

MICHIGAN STATE
UNIVERSITY

Alpha Presentation

Prompt Assistant: Mastering the Art of
Prompt Engineering

The Capstone Experience

Team HAP

Snigdha Akula

James Chen

Anthony Greig

Praseedha Vinukonda

Aditi Viswanatha

De'Janae Williams

Department of Computer Science and Engineering
Michigan State University



*From Students...
...to Professionals*

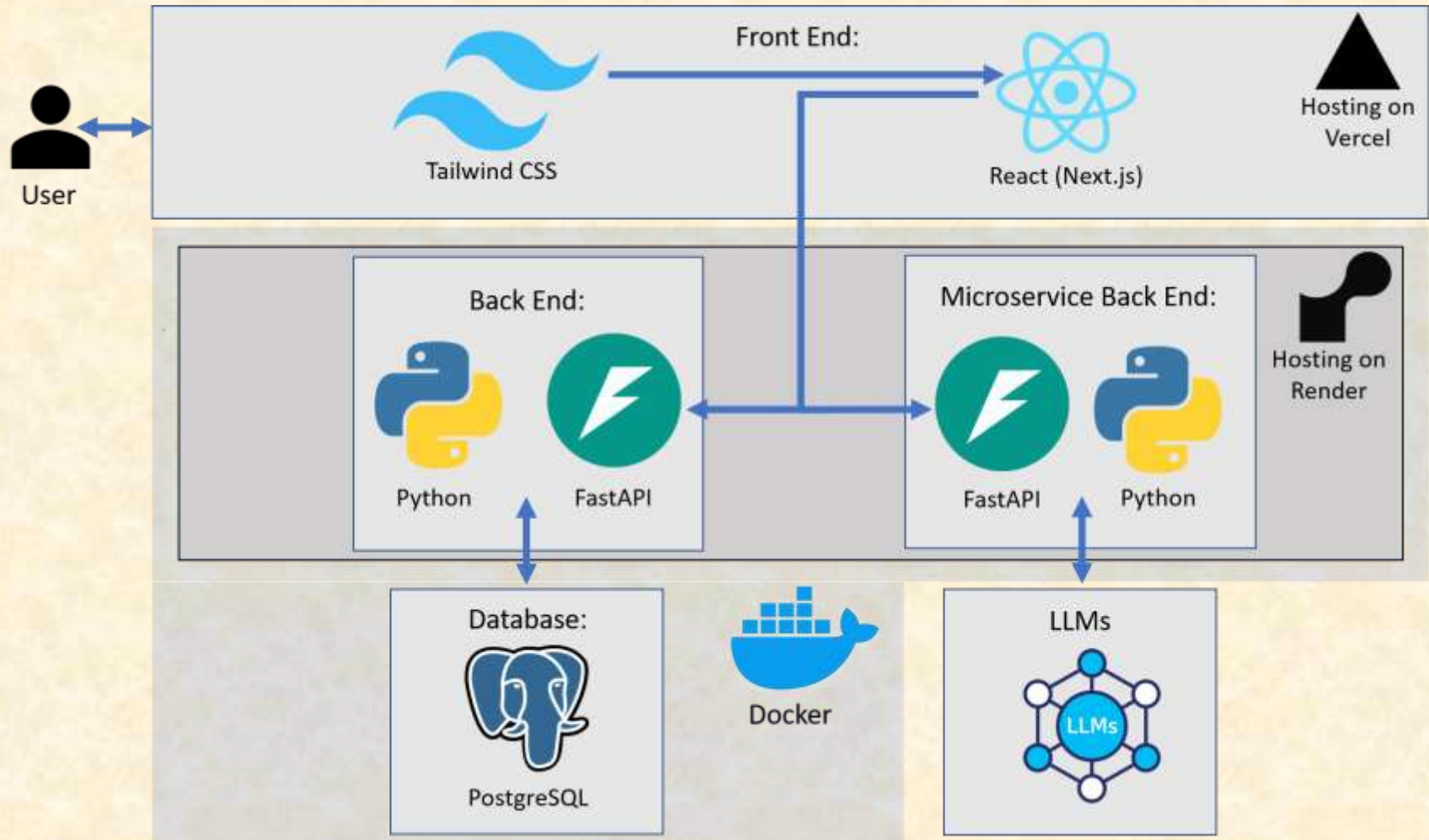
Fall 2025

Project Overview

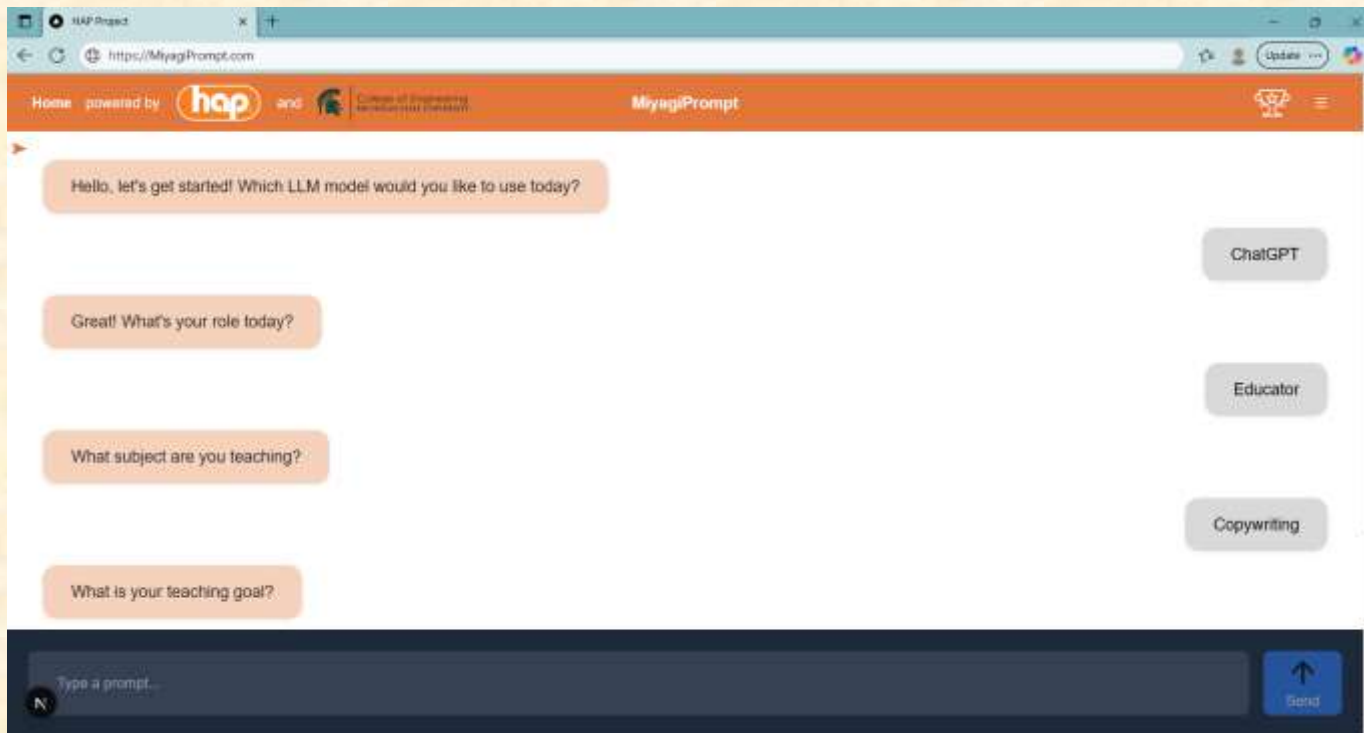
- Solves the problem of vague, ineffective AI prompts
- Guides users to build and test strong prompts through a web application
- Boosts output quality, productivity, and engagement through gamification



System Architecture



Home Page



Miyagi Prompt Evaluation Data:

- Sample Size: 30
- 96.7% were satisfied/highly satisfied with the prompt given by our tool
- 93.3% were satisfied/highly satisfied with the outcome given by the LLM
- 100% felt their prompt engineering skills improved after using our tool



Score Card and Badges

The screenshot displays the MiyagiPrompt web application interface. The browser address bar shows the URL <https://MiyagiPrompt.com>. The page header includes the text "Home powered by hqp and College of Engineering WICHITA STATE UNIVERSITY" and the "MiyagiPrompt" logo. On the left side, a score card is visible with the following metrics:

- Clarity**: 65% (indicated by a star icon)
- Accuracy**: 65% (indicated by a checkmark icon)
- Consistency**: 65% (indicated by a circular arrow icon)

The main content area shows a chat interface with several orange bubbles containing prompts such as "started! Which LLM model would you like to use today?", "our role today?", "e you teaching?", and "What is your teaching goal?". On the right side, a "Trophies" modal window is open, displaying a 3x3 grid of trophy icons. Below this modal, a "Copywriting" button is visible. At the bottom of the page, there is a dark blue input bar with the placeholder text "Type a prompt..." and a "Send" button with an upward arrow icon.



LLM Arena

The screenshot shows the LLM Arena web application in a browser window. The address bar displays <https://MiyagiPrompt.com/arena/457>. The page has an orange header with navigation links: Home, powered by HAP (HAP Project logo), and College of Engineering, Middle Tennessee State University. The MiyagiPrompt logo is also present. On the right side of the header, there are icons for a trophy and a menu.

