AI-Powered
Learning Assistant for
Enhanced Discussions

Presentation by the MAP Gang

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Our Motivation

Our

Goal!

Our Motivation

Good teaching is more a giving of right questions than a giving of right answers
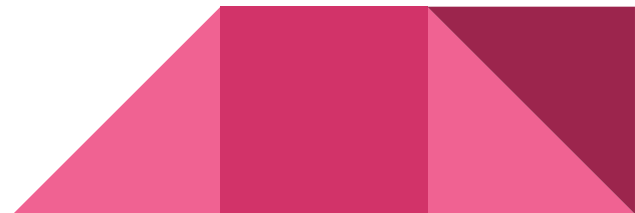**Josef Albers (1888-1976)**

The past is important for all the information and wisdom it holds.
But you can get lost in it!
Lauren Kate

So, you need an effective search tool!

Our Product
What We
Built!

What we wanted to built?

SmartSearch

A tool that finds the past and related discussions more effectively taking into account the context.

SmartPost

A tool that helps the person write more meaningful discussion text.

SmartPost

- SmartPost leverages ChatGPT to provide students and instructors with insightful, real-time feedback on the quality of discussion posts.

- SmartPost evaluates posts by examining meaning (**semantics**), ease of comprehension (**clarity**), and overall impact (**effectiveness**)

- Delivers targeted feedback to help users write more effective replies and discussions with constructive suggestions.

SmartPost
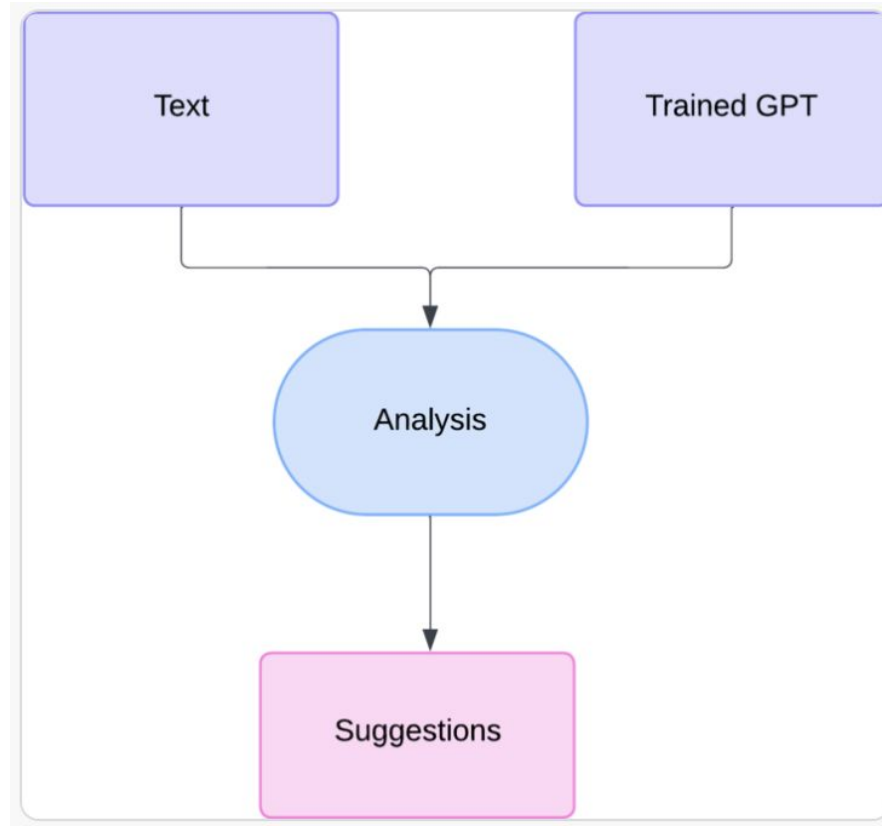
SmartPost - Discussion

Input

Title: Ketchup or Mustard?

Description: I prefer ketchup over mustard. Ketchup can be combined with a greater variety of foods to give a delicious taste. Mustard on the other hand can only be used with few foods.

Canvas Discussion

Title:

Ketchup or Mustard?

Description:

I prefer ketchup over mustard. Ketchup can be combined with a greater variety of foods to give a delicious taste. Mustard on the other har

- **Semantics**:
  - Suggest rephrasing: "While I enjoy ketchup over mustard, I think mustard might be better appreciated with certain dishes."

