

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- 6.3 Database Schema (if Applicable)

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10. FUTURE SCOPE

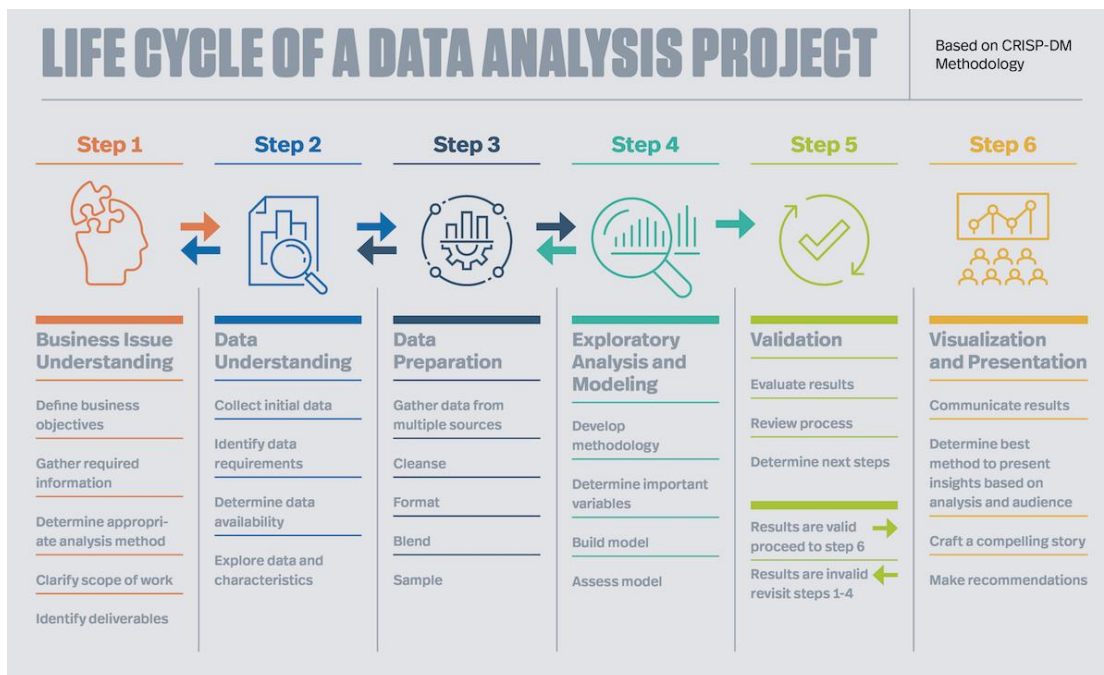
11. APPENDIX

- Source Code
- GitHub & Project Demo Link

1. INTRODUCTION

Data analysis is a field which focuses on extracting significant information, models and information from large data sets. It involves the application of various statistical, mathematical, and computational techniques to analyze and interpret data to support decision-making, uncover trends, and gain valuable insights. Data analytics converts raw data into actionable insights. It includes a range of tools, technologies, and processes used to find trends and solve problems by using data. Data analytics can shape business processes, improve decision-making, and foster business growth.

How Data Analytics works?



Data analytics involves a systematic approach to extracting insights and knowledge from data. The process typically begins with data collection from various sources, followed by data cleaning and preprocessing to ensure data quality and consistency. Once the data is ready, it is analyzed using a combination of statistical techniques, machine learning algorithms, and data visualization tools. Descriptive analytics helps to summarize and understand historical data patterns, while predictive analytics employs models to forecast future trends and outcomes. Prescriptive analytics goes a step further by providing recommendations or actions based on the insights gained. Throughout the analysis, iterative exploration and visualization of data aid in understanding and communicating the findings effectively. The ultimate goal of data analytics is to uncover valuable insights, make data-driven decisions, optimize processes, and drive meaningful business outcomes.

1.1 PROJECT OVERVIEW

The project aims to enhance the student performance analysis system in an educational institution to improve academic outcomes and support data-driven decision-making. By leveraging data analytics techniques, the project aims to gain insights into student performance, identify factors influencing academic success, and provide personalized interventions to support struggling students. The ultimate goal is to enhance the overall educational experience and foster academic excellence.

PROJECT FLOW

- 1.Data Gathering: Collect dataset from the portal. Ensure data quality and consistency.
- 2.Data Preparation: Clean and preprocess the collected data, addressing missing values, inconsistencies, and outliers. Transform the data into a format suitable for analysis in IBM Cognos.
- 3.Data Integration: Integrate the cleaned data from various sources into a single data repository. This step ensures that all relevant student performance data is consolidated and readily accessible.
4. Data Modeling: Design and create data models in IBM Cognos. Establish relationships between different data elements to enable efficient querying and analysis.
5. Report and Dashboard Development: Utilize IBM Cognos Report Studio and Dashboarding capabilities to develop interactive reports and dashboards for student performance analysis. These visualizations should provide key insights into student achievements, progress, and areas of improvement.
6. Performance Metrics: Define the performance metrics and key performance indicators (KPIs) that will be used to assess student performance. These may include metrics such as average grades, test scores, attendance rates, or class participation.
7. Collaboration and Sharing: Enable collaboration and sharing capabilities within IBM Cognos to facilitate communication and knowledge sharing among stakeholders. This promotes data-driven decision-making and allows educators and administrators to work together in addressing student performance challenges.
8. Performance Monitoring and Evaluation: Continuously monitor student performance and evaluate the effectiveness of interventions. Measure the impact of implemented strategies on student outcomes and make necessary adjustments based on the insights gained.
9. Iterative Improvements: Continuously improve the student performance analysis system based on user feedback, emerging trends, and evolving educational needs. Incorporate new features, data sources, or analytics techniques to enhance the effectiveness and efficiency of the analysis process.

1.2 PURPOSE

The purpose of student performance analysis is to gain a comprehensive understanding of student performance using multiple data points such as grades, test scores, attendance records, and behavioral indicators. It helps teachers measure, manage, and evaluate student performance data, enabling them to optimize instruction for better learning outcomes. This can help understand the influence of important factors such as parental level of education and test preparation status on student performance. Ultimately, the integration of edutech and data analytics has the potential to optimize efficiency and offer students a seamless learning experience.

2. IDEATION & PROPOSED SOLUTION

2.1 PROBLEM STATEMENT DEFINITION

The problem statement in student performance analysis pertains to the challenge of effectively analyzing and understanding the factors influencing student performance in a given educational context. This includes academic achievement, attendance, behavioral patterns, and other relevant indicators. The problem lies in the inability to comprehensively assess and interpret student performance data, resulting in difficulties in identifying patterns, predicting outcomes, and implementing targeted interventions. Therefore, there is a pressing need for an efficient and robust student performance analysis framework that can provide actionable insights, facilitate data-driven decision-making, and enable the implementation of targeted interventions to improve student performance and academic success.

2.2 EMPATHY MAP CANVAS



2.3 IDEATION & BRAINSTORMING



Brainstorm & idea prioritization

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

- 🕒 10 minutes to prepare
- 🕒 1 hour to collaborate
- 👤 2-8 people recommended



Before you collaborate

A little bit of preparation goes a long way with this session. Here's what you need to do to get going.

10 minutes

- A** **Team gathering**
Define who should participate in the session and send an invite. Share relevant information or pre-work ahead.
- B** **Set the goal**
Think about the problem you'll be focusing on solving in the brainstorming session.
- C** **Learn how to use the facilitation tools**
Use the Facilitation Superpowers to run a happy and productive session.

[Open article](#) →

1

Define your problem statement

What problem are you trying to solve? Frame your problem as a How Might We statement. This will be the focus of your brainstorm.

5 minutes







PROBLEM

A school authority trying to track the academic process of the students to identify the areas for improvement and data-driven measures to improve student outcomes.



Key rules of brainstorming

To run an smooth and productive session

- | | | | |
|-------------------------------------------------------------------------------------|-----------------|-------------------------------------------------------------------------------------|-------------------------|
|  | Stay in topic. |  | Encourage wild ideas. |
|  | Defer judgment. |  | Listen to others. |
|  | Go for volume. |  | If possible, be visual. |

2

Brainstorm

Write down any ideas that come to mind that address your problem statement.

🕒 10 minutes

Person 1

Data collection	Data cleaning and preparation	Predictive modeling
Analyze the data	Personalized learning	Impact of student mobility

Person 2

Descriptive statistics	Correlation analysis	Data visualization
Impact of peer influence	Most effective study habits	Impact of parental involvement

Person 3

Regression analysis	Outlier detection	Qualitative analysis
Impact of student engagement	Correlation between student performance and sleep patterns	Impact of school resources

Person 4

Cluster analysis	Comparing groups	Identify areas of improvement
Relationship between student performance and the use of digital learning tools	Effective teaching methods	Impact of class size

3

Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you can break it up into smaller sub-groups.

