Analytical Themes	CHAT GPT	DEEP SEEK	GEMINI	CIAUDE	Perplexity AI

• Purpose
• (JTBD)
• Target audience
• Interface
	Think of ChatGPT as that really smart, creative friend who's also great at building things up for you. Evolved from a conversational Large Language Model (LLM) to a multi-modal assistant capable of web-augmented search and task execution.
	
	The Job: To help me with a question I want to ask about my kets diet plan.
	That is why I hired ChatGPT :
	• It's faster than researching nutrition websites.
	• It personalizes advice for my preferences.
	• It gives immediate, actionable steps.
	The Outcome: I got my answer so fast and easy, and it didn't take me any time. It also offered to create a personalized diet plan for me, and this was so good of it.
	
	The target audience :
	• **Everyday user** who has daily questions about daily aspects and everything.
	• **professional**: as it helps in writing, coding, and summarization tasks.
	• **students and creators**: use it as a learning tool and to create images and for problem-solving beyond traditional search.
	
	Interface:
	
	• Dominant Paradigm: Chat-style interface (a simple box where you type a question. There's a reason for that! The chat format just feels natural. Instead of typing "best pizza recipe keyword," you can just ask, "What's a foolproof recipe for a New York-style pizza?" and get a full, conversational answer, often with links to the sources it used.)
	• Rationale: Promotes natural language queries over keyword-based search, aligning with user expectations for an "assistant."
	• Output Format: Conversational summaries, often supplemented with source citations or links.
	• Key Interface Features:
	  • Custom Personas: Users can select or instruct the AI on how to respond (e.g., "act as a sarcastic chef," "respond in a formal tone," "explain like I'm 10").
	  • Response Customization: The model adapts its communication style, formality, and depth based on user prompt, allowing for a tailored interaction.
	  • Library & Memory: Features a sidebar "library" for organizing and accessing past conversation histories, enabling continuity and recall across sessions.
	• Resulting Homogeneity: The effective combination of "chat + answer + citations" has become a standard, leading to visually similar interfaces across competing AI tools.
		DeepSeek is a newer tool (Chinese-based) that emphasizes "advanced search technology" and open-source large language models at lower cost.
		
		• **The Job:** I had a big research assignment and I needed help to do it perfectly. I had a lot of files and long tests I needed to upload and understand.
		• **Why I Hired DeepSeek :** chose DeepSeek because it can handle a high amount of files and text that I can upload to it. It's built for this kind of heavy work.
		• **The Outcome:** It gave me the perfect research for my assignment. I submitted it and the result was perfect. It was the right tool for a big, serious job.
		
		Target Audience:
		Researchers & Developers: Users who need a robust, no-frills model for solving complex problems, code generation, and data analysis.
		Cost-Conscious Users & Businesses: Those who desire high-performance AI features without the prohibitively high price of other top-end models.
		Students & Academics: Most appropriate for in-depth thinking tasks, research summarizing, and coding assistance where minimal interface is beneficial.
		
		Interface Design & Philosophy:
		• Dominant Paradigm: Clean, minimalist chat interface, prioritizing the text input/output above all else.
		• Design Philosophy: Emphasizes utility and speed over aesthetic flair. The interface is a direct window to the model's computational power.
		• Key Interface Features:
		  • File Upload for Context: A core feature allowing users to upload documents (PDF, Word, PowerPoint, Text, Excel) and images for the model to read and analyze.
		  • Web Search Toggle: A manual, opt-in search function, keeping the base model as a pure reasoning engine until the user decides external data is needed.
		  • The "DeepThink" Button: A dedicated button to trigger a more thorough, chain-of-thought reasoning process. This is useful for complex math, coding, or logic problems where you want to see the AI "think through" the steps more carefully before giving a final answer.
		• No Custom Personas by Default: The model is designed to be instructed directly in the chat, offering flexibility without pre-set personality filters.
			Gemini (by Google DeepMind / Google) is their flagship AI assistant / search-style tool. It supports large-scale reasoning, multimodal capabilities (text, images, etc) and is integrated into Google's broader ecosystem.
			
			Primary JTBD: To function as a smooth information and task completion assistant within the Google ecosystem and to deliver precise, current responses validated against actual web data.
			
			• **Target Audience:**
			  • **Heavy Google Users:** People who already live in Gmail, Google Docs, and use Google Search daily.
			  • **Information Seekers:** Users who want answers verified against real-time web data.
			  • **General Users:** Anyone looking for a versatile, free AI assistant that can handle text, images, and more.
			
			Interface Design & Philosophy:
			• Dual Interface Style:
			  a. Chat Interface: A clean, familiar chat box for conversational questions and tasks.
			  b. Search-Like Interface: Directly integrated into Google Search, allowing you to get AI answers without leaving the search results page.
			• Key Interface Features:
			  • Native Multimodality: Built from the ground up to understand text, images, audio, and video seamlessly. You can upload a picture and ask questions about it.
			  • "Google It" Button: A prominent button to double-check Gemini's answers with a traditional Google search, providing source links for verification.
			  • "Think harder" / Long Response Toggle: While not always labeled exactly this, Gemini often has a setting to generate more detailed, thoughtful responses, similar to a "deep think" mode.
			• Deep Ecosystem Integration: Works directly with your Google Workspace (e.g., summarize an email from Gmail, create a doc in Docs).
				Positioned as an AI assistant focused on being helpful, honest, and harmless. It is engineered for complex reasoning, detailed content creation, and safe, enterprise-grade interactions.
				
