



Advance Spreadsheet Assistance

Democratizing Data Analysis with AI

Presented by: [Your Team Name]

The Data Challenge



Data is abundant, yet 70% of business users struggle with complex Excel formulas and Python scripting. This leads to hours wasted on manual cleaning and blocks non-technical users from critical insights.

Our solution bridges this gap using existing, proven technologies (LLMs + Python Pandas) to make high-level analysis accessible to everyone.

Our Intelligent Web Platform

An intelligent web platform where you chat with your spreadsheet.



Instant Cleaning

Removes duplicates and fixes
formatting automatically.



Natural Language Queries

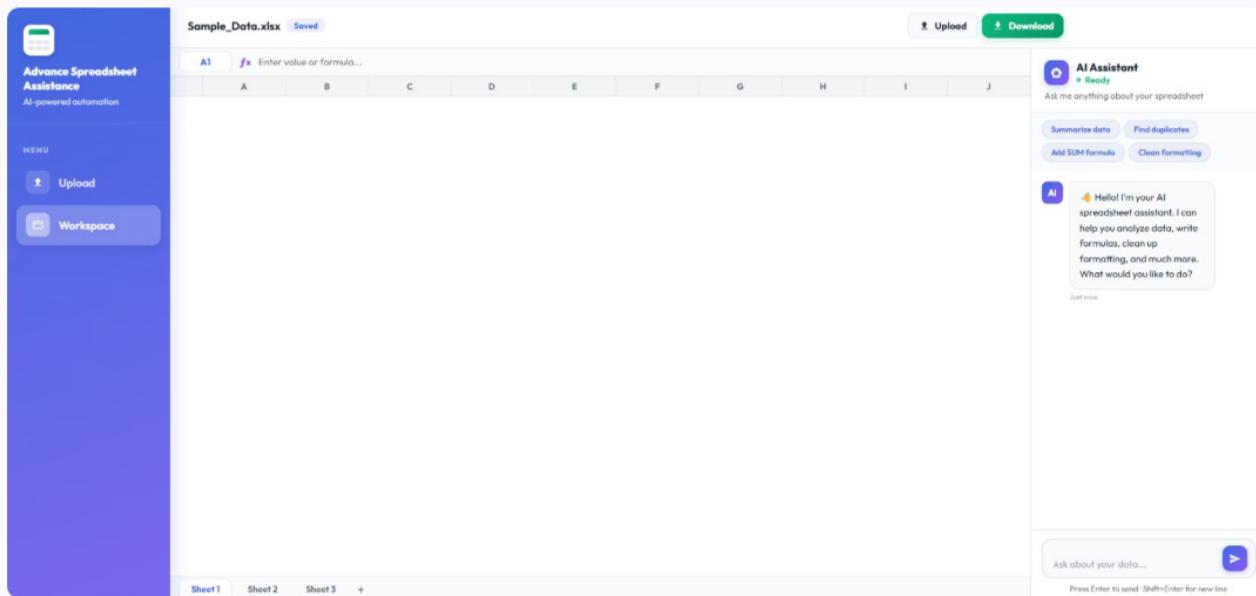
Ask "What is the sales trend?" instead
of writing complex formulas.



Zero Learning Curve

If you can send a text message, you
can analyze data.

Clean & Intuitive Interface



Our interface is designed for focus, offering a distraction-free workspace without cluttered ribbons or hidden menus.

The modern UI, featuring a glassmorphism design, feels professional and responsive, enhancing the user experience.

AI Analyst Integration

The screenshot shows a spreadsheet interface titled "Sample_Data.xlsx" with a "Saved" status. The left sidebar features a purple header "Advance Spreadsheet Assistance" with "AI-powered automation" and navigation buttons for "Home", "Upload", and "Workspace". The main area displays a weekly class schedule:

	A	B	C	D	E	F	G	H	I	J
1										
2		COURSE	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY			
3		PROBABILIT & STA	9:00 to 10:30				12:40 to 2:05			
4			AB2 203				AB2 203			
5		MACHINE LEARNI	10:40 to 12:10		9:00 to 10:30					
6			AB2 207		AB2 207					
7		DBMS		11:40 to 1:10		10:40 to 12:10				
8				AB2 202		AB2 207				
9		DIGITAL ELECTRIC			10:40 to 12:10		10:40 to 12:10			
10					AB2 205		AB2 205			
11		CRYPTOGRAPHY	3:50 to 5:15	3:50 to 5:15						
12			AB2 205	AB2 205						

The right side of the interface includes an "AI Assistant" panel with a "Ready" status, buttons for "Summarize data", "Find duplicates", "Add SUM formula", and "Clean formatting". A message box states: "The schedule covers classes from Monday to Friday. Each entry in the schedule specifies the course, the day of the week, the time slot, and the classroom number. For example, 'PROBABILIT & STATISTICS' is scheduled on Monday from 9:00 to 10:30 in room AB2 203 and on Friday from 12:40 to 2:05 in room AB2 203. All listed courses appear to have two scheduled sessions during the week." Another message box says: "Any classes clash with one other in the time table?" followed by "No class clashes were found in the timetable." A final message box at the bottom says "Talk about your data..." with a microphone icon.

Powered by Google Gemini 2.5 Flash,
our AI understands context, not just
keywords.

It performs complex reasoning,
analyzing schedules, detecting
clashes, and summarizing financial
reports with ease.

High Performance

The screenshot shows a web-based spreadsheet application with the following features:

- Left Sidebar:** Includes "Advance Spreadsheet Assistance" (AI-powered automation), "HERU" (Dashboard, Upload, Workspace), and "Logout".
- Header:** Shows the file name "Sample_Data.xlsx" (Saved), upload/download buttons, dashboard link, and AI Assistant status ("Ready").
- Table Data:** A grid of 20 rows of customer data with columns for ID, First Name, Last Name, Company, Address, City, State, Zip, Email, Phone, and Website.
- AI Assistant Panel:** Displays insights such as "No duplicate full customer records were found in the dataset.", "All 'Customer Id' values are unique, indicating no duplicate primary identifiers.", and "All 'Email' addresses are unique". It also shows a message about "Sheryl" appearing twice.
- Bottom Buttons:** "Ask me anything about your spreadsheet", "Download updated CSV...", and "Press Enter to send · Shift+Enter for new line".

Our optimized Python backend
(Pandas) handles big data, processing
large datasets without browser lag.

Real-time rendering ensures smooth
scrolling, even with thousands of
rows, by rendering only what you see.

Security & Architecture

Local-First Processing

Data processed in Python backend session, not stored permanently.

Ephemeral Storage

Files cleared from memory after session ends.

No AI Training

User data is NOT used to train the AI model (Enterprise-grade API privacy).

Tech Stack: FastAPI (Secure Backend) + Vanilla JS (Lightweight Frontend).

Business Model

1

Freemium Model

Basic features free for students and individuals.

2

Pro Tier

Subscription for larger files (>50MB) and advanced export options.

3

API Licensing

White-label technology for other SaaS platforms to embed "Chat with Data" features.



Deployment & Scalability

Deployment Strategy

- **Frontend:** Vercel / Netlify (Global CDN).
- **Backend:** Render / AWS Lambda (Serverless Python).

Scalability

The architecture is stateless, allowing multiple backend instances (Docker Containers) to handle thousands of concurrent users without bottlenecks.

Limitations & Future Scope

Current Limitations

- Supports CSV and Excel only (no direct SQL database connection).
- Visualizations are text-described, not auto-plotted.

Future Roadmap

- Add "Generate Chart" button.
- Team Collaboration (Multi-user editing).
- Mobile App version.