🕒 20 minutes

Data Collection



Analysis



Visualization



External Factors



Changeable factors

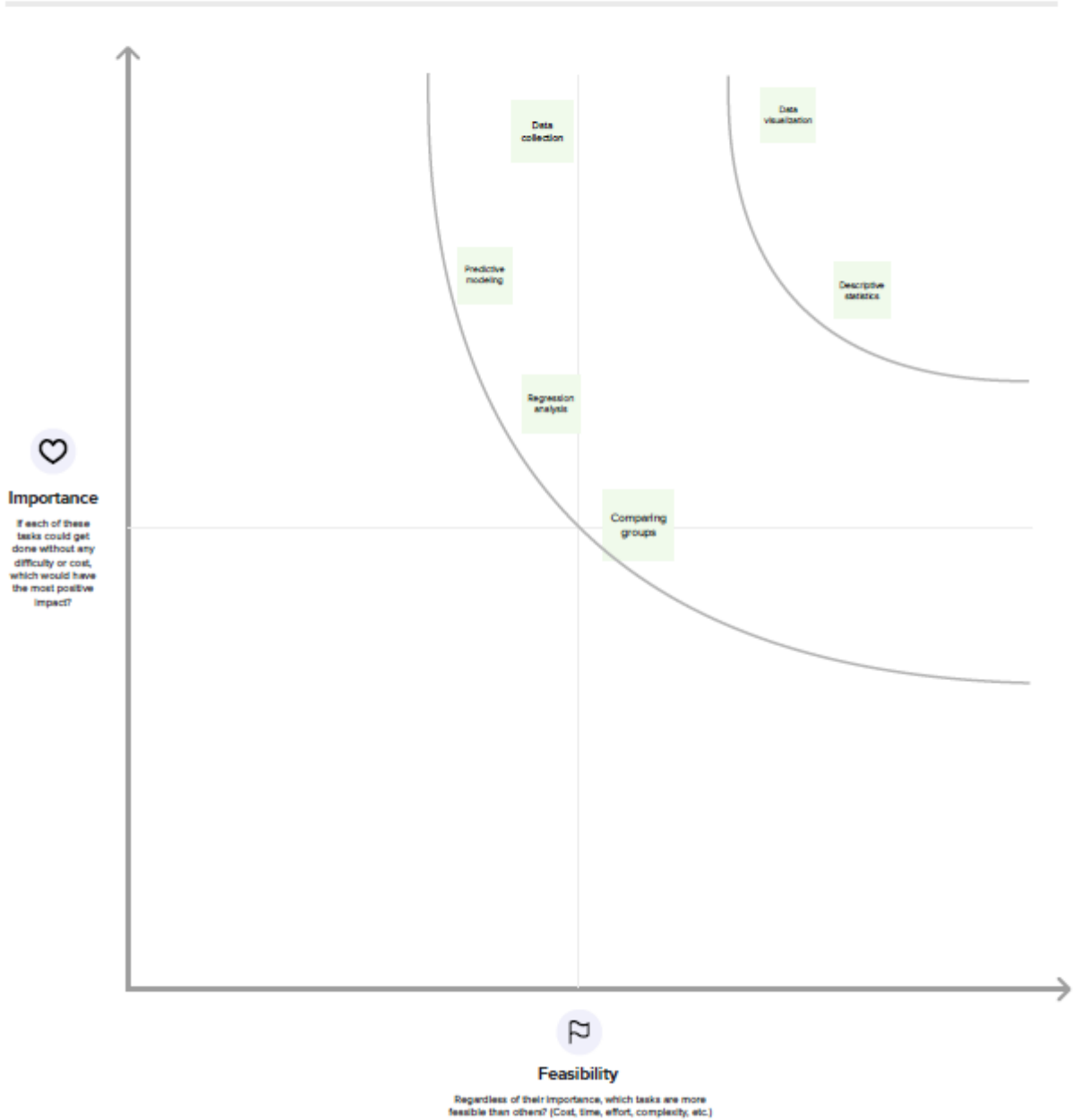


4

Prioritize

Your team should all be on the same page about what's Important moving forward. Place your ideas on this grid to determine which ideas are Important and which are feasible.

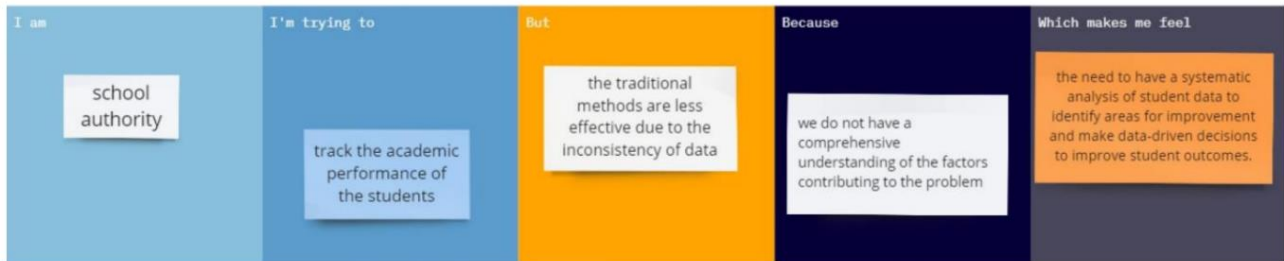
🕒 20 minutes



2.4 PROPOSED SOLUTION

S.No.	Parameter	Description
1.	Problem Statement	The problem we are solving is to help educational institutions and teachers to get insights into the performance of their students. By analyzing the performance of students, educational institutions can identify the areas where students are struggling and take corrective measures to improve their performance.
2.	Solution description	Our solution is a student performance analysis tool that uses data analytics to analyze the performance of students. The tool collects data from various sources such as exam results, attendance records, and student feedback, and uses this data to generate insights into the performance of students. The tool provides dashboards and reports that help teachers and educational institutions to identify the areas where students are struggling and take corrective measures to improve their performance.
3.	Novelty/Uniqueness	Our solution is unique because it uses data analytics to analyze the performance of students. Our solution is also unique because it is customizable and can be tailored to the specific needs of each educational institution.
4.	Social impact/ Customer satisfaction	Our solution has a significant social impact as it helps to improve the performance of students and increase their chances of success in their careers. By providing insights into the performance of students, our solution helps teachers and educational institutions to identify the areas where students are struggling and take corrective measures to improve their performance. This, in turn, leads to increased student satisfaction and retention rates.
5.	Business/ Revenue model	Educational institutions can subscribe to our service and pay a monthly or annual fee to access our student performance analysis tool. We also offer customization services for an additional fee.
6.	Scalability of the solution	Our solution is highly scalable as we can easily add new features and functionalities to our tool to meet the evolving needs of educational institutions. We can provide support and assistance to our customers

PROBLEM SOLUTION FIT



I am school authority. I'm trying to track the academic performance of students but the traditional methods are less effective due to the inconsistency of data because we do not have comprehensive understanding of the factors contributing to the problem which makes me feel the need to have a systematic analysis of student data to identify areas for improvement and make data-driven decisions to improve student outcomes.

3. REQUIREMENT ANALYSIS

3.1 FUNCTIONAL REQUIREMENTS

FRNo.	Functional Requirement (Epic)	Sub Requirement(Story/Sub-Task)
FR-1	Performance Dashboard	Integration with the student information system(real time data) Track trends and compare the performance across different classes
FR-2	Report Generation	Clear presentation of data Data accuracy Timeliness
FR-3	Parent Portal	User-friendly interface Notifications and alerts
FR-4	Student Portal	Goal-setting tools Personalized information
FR-5	Assessment and Evaluation Tool	Validity and reliability Clear grading criteria Individualized feedback

3.2 NON-FUNCTIONAL REQUIREMENTS

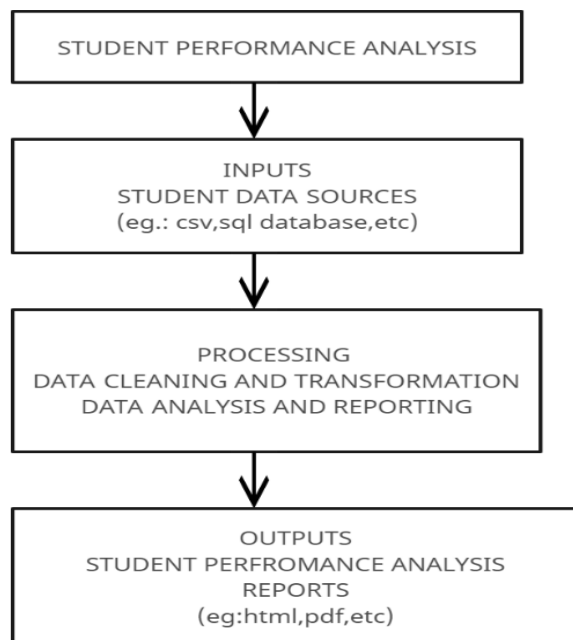
FRNo.	Non-Functional Requirement	Description
NFR-1	Usability	Usability plays a critical role in student performance analysis, as it impacts user adoption, data accuracy, user satisfaction, efficiency, accessibility, training requirements, collaboration, and decision-making.
NFR-2	Security	Data protection, confidentiality, user authentication, data backup and recovery will be done in a good manner.
NFR-3	Reliability	Reliability ensures that the data and information provided by the analysis are accurate, consistent, and dependable.
NFR-4	Performance	Performance in student performance analysis is to measure and evaluate how well a student is performing in a particular subject or skill area.
NFR-5	Availability	The role of availability in student performance analysis is to ensure that the necessary data and resources are accessible and reliable. By ensuring availability, stakeholders can perform effective analysis, make informed decisions, and support student success.
NFR-6	Scalability	Scalability in student performance analysis is to ensure that the system can handle increasing amounts of data and users without sacrificing performance or reliability.