				• **The Job:** I was working on a frontend project and I had a piece of code that was broken. I couldn't figure out why. I needed someone to not just fix it, but to explain why it was broken so I could learn.
				• **Why I Hired Claude:** I chose Claude because I heard it's great at reasoning and understanding complex logic. I could paste my entire long code file and it would read all of it. It doesn't get distracted. It just focuses on the problem.
				• **The Outcome:** It solved my problem perfectly. It explained the error in a clear way, showed me the fixed code, and even suggested a better way to write it to avoid the same mistake in the future. Everything worked fine after that, and I understood the concept better.
				
				• **Target Audience:**
				  • **Enterprises & Businesses:** Organizations with a high priority on security, safety, and reducing AI risks.
				  • **Writers, Researchers, & Analysts:** Users who work with long-form content, need to synthesize large amounts of information, or require nuanced, high-quality writing.
				  • **Privacy-Conscious Users:** Individuals concerned with ethical AI development and data handling.
				
				Interface Design & Philosophy:
				• The dominant paradigm is a text-focused, tidy, and expertly designed interface. Clarity and substance are prioritized over playful interaction in the design.
				• Design philosophy is based on the idea of "Constitutional AI," which states that a set of rules governs its actions to make sure they are beneficial rather than detrimental. It feels more "measured" and "conscientious" than some of its rivals because of this.
				• Important Interface Elements:
				  • The industry leader in context length, Massive 200K Context Window (Claude 3) can process and analyze lengthy legal contracts, entire books, or large codebases in a single prompt.
				  • Multiple Model Tiers (Opus, Sonnet, Haiku): Provides a clear choice between instantaneous, economical responses (Haiku), balanced speed and skill (Sonnet), and superior intelligence (Opus).
				  • File Upload Capacity: Claude can easily upload Word, Excel, TXT, and PDF files.Clarity and substance are prioritized over playful interaction in the design.
				• Design philosophy is based on the idea of "Constitutional AI," which states that a set of rules governs its actions to make sure they are beneficial rather than detrimental. It feels more "measured" and "conscientious" than some of its rivals because of this.
					Designed specifically as an "answer engine" that combines the power of AI language models with real-time web search to provide accurate, cited answers to questions.
					
					Primary JTBD: To act as a conversational search engine that provides immediate, accurate, and sourced answers to specific questions, eliminating the need to sift through pages of search results.
					
					• **Target Audience**:
					  • **Researchers & Students:** Users who need fast, well-sourced information for projects and learning.
					  • **Professionals & Curious Minds:** Anyone who wants a direct, factual answer to a question without sifting through search results or engaging in long chat.
					  • **Power Users:** Those who value precision, source transparency, and efficiency over open-ended conversation.
					
					Interface Design & Philosophy:
					• Dominant Paradigm: A hybrid between a search engine and a chatbot. The main screen prominently features a search bar, establishing its core identity.
					• Design Philosophy: Focuses on accuracy, speed, and source transparency. The goal is to get you from question to verified answer in the fewest steps possible.
					• Key Interface Features:
					  • AI Model Selector (Pro Feature): A crucial feature that allows users to choose which AI models (e.g., GPT-4, Claude 3, Sonnet, Llama) generates the answer. This lets you compare strengths and find the best "brain" for your specific query.
					  • Focus Selector: Allows users to tailor searches for different contexts (e.g., All, Academic, Writing, Wolfram Alpha for computational answers).
					  • Source Citations Inline: Every answer is accompanied by numbered citations. You can hover over a fact to instantly see which website it came from.
					  • Related Questions: Suggests logical follow-up questions to help you explore a topic deeper without having to formulate new queries.
					  • "Pro Search" Toggle: A dedicated button for more complex, multi-step reasoning, acting as its "deep think" mode for tougher queries.

