PROJECT CHARTER

GENERAL PROJECT INFORMATION

PROJECT NAME		PROJECT MANAGER	PROJECT SPONSOR
Data Visualiser		Hanna Yershova	

EMAIL	PHONE	ORGANIZATIONAL UNIT(S)	
ye.anna.yu@gmail.com	000-000-0000	Modern Technologies for Software Project Development Course	

		EXPECTED START DATE	EXPECTED COMPLETION DATE
		09/02/2025	20/05/2025

		EXPECTED SAVINGS	ESTIMATED COSTS

PROJECT OVERVIEW

PROBLEM OR ISSUE	Data analysis is often complex and requires specialized tools or coding knowledge. Many users struggle with interpreting raw data due to a lack of accessible and user-friendly visualization tools. Existing solutions may be too technical, expensive, or limited in format support.
PURPOSE OF PROJECT	"Data Visualiser" aims to provide an intuitive web-based tool allowing users to upload datasets and generate clear, interactive visualizations. This will help users better understand trends, patterns, and insights within their data without needing advanced technical skills.
BUSINESS CASE	With the growing importance of data-driven decision-making, tools are strongly needed to simplify data visualization. This project addresses that need by offering an easy-to-use platform that supports multiple file formats, generates various charts, and provides interactive exploration features. The project also provides a learning opportunity to apply modern web development techniques.
GOALS / METRICS	User Engagement: Track the number of users who upload files and generate visualizations. Functionality: Ensure support for at least three standard data formats (e.g., CSV, JSON, Excel). Performance: Ensure data processing and visualization render within 2 seconds for datasets up to 10,000 rows. Usability: Conduct user testing and aim for an 80% or higher satisfaction rating. Accessibility: Ensure compliance with WCAG 2.1 AA accessibility standards.
EXPECTED DELIVERABLES	A responsive website with a file upload feature. Automatic data visualization with multiple chart types. Interactive features like zooming, filtering, and tooltips for better data exploration. Documentation, including user guides and technical specifications.

PROJECT SCOPE

WITHIN SCOPE	**File Upload & Processing: Users can upload structured data files (CSV, JSON, Excel). Data Visualization: Generate various chart types (bar charts, line graphs, scatter plots, pie charts). Interactivity: Users can interact with visualizations (zoom, filter, hover tooltips). Basic Data Transformation: Support simple operations like sorting, filtering, and aggregating data. User Interface (UI) Design: A responsive, user-friendly web interface for easy navigation. Performance Optimization: Ensure smooth rendering for datasets up to 10,000 rows. Cross-Browser Compatibility: Ensure functionality across major browsers (Chrome, Firefox, Edge, Safari). Documentation: Provide a user guide and technical documentation.**
OUTSIDE OF SCOPE	**Advanced Data Analytics: No support for machine learning, predictive modeling, or statistical analysis. Real-Time Data** **Database Storage: Uploaded files will not be stored persistently; they will only be processed temporarily for visualization. User Authentication & Accounts: No login or personalized user profiles. Mobile App Development: The project is web-based and does not include a mobile app. Complex Data Cleaning: No support for advanced data cleaning (e.g., handling missing values, outlier detection).**

TENTATIVE SCHEDULE

KEY MILESTONE	START	FINISH
Form Project Team / Preliminary Review / Scope	**10/02/2025**	**16/02/2025**
Finalize Project Plan / Charter / Kick Off	**17/02/2025**	**23/02/2025**
Define Phase	**24/02/2025**	**08/03/2025**
Measurement Phase	**09/03/2025**	**23/03/2025**
Analysis Phase	**24/03/2025**	**07/04/2025**
Improvement Phase	**08/04/2025**	**28/04/2025**
Control Phase	**29/04/2025**	**12/05/2025**
Project Summary Report and Close-Out	**13/05/2025**	**20/05/2025**

RESOURCES

PROJECT TEAM	Janine Remagio - Project Manager David Coen - Chief Engineer Rita Preze - CFO	Lisa Jones - QA Director Donald Smythe - Field Engineer
SUPPORT RESOURCES	Operations, Sales, Project Management, Engineering	
SPECIAL NEEDS	TBD	

COSTS

COST TYPE	VENDOR / LABOR NAMES	RATE	QTY	AMOUNT
Labor	Electro Charge Logistics, Inc.	$78.00	200	$15,600.00
Labor	Level 1 EVS	$46.00	100	$4,600.00
Labor	Level 2 EVS	$58.00	50	$2,900.00
Labor	EVC Fast Chargers	$85,000.00	1	$85,000.00
Labor	Battery Vendor	$79,879.00	3	$239,637.00
Supplies	Power Conversion System Vendor	$68,686.00	1	$68,686.00
Miscellaneous	Third-Party Software	$68,768.00	0	$ -
			TOTAL COSTS	$416,423.00

BENEFITS AND CUSTOMERS

PROCESS OWNER	Hanna Yershova - Project Manager
KEY STAKEHOLDERS	Project Team (Developer/Students) – Responsible for designing, developing, and maintaining the system. Course Instructors / Academic Supervisors – Overseeing project progress, providing guidance, and evaluating outcomes. Potential End Users – Individuals or organizations needing data visualization tools, such as students, analysts, and educators. Technology Providers – Any third-party libraries, frameworks, or hosting services used for deployment.
FINAL CUSTOMER	Students, Researchers, and Educators who need quick and easy ways to visualize data for academic and professional purposes. Small Businesses & Analysts who require simple yet effective data visualization without needing expensive software. General Users that are interested in exploring datasets for insights without technical expertise.
EXPECTED BENEFITS	Ease of Use – A simple and intuitive web-based tool that eliminates the need for complex data analysis software. Time Efficiency – Users can quickly upload files and generate visualizations without manual chart creation. Accessibility – A freely available tool that works in a browser without installations. Enhanced Decision-Making – Helps users identify trends and patterns in their data. Educational Value – Supports learning by allowing users to experiment with different visualizations and understand data relationships.

RISKS, CONSTRAINTS, AND ASSUMPTIONS

RISKS	**Technical Challenges** – Issues with data parsing, visualization rendering, or browser compatibility. **Performance Issues** – Large datasets may slow down visualization or cause failures. **User Adoption** – Users may struggle with the interface or not find the tool intuitive. **Scope Creep** – Additional feature requests may extend project timelines. **Security Risks** – Potential vulnerabilities in file uploads could expose the system to threats. **Resource Availability** – Limited time, team capacity, or access to required technologies.
CONSTRAINTS	**Time Constraint** – The project must be completed within the academic semester. **Technology Stack** – Development is limited to specific web technologies. **Data Format Support** – Initially, only CSV, JSON, and Excel files will be supported. **Budget Constraint** – The project will use free or open-source tools without allocated funding. **Hosting & Storage** – No persistent data storage; users must re-upload files for each session. **Single Developer/Team Size** – The project is handled by a small team, limiting scope expansion.
ASSUMPTIONS	**Users Have Clean Data** – The uploaded datasets are well-structured and correctly formatted. **Users Need Basic Visualizations** – The tool is not expected to support advanced statistical analysis. **Internet Access Is Required** – Users will use the platform online, and there's no offline mode. **Users Have a Modern Browser** – The application is optimized for recent Chrome, Firefox, and Edge versions. **No High-Traffic Load** – The system is designed for individual or small-scale use, not enterprise-level data processing.

PREPARED BY		DATE
Hanna Yershova		**10/02/2025**