4. PROJECT DESIGN

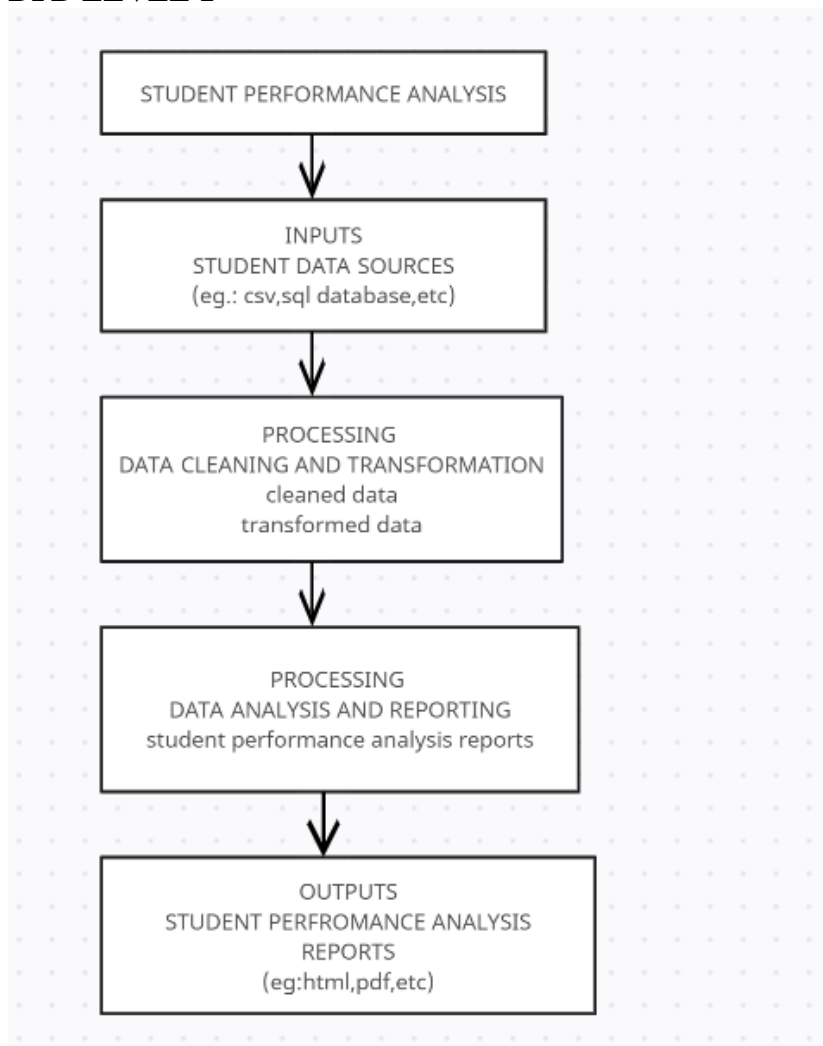
4.1 DATA FLOW DIAGRAMS

A data flow diagram (DFD) for student performance analysis would depict the flow of data and processes involved in analyzing and evaluating student performance within an educational system. The DFD can be expanded or decomposed further based on the specific requirements and processes involved in the student performance analysis system. It provides a visual representation of how data flows through various processes and entities, facilitating understanding, analysis, and communication among stakeholders involved in monitoring and improving student performance.

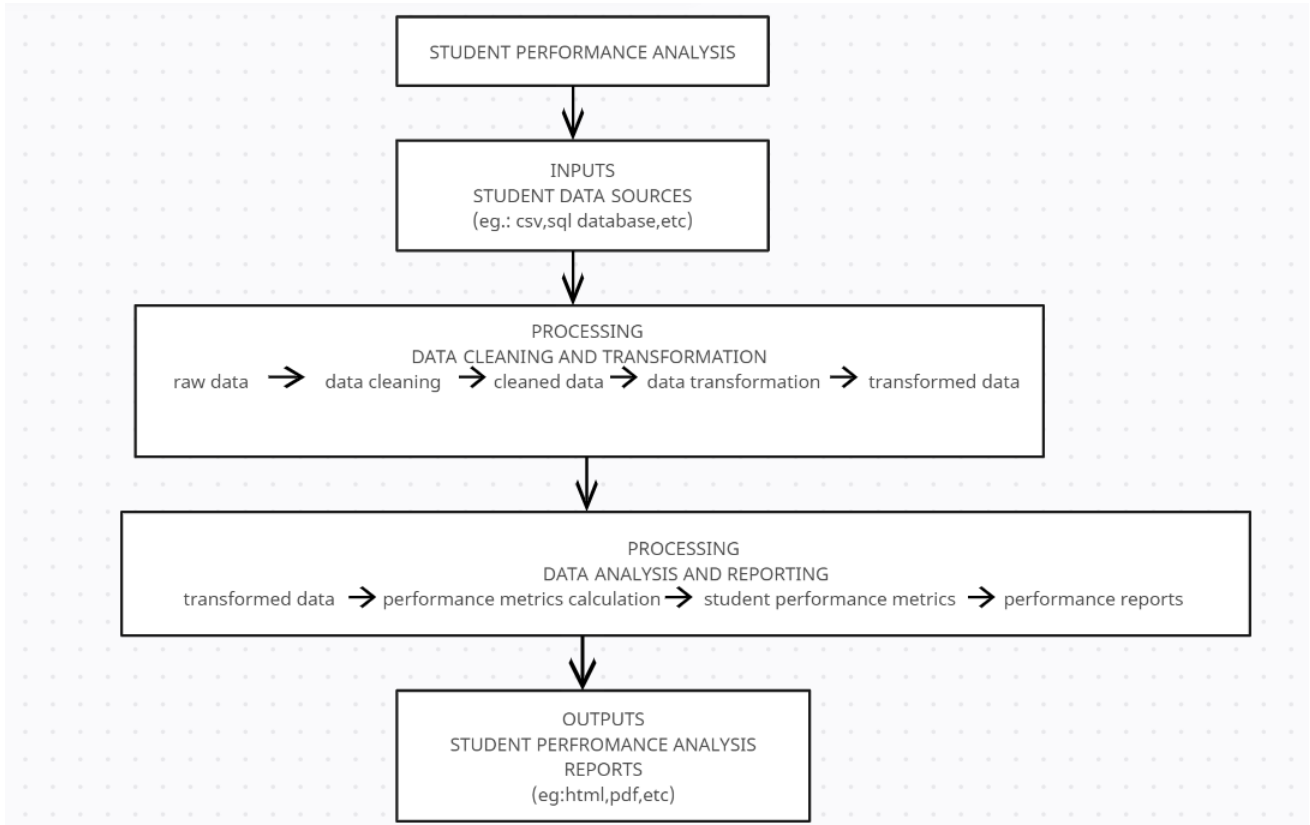
DFD LEVEL 0



DFD LEVEL 1



DFD LEVEL 2



4.2 SOLUTION ARCHITECTURE AND

TECHNICAL ARCHITECTURE

SOLUTION ARCHITECTURE

- Our solution is a student performance analysis tool that uses data analytics to analyze the performance of students. The tool collects data from various sources such as exam results, attendance records, and student feedback, and uses this data to generate insights into the performance of students. The tool provides dashboards and reports that help teachers and educational institutions to identify the areas where students are struggling and take corrective measures to improve their performance.
- Our solution is unique because it uses data analytics to analyze the performance of students. Our solution is also unique because it is customizable and can be tailored to the specific needs of each educational institution and provides specifications according to which the solution is defined, managed, and delivered.

