

Name of the Team/Project Title: GitInsight

Current Leader: Ankith Indrakumar

Next Leader: Akhil Patil Bagili

Members: Ankith Indrakumar, Akhil Patil Bagili, Shanmukha Sri Harsha Anvilla

GitHub Repository URL: <https://github.com/Ankith-Harsha-Akhil/GitInsight>

Job Assignments:

- Ankith and Akhil: Project management, backend development
- Akhil and Harsha: Frontend development, UI/UX design
- Ankith and Harsha: AI/ML modeling, integration
- Ankith and Akhil: Database management, security
- Ankith, Akhil, Harsha: Deployment
- Akhil and Harsha: Testing, documentation

Milestones with Deadlines:

- Week 1: Project setup and initial design. Team members will outline the project's structure and design the core features.
- Week 2: Backend development kick-off. Start developing the Flask backend and set up the initial database schema.
- Week 3: AI model development begins. Start training the RAG model and integrating it with the backend.
- Week 4: Frontend development starts. Begin crafting the React frontend, focusing on the landing page and chat interface.
- Week 5: Database and vector search integration. Integrate Astra DB and llama-index for efficient data handling and retrieval.
- Week 6: AI and front-end integration. Connect the AI model with the frontend to enable dynamic interactions.
- Week 7: Security measures and API integration. Implement security best practices and integrate external APIs.
- Week 8: Initial testing phase. Conduct thorough testing of both frontend and backend, focusing on functionality and user experience.
- Week 9: Feedback implementation and final adjustments. Make necessary adjustments based on testing feedback and prepare for deployment.
- Week 10: Deployment and documentation completion. Deploy the application and finalize all documentation, including user guides and technical documentation.

Frontend and Backend Technology Tools:

- Frontend: React, Axios, Vite, HTML, CSS
- Backend: Flask, Astra DB, llama-index, Cassio, GPT – 4
- Deployment: AWS or Render

Algorithms/AI Schemes:

Core Engine: Utilizes Vector DBs for efficient data indexing and retrieval, and RAG (Retrieval-Augmented Generation) modeling powered by OpenAI's GPT models for generating responses and understanding user queries.

Market Space and Product Selling Points:

Market Space: Targets developers, project managers, and non-technical users needing insights into Git commits without the complexity of the command line.

Selling Points: Unique ability to answer open-ended questions about Git commits, user-friendly chat interface, and detailed analytics beyond simple commit counts.