**Insight stream Project**

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1.Purpose & Goals

The purpose of this project is to transform raw data into meaningful insights using the InsightStream app.

It helps in analyzing datasets systematically.

Converts data into clear visualizations.

Supports decision-making by identifying trends and patterns.

Provides students hands-on experience in real-world data analysis.

2.Features & Functionalities

Data Upload & Handling – Import datasets easily (CSV/Excel).

Data Cleaning – Handle missing values and duplicates.

Visualization Tools – Generate charts, graphs, and dashboards.

Insights Generation – Summarize key findings from data.

Export/Presentation Ready – Create reports or screenshots for documentation

3.Architecture (Simplified)

The project is divided into parts: data input, processing, visualization, and reporting.

Global state: The uploaded dataset is shared across all charts and dashboards.

Local state: Filters or user selections are handled inside each chart.

Routing: Used for moving between pages like Home, Dashboard, and Reports.

4.Setup Instructions (Simplified)

Prerequisites: InsightStream app access, dataset (CSV/Excel), and basic system setup.

Steps:

1. Open the InsightStream app.

2. Upload the dataset.

3. Select the type of analysis or visualization.

4. Generate dashboards and reports

5.Component Documentation (Simplified)

Dashboard Component – Shows overall data summary.

Chart Components – Bar charts, pie charts, line graphs for visual analysis.

Filter Component – Lets users filter data by category or time.

Report Component – Summarizes insights for easy understanding

6.User Interface (Simplified)

Dashboard Page – Displays overall data summary with charts.

Charts/Graphs Section – Shows bar, pie, and line charts for detailed analysis.

Filter Options – Allow users to select categories, time periods, or variables.

Report Section – Summarizes insights in an easy-to-read format

7.Styling (Simplified)

CSS Framework – Used simple styling for clean and clear visuals.

Colors & Themes – Light theme with contrasting chart colors for readability.

Layout – Organized sections for dashboard, charts, and reports

12. Screenshots or Demo (Simplified)

Included screenshots of dashboards, charts, and reports.

Show how the data is visualized and insights are generated.

Demonstrates the working of the InsightStream app.

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13. Known Issues (Simplified)

Dataset may have missing or incomplete values.

Some charts may take time to load with large datasets.

Limited advanced analysis features in current version.

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14. Future Enhancements (Simplified)

Add predictive analysis and machine learning features.

Improve styling and user interface.

Enable exporting reports in multiple formats (PDF, PPT).

Include more interactive dashboards.