- **Clarity**:
  - No issues.

- **Effectiveness**:
  - Clearly state the main idea or argument. Consider rephrasing the comparison for balance.
  - Provide supporting evidence. Include examples of the foods that pair well with ketchup and mustard.
  - Include open-ended follow-up questions, such as "What are your favorite foods to pair with these condiments?" or "Do you think there are meals where mustard outshines ketchup?"

Suggestion   Clear

SmartPost - Discussion

Input

Title: Supervised Learning Discussion

Description: Hey everyone, so I think we should talk about supervised learning. It's a thing where we teach computers to learn from data and do stuff. Like, there are these algorithms and they try to predict things. Some people say it's important for making decisions. I just want to hear what you all think about it.
Also, isn't it cool how computers can do things like recognize faces? But what about unsupervised learning? It's like the opposite, right?

Canvas Discussion

Title:

Supervised Learning Discussion

Description:

Hey everyone, so I think we should talk about supervised learning. It's a thing where we teach computers to learn from data and do stuff. Like, there are th

- **Semantics:**
    - No issues found.

- **Clarity:**
    - Consider clarifying what you mean by "do stuff." Be specific about the tasks or applications of supervised learning.
    - The phrase "make decisions" could be expanded to specify what types of decisions are being made.

- **Effectiveness:**
    - Clearly State the Main Idea or Argument: Strengthen the main idea by providing a specific focus on supervised learning.
    - Provide Supporting Evidence or Examples: Include examples of supervised learning applications, such as spam detection or sentiment analysis.
    - Includes Open-Ended Follow-Up Questions: Consider adding a question to engage readers, like "How do you think supervised learning impacts our daily lives?"

Suggestion   Clear

SmartPost - Reply

Input

Alex, you're suggesting we gamble with the entire planet! We can't just 'experiment' with geoengineering and hope for the best. The potential unintended consequences—disrupting ecosystems, worsening regional weather patterns—are too high a price to pay.

Canvas Discussion

Discussion Before

Geoengineering and Climate Manipulation Reply 1: "I'm horrified that geoengineering is even being considered as a serious solution to cli

New Reply

Alex, you're suggesting we gamble with the entire planet! We can't just 'experiment' with geoengineering and hope for the best. The poten

- **Semantics:**
  - Warning: The phrase "gamble with the entire planet" could come off as extreme or alarmist. Consider rephrasing to convey concern without implying recklessness.
- **Clarity:**
  - The phrase "and hope for the best" could be rephrased for better clarity. Consider specifying what aspects of geoengineering are being critiqued.
- **Effectiveness:**
  - Clearly state the main argument against geoengineering to ensure it stands out.
  - Provide specific examples or evidence detailing potential unintended consequences to strengthen your argument.
  - Include open-ended follow-up questions to engage the original poster, such as asking for their thoughts on alternative solutions to climate change.

Suggestion   Clear

SmartSearch

Smart Search is a semantic search bar integrated into the Canvas Discussion panel, helping users find relevant content based on discussion topics or replies.
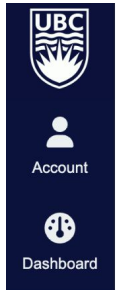
SmartSearch Tech Stack
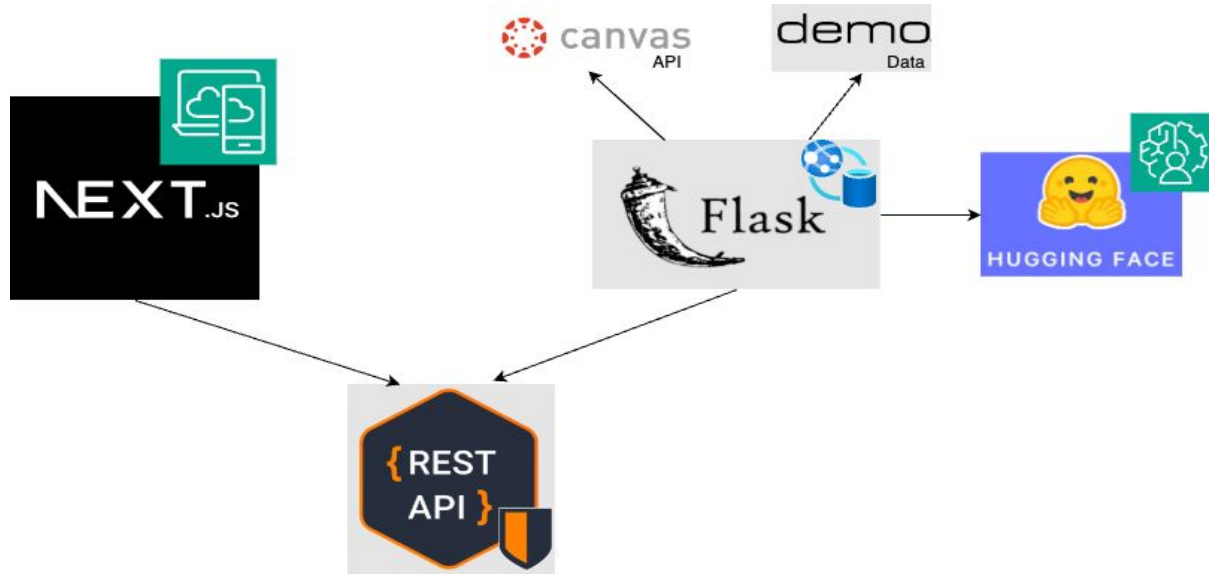
Achieved Goals with SmartPost and SmartSearch

