

**PROJECT: AENDICUS Dashboard Development
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Introduction

The AENDICUS database has significant potential to uncover valuable insights and support research uses. This project aims to analyze and present the data in order to address the limited appreciation among its end-users, the resident anesthesiologists. To achieve this, the proposed project will unlock the true value of the AENDICUS database through a comprehensive data exploration and the development of an interactive dashboard.

Project Description

This project will focus on two main objectives. First is to uncover meaningful patterns, trends, and relationships that can guide evidence-based decision-making and strategic planning. Second is to create a dynamic and user-friendly dashboard that will serve as a visual gateway to the discovered insights. This interactive interface will empower its end-users to explore the data, visualize key findings, and access valuable information effortlessly.

Project Outline

Description	Deliverables	Completion Date
MILESTONE 1 DATA CLEANING		
<ul style="list-style-type: none"> ● Data Quality Assurance Identify and rectify inconsistencies, errors, and inaccuracies in the dataset to ensure data integrity and reliability. ● Data Standardization Standardize data formats, units, and variables to ensure consistency and compatibility across the dataset, enhancing data coherence and analysis accuracy. 	<ul style="list-style-type: none"> ● Clean downloadable dataset (.xlsx or .csv file) ● A list of recommendations for future data encoding to allow reproducible analyses 	<ul style="list-style-type: none"> ● Week 2
MILESTONE 2 EXPLORATORY DATA ANALYSIS		
<ul style="list-style-type: none"> ● Demographic Analysis Explore demographic variables such as age, gender, ethnicity, and geographical location to understand the distribution and characteristics of the population. Visualize demographic trends using charts or geographic maps. ● Comparative Analysis Compare health data across different provinces, training institutions, or demographic groups to identify variations. 	<ul style="list-style-type: none"> ● Initial findings A document providing in-depth analysis and interpretations based on the AENDICUS data. ● Ad Hoc Analysis: An additional report summarizing all research questions from the client ● Synthesized report A synthesis of the Initial Report and Ad Hoc Analysis. 	<ul style="list-style-type: none"> ● Initial findings - Week 4 ● Ad Hoc Analysis - Week 5 ● Synthesized Report, Summary PowerPoint Presentation - Week 6

<ul style="list-style-type: none"> ● Ad Hoc Analysis Conduct customized analysis based on specific research questions or hypotheses provided by the client. Explore the data to address client-specific inquiries, uncover new insights, and provide targeted information to support decision-making in the field of anesthesiology. 	<ul style="list-style-type: none"> ● Summary PowerPoint Presentation A concise and visually engaging presentation, for face-to-face or remote delivery, highlighting key findings and insights derived from the AENDICUS data analysis in a clear and accessible format. 	
MILESTONE 3 DASHBOARD DEVELOPMENT		
<ul style="list-style-type: none"> ● Data Visualization Display data in various visual formats such as charts, graphs, and maps to provide a quick overview and enable easy understanding of trends, patterns, and insights. ● Data Filtering and Sorting Allow users to interact with the dashboard by providing filters, dropdowns, sliders, or search functionality. This empowers users to explore specific data subsets and customize their view based on their needs. 	<ul style="list-style-type: none"> ● Initial Layout The initial design and arrangement of the dashboard components, outlining the overall structure and organization. ● Initial Draft Dashboard A preliminary version of the dashboard with basic functionality and visualizations, serving as an early representation of the final product. ● Final Dashboard The completed and refined version of the dashboard, incorporating all desired features, visualizations, and interactive elements. 	<ul style="list-style-type: none"> ● Initial Layout - Week 6 ● Initial Draft Dashboard - Week 10 ● Final Dashboard and Demonstration - Week 14

- **Data Export**

Provide the ability to export data or reports from the dashboard in various formats such as CSV, Excel, or PDF. This allows users to further analyze or share the data outside the dashboard.

- **Dashboard Demonstration Video**

A recorded video demonstration showcasing the features, functionality, and insights provided by the dashboard, intended for presentation purposes and sharing with stakeholders.