The main content area is divided into three columns. The left column contains four orange buttons: ROLE, PROBLEM, OUTCOME, and FEEDBACK. The ROLE button is selected, showing the text "Educator". The PROBLEM button shows "Copywriting". The OUTCOME button shows "My goal is to create more engaging copy of a hero section of a website and I need a good prompt for any". The FEEDBACK button is empty.

The middle column is titled "OpenAI" and contains the text: "Imagine you have the power to reshape the world with your ideas and actions. How would you use this power to make a positive impact in your community?"

The right column is titled "Gemini" and contains the text: "This is a fantastic goal! To create an engaging LLM prompt for middle schoolers, we need to make it relatable, fun, and clearly explain the concept of a 'hero section' in terms they can grasp. We'll use an analogy and break down the task into simple, actionable steps. --- ### The Prompt for Any LLM (for Middle Schoolers) **Introduction for the Student (You would say this to them first):** "Hey future marketing superstars! You know how sometimes you see a website, and the very first thing that pops up makes you immediately interested, or tells you exactly what that site is about in a super cool way? That's called a 'Hero Section'! It's like the 'movie poster' for a website – It has to grab your attention instantly and make you want to see the whole movie (or explore the whole website!). Today, you're going to be the director of your own website movie poster! We're going to ask an AI to help us write some awesome, attention-grabbing text for our hero section. Get ready to be creative!" --- **The LLM Prompt Itself:** **"[Start of LLM Prompt]" "You are a super creative marketing assistant, and your job is to help a middle school student make an amazing 'Hero Section' for a website. "Here's the mission:" We need to create the ultimate 'movie poster' text for a brand new, super cool idea. The idea can be anything they imagine: "A revolutionary new video game " An

The far right column is titled "Claude" and contains the text: "Here is a prompt that can be used for any large language model (LLM) to create more engaging copy for the hero section of a website, with a focus on middle school students: "Imagine you are a middle school student exploring a new website. The hero section is the first thing you see, and it needs to grab your attention and make you want to learn more. Using your creative writing skills, craft a compelling hero section that speaks directly to a middle school audience. Consider the following: - What type of language and tone would resonate with middle schoolers? - What visuals or imagery would make the hero section visually appealing and engaging? - How can you convey the key benefits or features of the website in an exciting way? - What kind of call-to-action would encourage middle school users to explore the site further? Your task is to produce a hero section that is informative, visually captivating, and tailored to pique the interest of a middle school audience. Focus on using clear, conversational language, relatable examples, and a sense of adventure or discovery. The goal is to create a hero section that makes middle school students eager to learn more about the website and its offerings." This prompt encourages the LLM to consider the specific needs and interests of a middle school audience, while still allowing for creative and engaging copywriting."



Prompt Performance Indicators

The screenshot shows a web browser window with the URL <https://MiyagiPrompt.com/arena/457>. The interface is titled "HAP Project" and features a comparison between three AI models: OpenAI, Gemini, and Claude. At the top, a grey box contains the prompt: "Examples: * Gives them ideas for what kind of 'product' to imagine. * **Breaks Down the Task:** Clearly defines Headline, Sub-Headline, and CTA. * ***Secret Ingredients:** Teaches them basic copywriting principles (emotion, benefit, conciseness) without jargon. * **Structured Output:** Tells the LLM exactly how to format the response, making it easy for students to compare and understand. * **Encourages Creativity:** Allows them to invent their own cool concepts. * **Multiple Options:** Provides variety, which is great for discussion and learning what works best."

Below the prompt, three orange boxes provide justifications for each model's performance:

- OpenAI Justification:** The response from OpenAI provides a broad and inspiring question, but it does not address the specifics of the user prompt regarding copywriting for a hero section on a website. It lacks direct relevancy to the task.
- Gemini Justification:** Gemini's response excellently addresses the user's needs by providing a detailed, structured, and engaging exercise tailored specifically for middle schoolers learning about hero sections in websites. It breaks down the copywriting task into manageable parts with relatable analogies, clear instructions, and stimulates creativity.
- Claude Justification:** Claude's response provides a well-thought-out prompt that focusses on engaging middle school students in creating a hero section. It encourages considering the needs and interests of the audience and is instructional, though it is less detailed and structured compared to Gemini's response.

At the bottom of each justification box are three diamond-shaped performance indicators (70, 30, 50 for OpenAI; 98, 95, 92 for Gemini; 80, 70, 75 for Claude) and a "Next" button. Above each diamond is a star icon, a checked box, and a refresh icon.

What's left to do?

- Improve live scoring
- Implement feedback section
- Activate gamification and embedded features (badges and prompt history)
- Testing and deployment



Questions?

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