- **Fostering Critical Thinking with SmartPost:** Encouraging structured, thoughtful responses to promote deeper engagement and analysis.
- **Creating a Positive Learning Environment:** A proactive approach to addressing negative interactions in discussions, fostering a more supportive and productive space for learning.
- **Enhancing Learning Efficiency with SmartSearch:** Streamlines knowledge retrieval, allowing students to focus on meaningful participation and deeper understanding.

What have we learned?
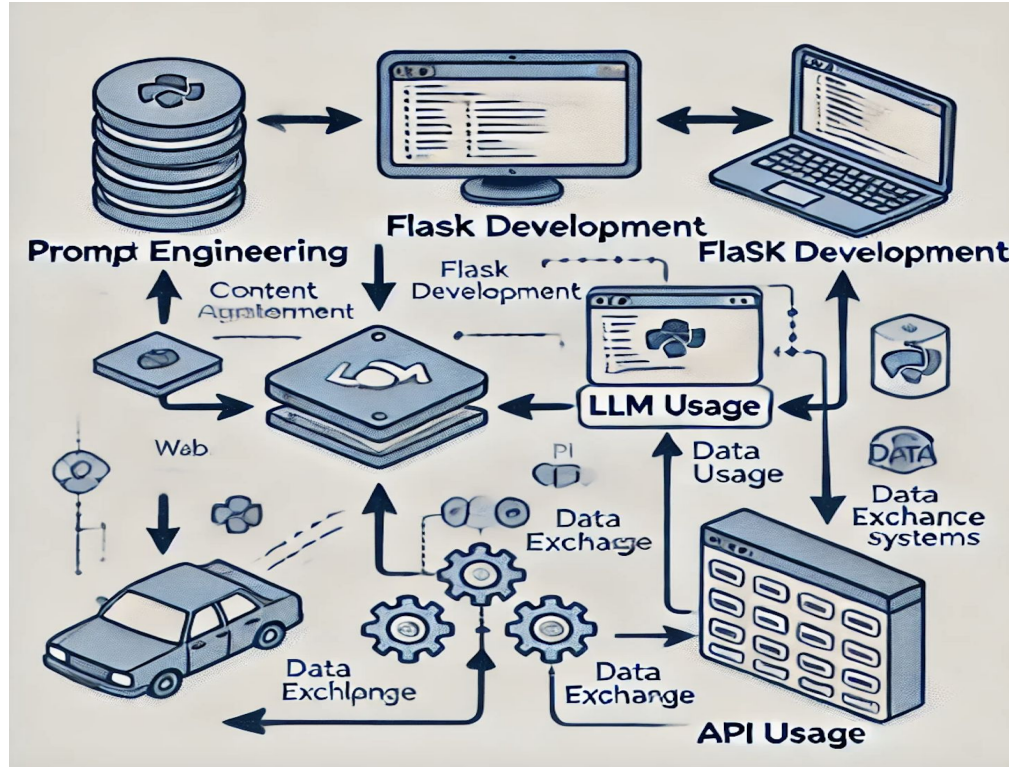
- Prompt Engineering
- Flask Development
- LLM Usage
- API Usage
- Semantic Search

Thank you for your Attention

Any Questions ?