

CS4530 Final Project: “FakeStackOverflow AI Summary Integration”

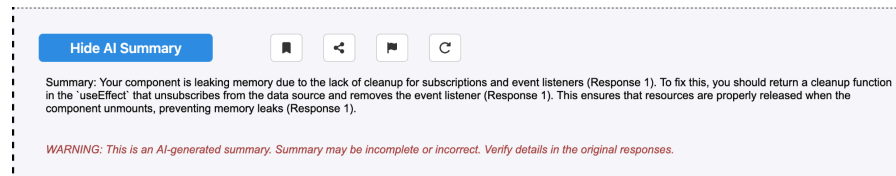
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[View Our Project Here!](#)

[Check out our Github!](#)

Project Description

For our project we added AI-generated summaries for both questions and searches, allowing users to quickly understand discussion threads without reading every response. Before these features, users had to manually sift through long answers and search results; now they receive concise, citation-based summaries instantly. We also introduced saving and sharing options, enabling users to build a personal summary library and collaborate with others. Additionally, we implemented flagging and an admin review system to ensure AI outputs remain accurate and safe. Finally, memoization significantly reduced repeated API calls, improving performance and consistency across the site.

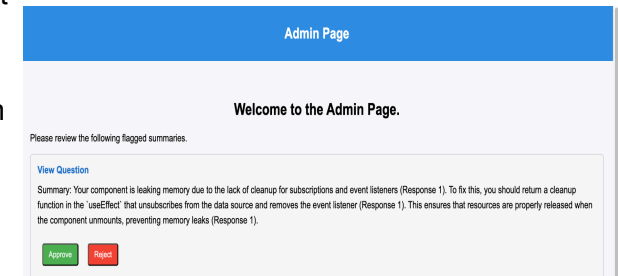


New Features

1. AI Generated Summaries of Responses to Questions
2. AI Generated Summaries of Search Results
3. Saving + Viewing AI Generated Summaries
4. Flagging AI Summaries. Restricted Admin Page to review, approve, and reject AI content.
5. Sharing + Viewing shared AI Summaries with other users
6. Memoizing and Regenerating AI Summaries for efficient and user friendly results

Our Design and Tech Stack

For this project, we utilized a tech stack of React + TypeScript for the front end, Node/Express.js for the server, OpenAI API calls, and Jest/Cypress for testing. Our design involved using new schemas for QuestionSummaries and SearchSummaries, as well as SavedSummaries, in order to track summaries that the user has saved. We designed question summaries and search summaries with different schemas in order to maintain low coupling with schema designs, and we felt that they had characteristics different enough that they should be separated, as tracking them within the same schema seemed to violate the Single Responsibility Principle.



Future Work

Some future work we can add to this project is further evolving search summaries. We had a limitation within this project due to how search queries did not directly return questions with relevance to the topic. So, we prompted GPT to use its own knowledge and if it felt a question was relevant, to use the info from said question. Moreover, we would also add more effective memoization for search summaries, using chunking.