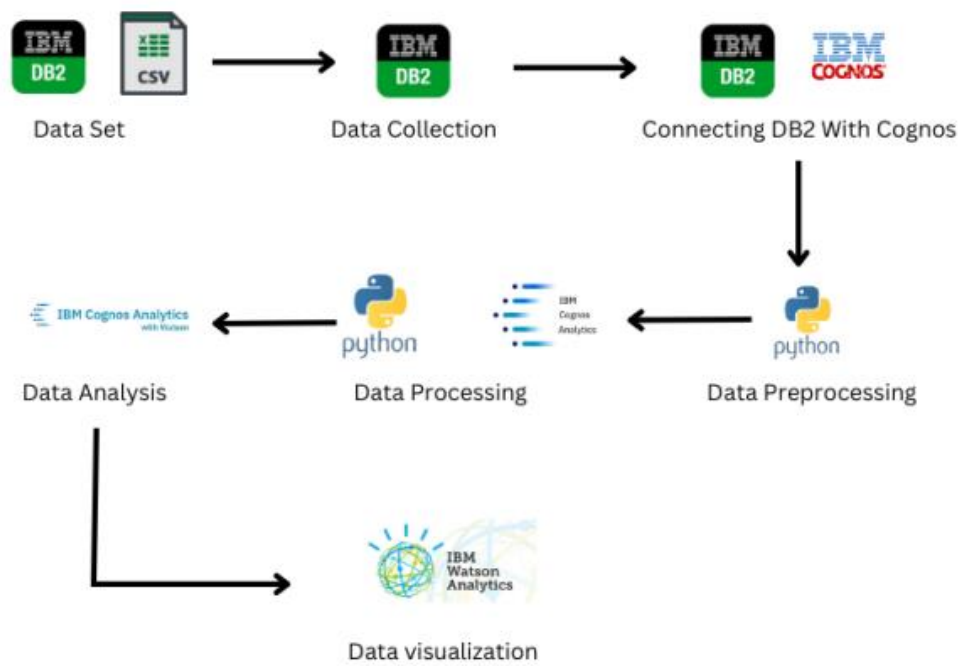
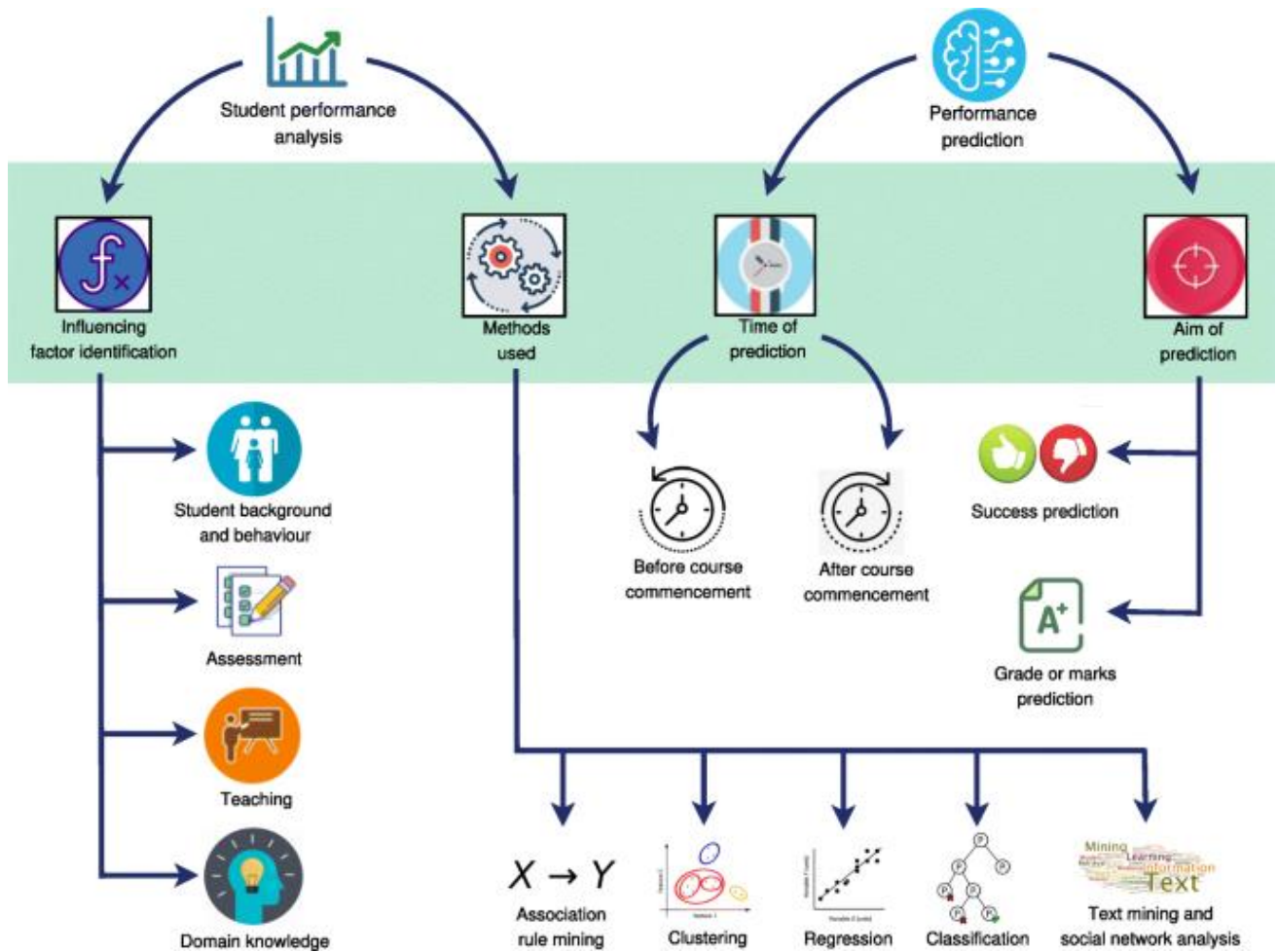


Figure 1: Architecture and data flow of a Student Performance Analysis application

Solution Architecture

TECHNICAL ARCHITECTURE:



Technical Architecture

Table-1 :**Components & Technologies:**

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript, React JS
2.	Application Logic-1	Data Preprocessing and Cleaning	Python (Pandas, Numpy)
3.	Application Logic-2	Predictive Analytics	Python (Scikit-Learn, XGBoost)
4.	Application Logic-3	Natural Language Processing	IBM Watson Assistant
5.	Database	Data Type, Configurations	IBM DB2
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	External API-1	Education Data API	National Center for Education Statistics (NCES) API
9.	External API-2	Location Data API	Google Maps API
10.	Machine Learning Model	Supervised Learning Model	Random Forest, Support Vector Machine (SVM)
11.	Infrastructure (Server / Cloud)	Application Deployment on Cloud	IBM Cloud, Github

Table-2:

Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Pandas, NumPy
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	HTTPS
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Docker
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	Kubernetes
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Redis

4.3 USER STORIES

PROJECT PLANNING & SCHEDULING

User Stories

USER TYPE	FUNCTIONAL REQUIREMENT	USER STORY NUMBER	USER STORY/TASK	ACCEPTANCE CRITERIA	PRIORITY	TEAM MEMBER
Teacher	Performance Dashboard	US001	As a teacher, I want to be able to see the grades and overall performance of all my students in a particular class, so that I can identify areas of strength and weakness and adjust my teaching approach accordingly.	<ol style="list-style-type: none">1. The performance dashboard displays all students in the selected class with their corresponding grades and overall performance.
2. The performance dashboard can be filtered and sorted based on different criteria such as grade level, gender, or performance level.
3. The performance dashboard provides a user-friendly interface such as a table or chart.	High	Muthulakshmi R

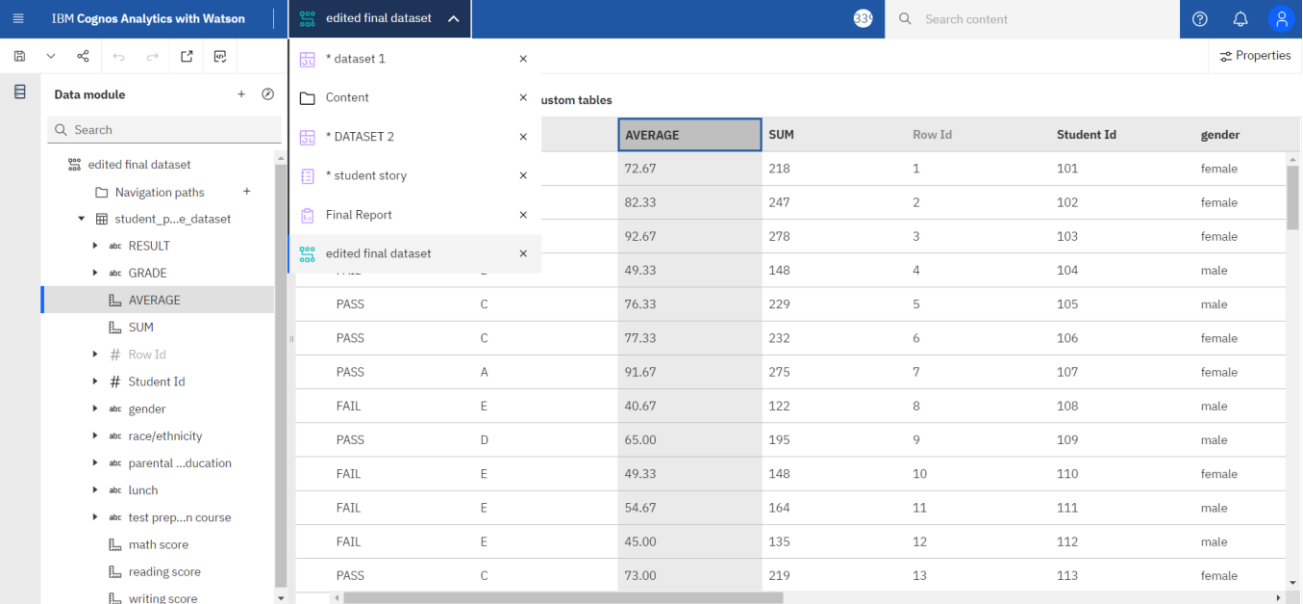
School Administrator	Report Generation	US002	As a school administrator, I want to be able to generate reports on student performance over time, so that I can track trends and identify areas of improvement or concern.	<p>1. The report generation feature allows the user to select parameters such as time range, student groups, and subject areas.</p> <p>
</p> <p>2. The generated report presents the retrieved data in a user-friendly format such as a table or chart.</p> <p>
</p> <p>3. The generated report can be exported in a variety of formats such as PDF or CSV.</p> <p>
</p> <p>4. The generated report can be filtered and sorted based on different criteria such as grade level, gender, or performance level.</p>	Medium	Ameenath Famida D M
Parent	Parent Portal	US003	As a parent, I want to be able to see my child's grades and overall performance in each subject, so that I can monitor their progress and provide	<p>1. The parent portal allows parents to access their child's performance data.</p> <p>
</p> <p>2. The parent portal displays the</p>	Medium	Swathi Priya S G

			support where needed	<p>child's grades and overall performance in each subject.
</p> <p>3. The parent portal provides a user-friendly interface such as a table or chart.
</p> <p>4. The parent portal can be filtered and sorted based on different criteria such as grade level, subject, or performance level.</p>		
Student	Student Portal	US004	<p>As a student, I want to be able to see my own grades and overall performance, so that I can track my progress and identify areas where I need to improve.</p>	<p>1. The student portal allows students to access their own performance data.</p> <p>2. The student portal displays the student's grades and overall performance in each subject.</p> <p>3. The student portal provides a user-friendly interface such as a table or chart.</p>	Medium	Swetha P

5.CODING & SOLUTIONING

5.1 FEATURE 1:

IBM Cognos (dashboard, story, report) - Utilizing IBM Cognos, the project enables the creation of visually appealing dashboards, interactive stories, and detailed reports for comprehensive student performance analysis.

