

AI Usage Report

Project: ADmyBRAND Insights Dashboard - Task A

Submitted By: Amartya Paul

1.Objective

This report outlines the integration of an AI programming assistant, Google Gemini, during the development of the ADmyBRAND Insights Dashboard as part of Task A. The goal was to rapidly build a functional analytics dashboard with modern design, interactive features, and deployment readiness.

2. AI Tools Utilized

Primary AI Assistant:

- Name: Google Gemini
- Type: AI-Powered Programming Assistant

Key Functional Contributions:

- Project Initialization & Setup: The AI provided clear, step-by-step instructions for setting up a modern web development stack using Next.js, Tailwind CSS, and the shadcn/ui component library.
- Codebase Generation: Generated the complete initial version of the dashboard including layout, metric cards, chart components, and data tables with mock data.
- Debugging & Error Handling: Efficiently resolved React hydration mismatches, module resolution issues, and Vercel TypeScript/ESLint build errors.
- Feature Implementation: Implemented API call logic, a date range filter, CSV export functionality, and real-time metric updates.
- Code Refactoring: Improved code maintainability by reorganizing components into smaller, reusable pieces.

AI Usage Report

3. Sample Prompts Used

- 1. "I need to build an analytics dashboard for an assignment. Please guide me from scratch and provide the code. The requirements are: [pasted requirements from PDF]."
- 2. "I'm getting a Vercel build error: 'DateRange' is defined but never used. Can you fix the code?"
- 3. "Please implement all the bonus features: Export to CSV, a date range filter, and real-time updates for one of the metric cards."

4. AI vs. Manual Contribution Breakdown

Task	AI Contribution	Manual Contribution
Project Setup & Dependencies	Yes	Yes
UI & Layout Code Generation	Yes	No
API Integration & Feature Logic	Yes	No
Debugging & Troubleshooting	Yes	Yes
Code Refactoring	Yes	No
Deployment to Vercel	No	Yes
Final Testing, Review, and Submission	No	Yes

Estimated Workload Split:

- AI-Generated Code & Logic: ~85%
- Manual Guidance & Execution: ~15%

The AI was primarily responsible for the technical development of the dashboard, while my contribution focused on initiating requests, executing commands, testing functionalities, and overseeing the project flow from concept to deployment.

AI Usage Report

5. Conclusion

The collaboration with Google Gemini significantly accelerated the development of the ADmyBRAND Insights Dashboard. It enabled rapid prototyping, real-time debugging, and high-quality code generation. By leveraging AI for technical execution, I was able to focus on project management, user experience validation, and ensuring alignment with the assignment specifications.

This approach demonstrates the effective use of AI in modern front-end web development and highlights its potential as a powerful coding partner in academic and professional environments.