

Stroke Data Analysis Project – Summary

Project Overview:

As part of my Master's in Data Analytics, I developed a stroke data analysis project focused on identifying key factors related to stroke risks using real-world data. The project emphasized clean code structure, data-driven insights, and clear visual communication.

Objectives:

- Analyze a healthcare dataset to uncover stroke risk patterns.
- Clean, process, and visualize data for meaningful interpretation.
- Practice modular programming with structured Python code.

Technical Skills Applied:

- Programming: Python (pandas, matplotlib, seaborn)
- Data Handling: Data cleaning, transformation, and feature extraction
- Data Analysis: Exploratory Data Analysis (EDA), Statistical summaries
- Visualization: Charts and graphs to communicate findings
- Project Structuring: Modular design (dataset, query, and UI modules)

Key Achievements:

1. Successfully managed and analyzed a complex healthcare dataset.
2. Created insightful visualizations highlighting stroke correlations with factors like age, hypertension, and heart disease.
3. Developed a user-friendly query interface to explore the dataset.
4. Authored a comprehensive report explaining methods, analysis, and reflections.

Tools Used:

- Python | pandas | matplotlib | seaborn