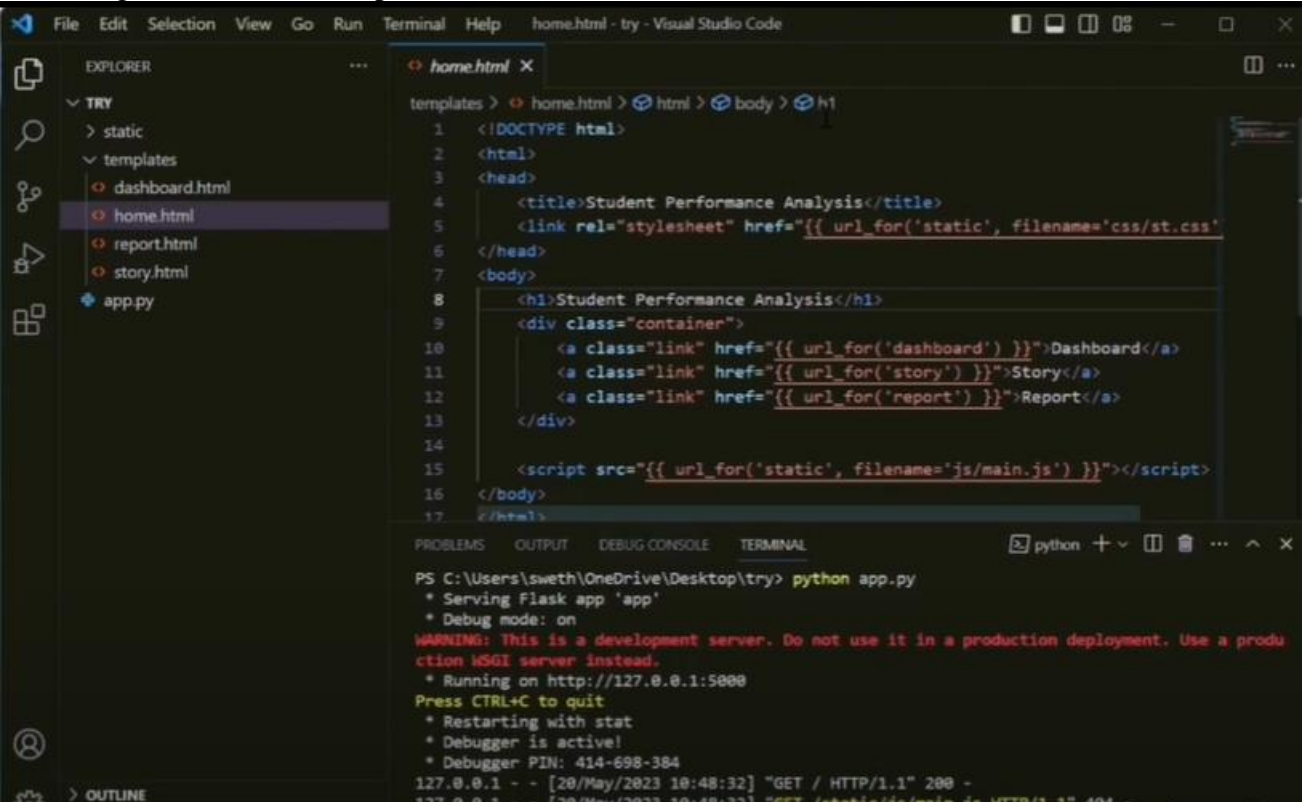


The screenshot displays the IBM Cognos Analytics interface. On the left, a 'Data module' sidebar shows a search bar and a list of data sources including 'edited final dataset', 'Navigation paths', 'student_p...e_dataset', 'RESULT', 'GRADE', 'AVERAGE', 'SUM', 'Row Id', 'Student Id', 'gender', 'race/ethnicity', 'parental ...ducation', 'lunch', 'test prep...n course', 'math score', 'reading score', and 'writing score'. The main area shows a table titled 'dataset 1' with columns: AVERAGE, SUM, Row Id, Student Id, and gender. The table contains 13 rows of data.

AVERAGE	SUM	Row Id	Student Id	gender
72.67	218	1	101	female
82.33	247	2	102	female
92.67	278	3	103	female
49.33	148	4	104	male
76.33	229	5	105	male
77.33	232	6	106	female
91.67	275	7	107	female
40.67	122	8	108	male
65.00	195	9	109	male
49.33	148	10	110	female
54.67	164	11	111	male
45.00	135	12	112	male
73.00	219	13	113	female

5.2 FEATURE 2:

Python Flask Application - The project incorporates a Python Flask application to provide a user-friendly and responsive interface for accessing and interacting with the student performance data, enhancing the overall user experience.



The screenshot shows a Python Flask application running in Visual Studio Code. The Explorer panel on the left shows the project structure with files: static, templates, dashboard.html, home.html, report.html, story.html, and app.py. The main editor displays the content of home.html, which is an HTML template for a 'Student Performance Analysis' dashboard. The terminal at the bottom shows the command 'python app.py' being executed, and the output indicates that the Flask app is running on http://127.0.0.1:5000.

```
File Edit Selection View Go Run Terminal Help home.html - try - Visual Studio Code

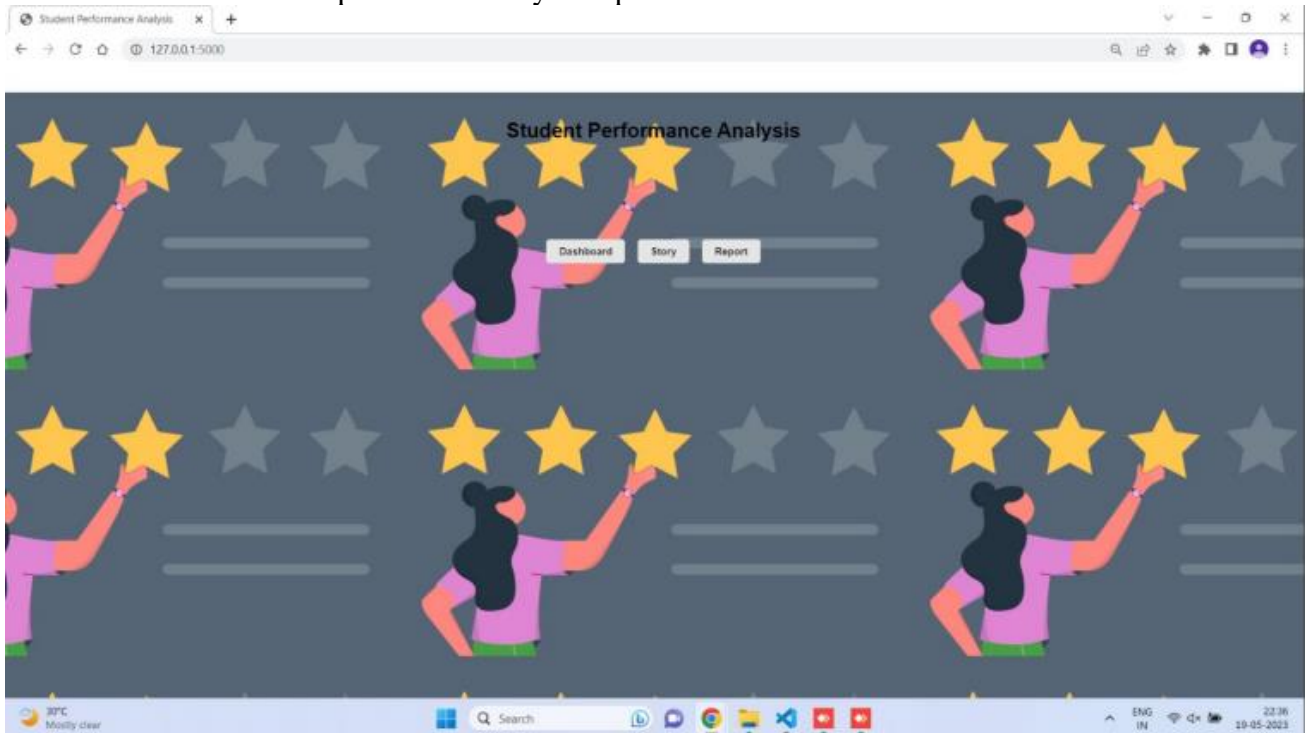
EXPLORER
  TRY
    static
    templates
      dashboard.html
      home.html
      report.html
      story.html
    app.py

home.html
1 <!DOCTYPE html>
2 <html>
3 <head>
4   <title>Student Performance Analysis</title>
5   <link rel="stylesheet" href="{{ url_for('static', filename='css/st.css') }}">
6 </head>
7 <body>
8   <h1>Student Performance Analysis</h1>
9   <div class="container">
10    <a class="link" href="{{ url_for('dashboard') }}">Dashboard</a>
11    <a class="link" href="{{ url_for('story') }}">Story</a>
12    <a class="link" href="{{ url_for('report') }}">Report</a>
13  </div>
14
15  <script src="{{ url_for('static', filename='js/main.js') }}"></script>
16 </body>
17 </html>

TERMINAL
PS C:\Users\sweth\OneDrive\Desktop\try> python app.py
* Serving Flask app 'app'
* Debug mode: on
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on http://127.0.0.1:5000
Press CTRL+C to quit
* Restarting with stat
* Debugger is active!
* Debugger PIN: 414-698-384
127.0.0.1 - - [20/May/2023 10:48:32] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [20/May/2023 10:48:32] "GET /static/js/main.js HTTP/1.1" 404 -
```

