Excel Analytics Platform

A full-stack web application that allows users to upload Excel (.xlsx) files and visualize their data interactively using dynamic charts. Designed with simplicity, responsiveness, and usability in mind.

Developed with ❤️ by Bibhu under Zidio Development Internship

🌐 Live Demo

- Frontend: https://excel-analytics-client-2ro4.onrender.com

- Backend: https://excel-api-14eb.onrender.com

🚀 Features

- Upload `.xlsx` files directly from the browser
- Parses and displays structured data in chart format
- Supports chart visualization
- Download the analyzed chart in PNG
- Clean and modern UI with responsive design
- Real-time feedback and error handling
- Fully deployed on Render with MERN stack

🗂 Tech Stack

Frontend

- React.js
- Axios
- Chart.js
- CSS3 (Glassmorphism UI)

Backend

- Node.js + Express
- Multer (for file uploads)
- xlsx (to parse Excel files)
- CORS, dotenv

Deployment

- Render (Frontend + Backend)
- GitHub for version control

⚒️ Installation & Setup

Prerequisites
- Node.js & npm
- MongoDB (if data storage is extended)
- Git

Frontend Setup

cd excel-analytics-frontend
npm install
npm start

Backend Setup

cd excel-analytics-backend
npm install
node server.js

🔨 Project Structure

📦 excel-analytics-platform
├ 📁 client
│ ├ 📄 App.js
│ ├ 📄 ExcelChart.js
│ └ 📁 …
├ 📁 server
│ ├ 📄 server.js
│ └ 📁 routes

🔲 Future Enhancements
- Support for CSV and other file formats
- Exporting data and analytics as PDF/CSV
- User authentication & history of uploads
- Drag-and-drop upload feature
- Dark/light mode toggle
- Multi-sheet support for Excel files
- AI-based recommendations for visualizations
- Data filtering and sorting options for large files

🧱 Challenges Faced

- Handling different Excel file structures dynamically
- Deploying full-stack app with separate frontend/backend on Render
- Managing CORS and environment variable configurations
- Optimizing file size handling and performance
- Maintaining state management and user experience for large datasets
- Balancing minimal UI with maximum functionality

🔚 Conclusion

The Excel Analytics Platform stands as a testament to how modern web technologies can empower users to make data-driven decisions seamlessly. Throughout this project, significant emphasis was placed on creating a user-friendly experience, while ensuring technical robustness on both frontend and backend ends. It allowed me to consolidate my knowledge in full-stack development, API integration, and data visualization. This internship journey not only provided hands-on experience but also deepened my understanding of end-to-end application development workflows. I am confident that with further iterations and enhancements, this platform can become a go-to tool for professionals and students alike who work extensively with Excel data.

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- Chart.js
- Render
- Multer
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📄 License

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"Turning raw data into visual insight — one Excel file at a time."