

Implementation stages		Timeline (months)	
1	Server setup: Repository and hosting server setup, basic project environment settings and automatic deploy pipeline implementation.	M1	M6
2	Database Setup and Management: Design and implement database schemas. Optimize database performance and query efficiency. Set up database backups and recovery mechanisms. Implement data migration strategies for seamless updates.	M6	M12
3	Data Preprocessing: Clean and normalize raw data for consistency. Develop data validation scripts to ensure data integrity. Implement data transformation pipelines for analytics readiness. Automate data extraction, transformation, and loading (ETL) processes.	M6	M12
4	API Development and Integration: Design RESTful or GraphQL APIs for data access and manipulation. Implement third-party API integrations for extended functionalities. Ensure robust error handling and logging mechanisms. Secure APIs with appropriate authentication and authorization protocols.	M8	M12
5	Performance Optimization: Conduct load testing to identify and address bottlenecks. Implement caching strategies to improve response times. Optimize server configuration for better performance. Monitor and log system performance metrics for continuous improvement.	M9	M18
6	Infographics and Data Visualization: Design interactive charts and graphs using libraries Create dynamic dashboards for real-time data visualization. Implement responsive design to ensure compatibility across devices. Ensure visual consistency and accessibility in data presentation.	M9	M24
7	Search Functionality: Implement full-text search capabilities for efficient data retrieval. Develop advanced filtering and sorting options for search results. Optimize search algorithms for speed and accuracy. Integrate search with user-specific preferences and history.	M9	M24
8	Interactive Features: Implement interactive forms with real-time validation. Develop drag-and-drop interfaces for enhanced user engagement. Integrate social media sharing and interaction features. Provide customizable user settings and preferences	M9	M24
9	Testing and quality assurance (classical unit test, manual testing)	M16	M24
10	Deployment	M22	M24
11	Preparing technical documentation	M22	M24
12	Final presentation of the web platform	M24	M24