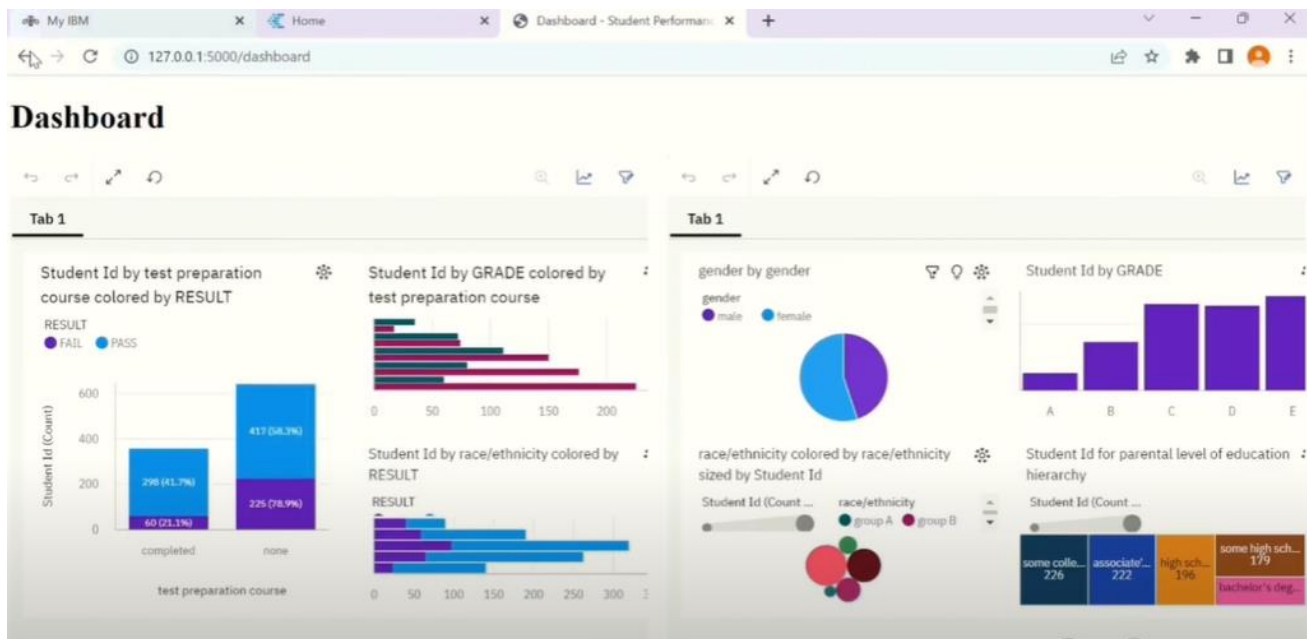

5.3 FEATURE 3:

Webpage- A webpage for student data analysis provides an interactive and user-friendly interface for analyzing and exploring student performance data. It allows educators, administrators, and other stakeholders to access and analyze student data to gain insights, track progress, and make informed decisions. Here's a description of the key components and features that could be included on a we



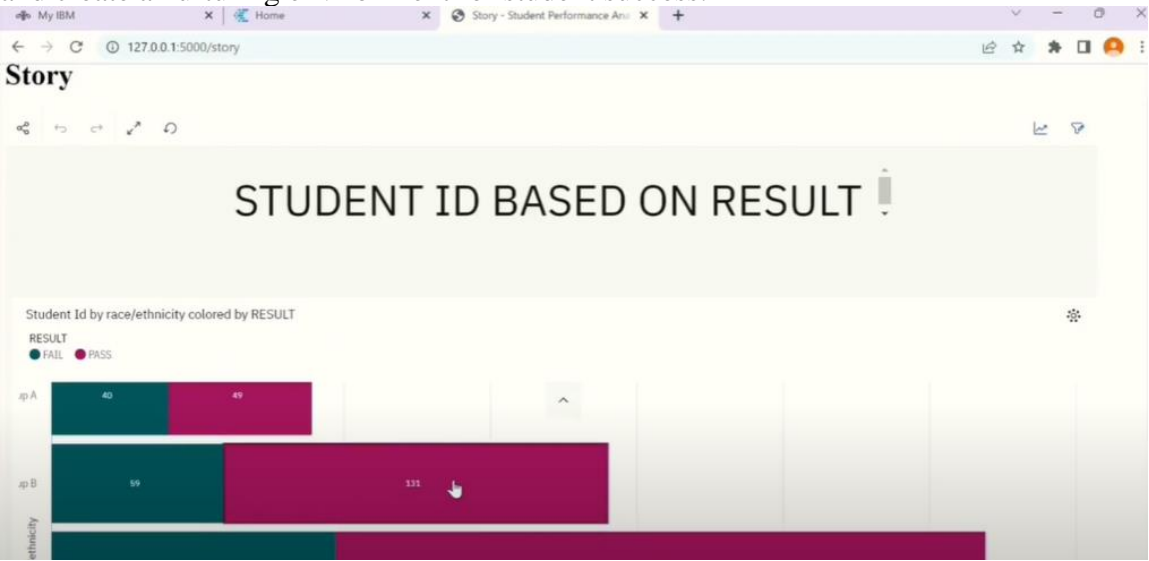
5.4 FEATURE 4:

Dashboard: A dashboard for student data analysis provides a visual representation of key metrics and insights derived from student performance data. It allows educators, administrators, and other stakeholders to monitor and assess student progress, identify areas of improvement, and make data driven decisions.



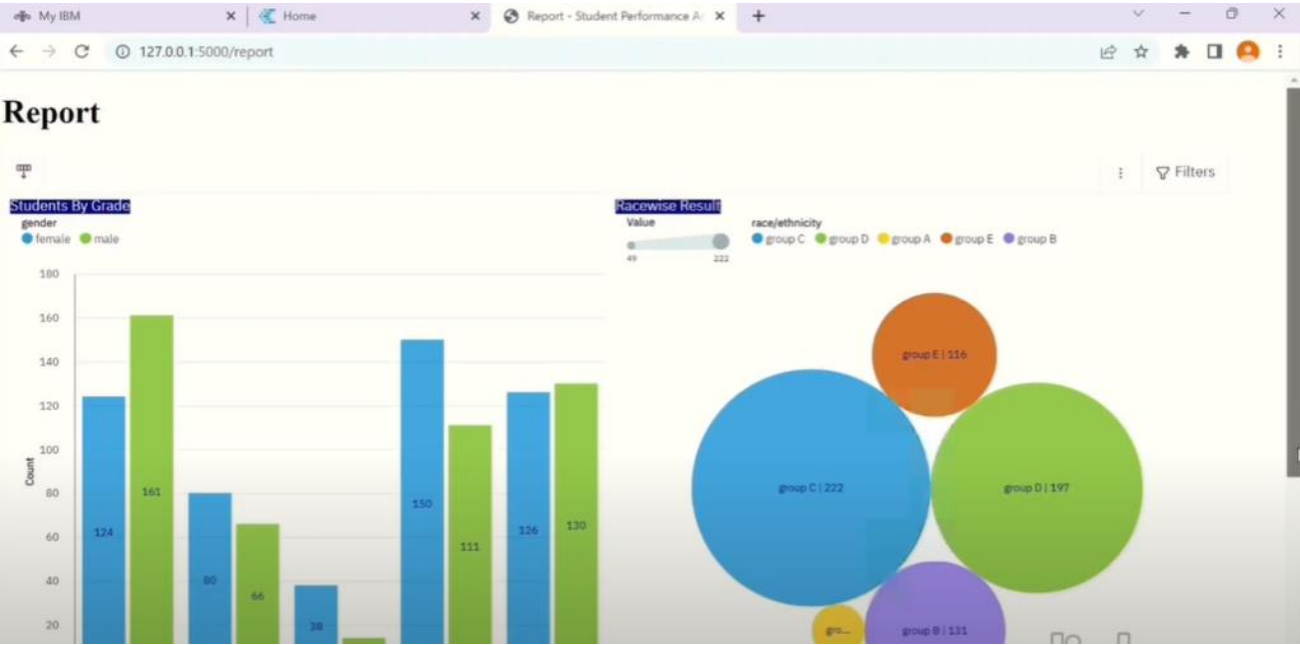
5.5 FEATURE 5:

Story – The story highlights the impact of leveraging student data to improve educational outcomes and create a nurturing environment for student success.



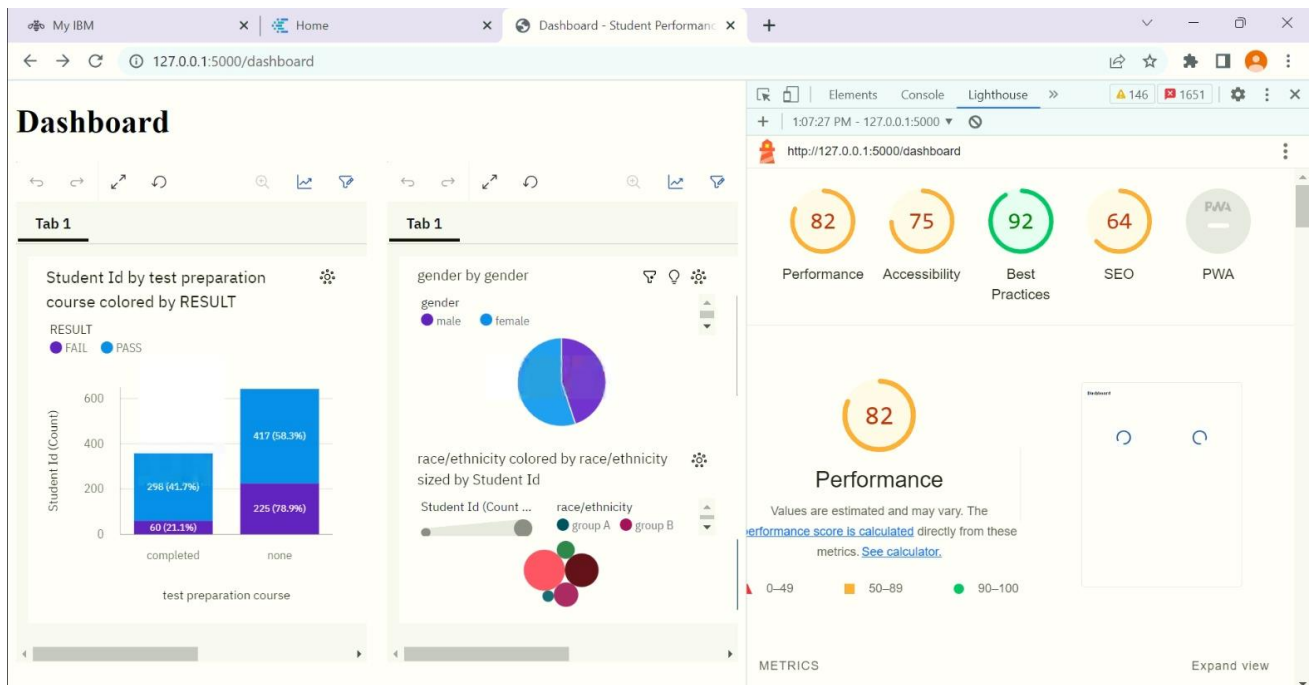
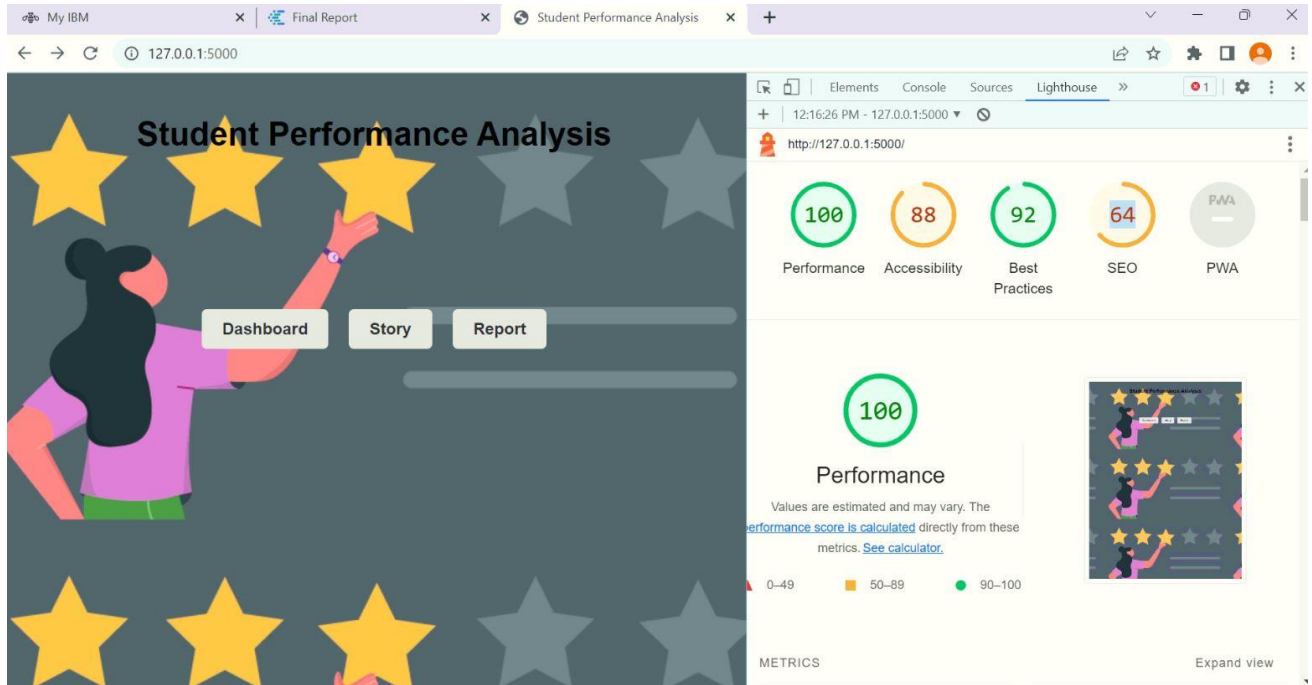
5.6 FEATURE 6:

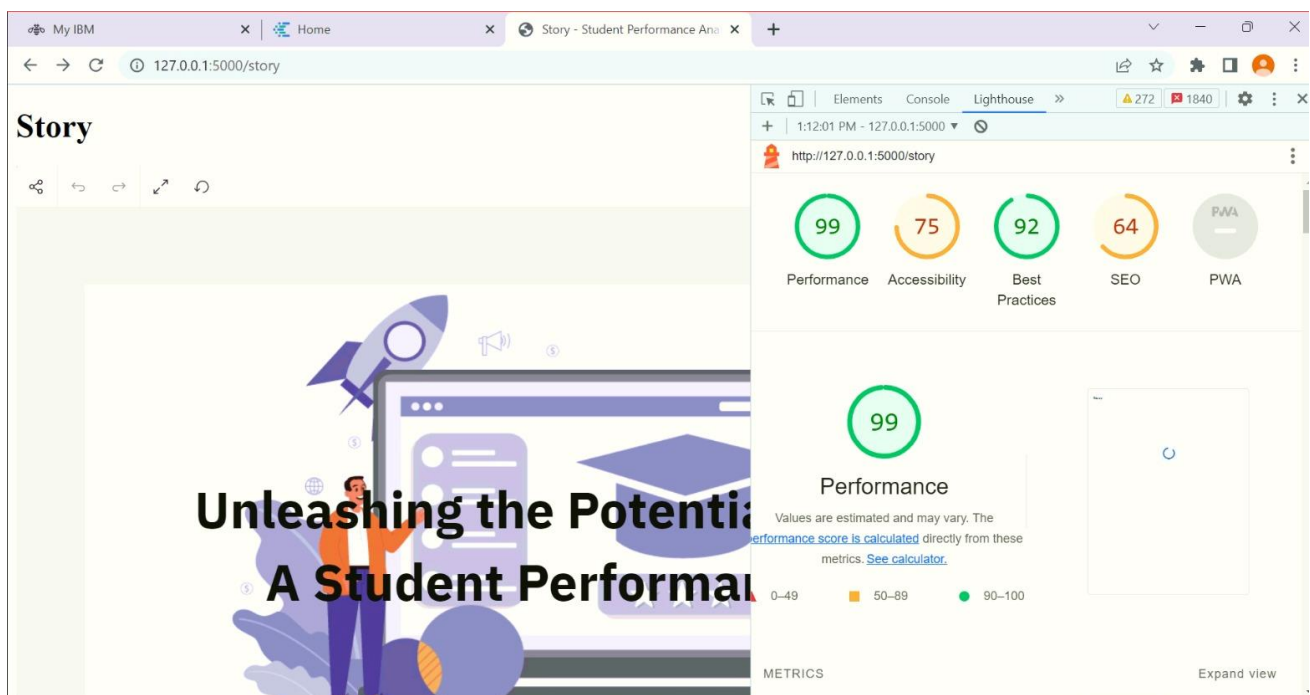
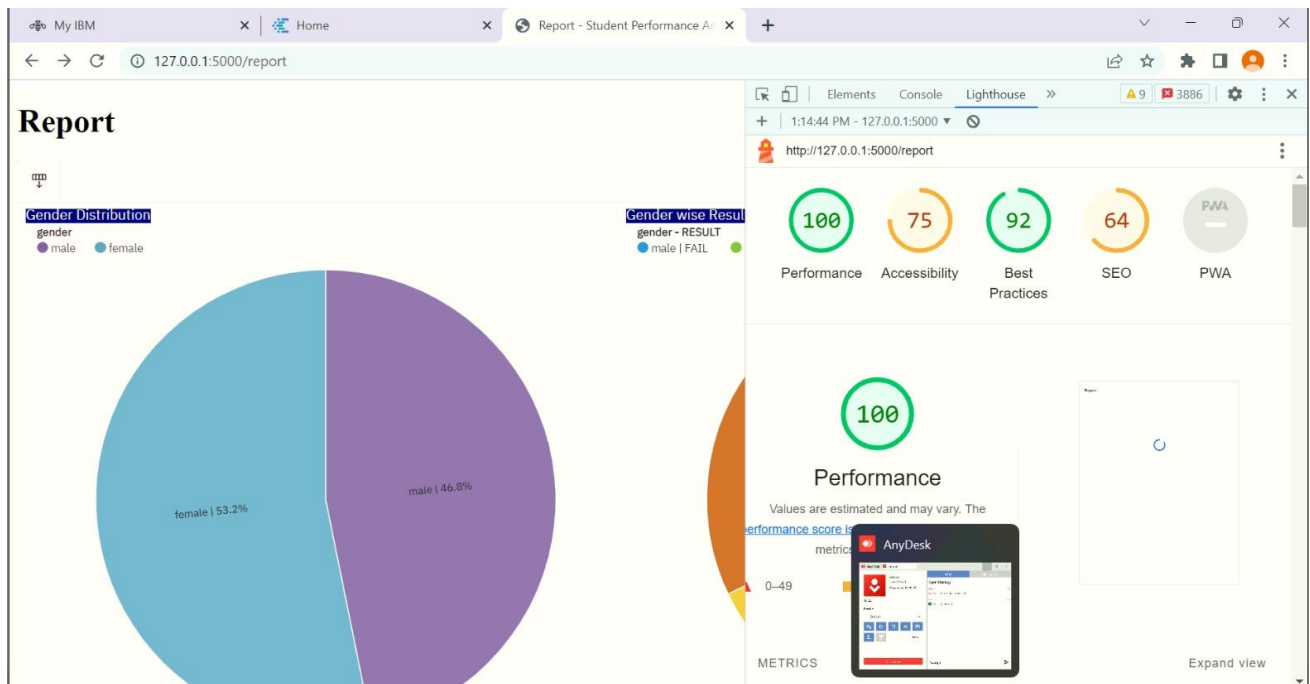
Report – This report highlights key findings, trends, and insights derived from the analysis of student data, enabling stakeholders to make informed decisions and take targeted actions to improve educational outcomes. The report begins with an executive summary, presenting a concise overview of the main findings and recommendations. It provides a high-level snapshot of student performance, identifying notable achievements, challenges, and areas requiring further attention.



6.RESULTS

6.1 PERFORMANCE METRICS





7.ADVANTAGES & DISADVANTAGES:

ADVANTAGES:

1. **Comprehensive Data Analysis:** The project allows for in-depth analysis of student performance through IBM Cognos, enabling educators to gain valuable insights and make data-driven decisions.
2. **Interactive Visualization:** The use of IBM Cognos dashboards and stories facilitates interactive data visualization, making it easier to understand and communicate complex information.
3. **User-Friendly Interface:** The Python Flask application provides a user-friendly interface, allowing educators and administrators to easily navigate and access student performance data.
4. **Customizability:** Both IBM Cognos and Python Flask offer customization options, enabling the project to be tailored to the specific needs and requirements of educational institutions.
5. **Scalability:** The project can be scaled up to accommodate large amounts of data and additional features, making it suitable for educational institutions of varying sizes.

DISADVANTAGES:

1. **Complexity:** Implementing and maintaining an IBM Cognos and Python Flask-based project can be complex, requiring expertise in both technologies and potentially posing challenges for less tech-savvy users.
2. **Cost:** IBM Cognos is a commercial tool that may involve licensing and subscription costs, which could be a potential financial burden for smaller educational institutions with limited budgets.
3. **Integration Challenges:** Integrating the project with existing systems and databases may present challenges, requiring thorough planning and coordination to ensure smooth data flow and compatibility.

8.CONCLUSION

In conclusion, student performance analysis plays a critical role in understanding and improving academic outcomes. By analyzing various factors that influence student achievement, such as individual abilities, motivation, and learning environments, educators can gain valuable insights into students' strengths and weaknesses. This analysis enables evidence-based decision-making, allowing educators to identify areas for improvement, implement targeted interventions, and allocate resources effectively. Additionally, student performance analysis helps identify achievement gaps and promotes equity in education by addressing disparities among student groups. By continuously monitoring progress and measuring the impact of interventions, educational institutions can ensure that all students have equal opportunities for success. Ultimately, student performance analysis serves as a powerful tool for optimizing teaching strategies, improving learning outcomes, and creating a supportive and inclusive educational environment.

9.FUTURE SCOPE

The future scope for student performance analysis holds great potential for further advancements and innovations. With the rapid development of technology and data analytics, student performance analysis can leverage new tools and methodologies to provide more comprehensive and accurate insights. Machine learning algorithms and artificial intelligence can be employed to analyze large datasets, identify complex patterns, and generate personalized recommendations for students. Additionally, the integration of multiple data sources, such as academic records, assessment scores, attendance records, and even social and emotional data, can provide a more holistic view of student performance.

10 .APPENDIX

SOURCE CODE

app.py

```
from flask import Flask, render_template

app = Flask(__name__)

@app.route('/')
def home():
    return render_template('home.html')

@app.route('/story')
def story():
    return render_template('story.html')

@app.route('/dashboard')
def dashboard():
    return render_template('dashboard.html')

@app.route('/report')
def report():
    return render_template('report.html')

if __name__ == '__main__':
    app.run(debug=True)
```

st.css

```
body {
    font-family: Arial, sans-serif;
    margin: 0;
    padding: 20px;
    background-image: url("https://kissflow.com/hubfs/Performance-evaluation-questions.png");
    background-size: auto;
    background-position: center;
}

h1 {
    text-align: center;
}

.container {
    display: flex;
    justify-content: center;
    align-items: center;
    height: 300px;
}

.link {
```

```

display: inline-block;
margin: 10px;
padding: 10px 20px;
background-color: #e6e6e6;
border-radius: 5px;
text-decoration: none;
color: #333;
font-weight: bold;
}

```

dashboard.html:

```

<!DOCTYPE html>
<html>
<head>
  <title>Dashboard - Student Performance Analysis</title>
  <style>
    .embed-container {
      display: grid;
      grid-template-columns: repeat(2, 1fr); /* Adjust the number of columns as needed */
      gap: 20px;
    }
    .embed-container iframe {
      width: 100%;
      height: 500px;
      border: none;
    }
  </style>
</head>
<body>
  <h1>Dashboard</h1>
  <div class="embed-container">

    <!-- Paste your IBM Cognos Analytics embedding code for the first Dashboard file here -->
    <iframe
src="https://us3.ca.analytics.ibm.com/bi/?perspective=dashboard&pathRef=.my_folders%2FDATASET%2B2&closeWindowOnLastView=true&ui_appbar=false&ui_navbar=false&shareMode=embedded&action=view&mode=dashboard&subView=model00000188001882e44210c_00000002" width="1200" height="800" frameborder="0" gesture="media"
allow="encrypted-media" allowfullscreen=""></iframe>

    <!-- Paste your IBM Cognos Analytics embedding code for the second Dashboard file here -->
    <iframe
src="https://us3.ca.analytics.ibm.com/bi/?perspective=dashboard&pathRef=.my_folders%2Fdataset%2B1&closeWindowOnLastView=true&ui_appbar=false&ui_navbar=false&shareMode=embedded&action=view&mode=dashboard&subView=model000001882e41911b_00000001" width="1200" height="800" frameborder="0" gesture="media"
allow="encrypted-media" allowfullscreen=""></iframe>

  </div>
</body>
</html>

```

home.html

```
<!DOCTYPE html>
<html>
<head>
  <title>Student Performance Analysis</title>
  <link rel="stylesheet" href="{{ url_for('static', filename='css/st.css') }}">
</head>
<body>
  <h1>Student Performance Analysis</h1>
  <div class="container">
    <a class="link" href="{{ url_for('dashboard') }}">Dashboard</a>
    <a class="link" href="{{ url_for('story') }}">Story</a>
    <a class="link" href="{{ url_for('report') }}">Report</a>
  </div>

  <script src="{{ url_for('static', filename='js/main.js') }}"></script>
</body>
</html>
```

report.html

```
<!DOCTYPE html>
<html>
<head>
  <title>Report - Student Performance Analysis</title>
</head>
<body>
  <h1>Report</h1>
  <div class="embed-container">
    <iframe
src="https://us3.ca.analytics.ibm.com/bi/?pathRef=.my_folders%2FFinal%2BReport&closeWin
dowOnLastView=true&ui_appbar=false&ui_navbar=false&shareMode=embedded&a
mp;action=run&format=HTML&prompt=false"          width="1200"          height="800"
frameborder="0" gesture="media" allow="encrypted-media" allowfullscreen=""></iframe>
    </div>
</body>
</html>
```

story.html

```
<!DOCTYPE html>
<html>
<head>
  <title>Story - Student Performance Analysis</title>
</head>
<body>
  <h1>Story</h1>
  <div class="embed-container">
    <iframe
src="https://us3.ca.analytics.ibm.com/bi/?perspective=story&pathRef=.my_folders%2Fstudent
%2Bstory&closeWindowOnLastView=true&ui_appbar=false&ui_navbar=false&
shareMode=embedded&action=view&sceneId=model000001882e53f0cc_00000007&am
```

```
p;sceneTime=0" width="1200" height="800" frameborder="0" gesture="media" allow="encrypted-  
media" allowfullscreen=""></iframe>  
</div>  
</body>  
</html>
```

GITHUB LINK:

<https://github.com/Carolsankho/Naan-Mudhalvan>

PROJECT VIDEO DEMO LINK:

https://drive.google.com/drive/folders/1lfqHFYrLPKcPaapDyRHNT_5xfJ-h7RyV