Hook Model • **Trigger** • **Action** • **Reward** • **Investment**	• **Trigger**: Any everyday issue or query, from requiring a car to creating a diet plan, serves as the internal trigger. • **Action: The action is simple:** typing a question into a clean, open-ended chat box. • **A variable Reward**: In addition to providing a surprisingly accurate and beneficial response, the AI occasionally proactively offers additional assistance (such as formulating a comprehensive plan). • **Investment**: By creating a conversation history that the AI can recall and consult, the user makes an investment that will personalize subsequent exchanges.	**Trigger**: A need to conduct deep, efficient, and reliable academic research—finding insights, analyzing data, or generating content quickly using AI. **Action**: Use DeepSeek's interface to input research questions, summarize studies, or generate structured academic outlines. **Variable Reward**: The reward is high-quality, well-reasoned research assistance with accuracy and efficiency, saving time while maintaining academic depth. **Investment**: The user invests by refining prompts, saving outputs, and building a workflow around DeepSeek, which improves relevance and consistency in future research tasks.	**Trigger**: The internal trigger is the requirement for a recent, factually accurate response or a Google app task (such as "summarize this email"). **Action**: Use Gemini's interface to input research questions, summarize studies, or generate structured academic outlines. **Variable Reward**: The reward is a web-sourced answer and the discovery of the "Google It" button, which provides a satisfying sense of verification and access to more sources. **Investment**:By integrating Gemini with their Google Workspace (Gmail, Docs, and Drive), integrating AI into their everyday digital activities, and growing their dependence on the Google ecosystem, the user makes an investment.	• **Trigger**: The internal trigger is encountering a complex, lengthy task, like analyzing a 100-page contract, writing a detailed report, or needing a carefully reasoned answer. • **Action**: The action is uploading a document or typing a detailed prompt into a clean, professional interface. • **Variable Reward**: The reward is receiving an exceptionally thorough, well-structured, and nuanced response that demonstrates a deep understanding of the source material. • **Investment**: The user invests by trusting Claude with sensitive or lengthy documents and by building a history of complex interactions that leverage its massive context window.	• **Trigger**: Any question that comes to mind and for which you want a clear, cited response quickly is the internal trigger • **Action**: The action involves entering a query into a clear, search engine-style bar that is easy to use and doesn't require any setup. • **Variable Reward**: Receiving a well-summarized response with source citations nearly immediately is the variable reward. Additionally, the "Related Questions" feature offers unforeseen benefits by recommending fresh perspectives to consider. • **Investment**: By producing "Threads" (structured search sessions) and, for Pro users, by personalizing their experience with various AI models and focus modes, the user invests in the tool to fit their unique research methodology.

Persuasion vs. Dark Patterns	• **Persuasion**: It feels warm and friendly—like a friend genuinely offering to help you out (for example, "Would you like me to create a full diet plan for you?").
	
	• **Dark Pattern**: But that same friendly, proactive tone can also act as a dark pattern, subtly designed to keep you engaged in the conversation longer and make you more dependent on it.
		• **Persuasion**:
		  • DeepSeek is a revolution—"top-performing at much less expense" that is attractive and useful to many individuals.
		  • Minimalist Engagement: In contrast to other models, DeepSeek typically does not proactively ask follow-up questions. It provides a complete answer and waits for the user's next prompt.
		
		• **Dark Pattern:**On the other hand, some of the claims may over-promise abilities and may force users to believe they are getting "top-of-the-line performance" with no weaker areas . Thus, there is a possibility of over-promising or reliance before properly vetting the tool.
			• **Persuasion:** The "Google It" button is a brilliant and ethical persuasive feature. It builds trust by being transparent and inviting you to verify its answers, making you feel more confident in the results.
			
			• **Dark Pattern:** The deep integration with Google's ecosystem can be a "walled garden" dark pattern. It encourages you to stay within Google's services, making it harder to switch to alternatives, and raises significant privacy concerns due to the extensive data collection possible.
				Persuasion: Its "Constitutional AI" framework is a form of ethical persuasion, building trust by being transparent about its safety-first design. Features like the prominent "Stop" button give the user a sense of control.
				
				Dark Pattern: Its tendency to be overly cautious can sometimes feel like a dark pattern of artificial limitation, where it refuses legitimate creative or hypothetical tasks that other AIs would attempt, potentially hindering user workflow.
					• **Persuasion:** The inline source citations and the prominent "Cite" button are brilliant ethical persuasion. They build trust by being completely transparent about where the information comes from, empowering the user to verify the answer.
					• **Dark Pattern:** Its dependency on web search quality is a systemic weakness. If the top search results for a query are biased, outdated, or low-quality, Perplexity's answer will be too, potentially giving flawed information an air of AI-polished authority.

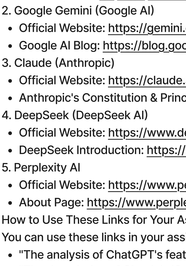
Capabilities & Inclusive Design	• **Strengths:**ChatGPT acts like a full ecosystem that can do a lot of things for you and help you in many different aspects, like generating images and having conversation. It acts like a friend that you can speak to about everything. Its interface is minimal and versatile, and it can also handle complex questions in the same chat window. You can upload files, images, and PDFs, and it can read and summarize them. • **Weakness:** Because it can do so much, it is not a deep specialist in any one area. Its wide range means it might not be the best for expert-level tasks in a specific field.	• **Strengths:**DeepSeek excels in technical, research, and cost-efficient tasks, offering precise, high-performance results without unnecessary engagement. • **Weakness:** It can feel less interactive or personable, lacking the conversational warmth and integrated features found in other AI models.	• **Strengths:** The interface is excellent for fast research. Its native multimodality and direct connection to real-time web data make it powerful for finding current information. The "Google It" button is a standout UX feature for trust. This makes Gemini superior for research & learning, tasks within Google's Apps, and getting quick, verified answers. • **Weakness:** Because it is so focused on factuality and safety, it can be overly cautious and less creative or conversational. This makes other models preferable for complex creative writing, open-ended coding, and for users who prioritize data privacy over Google ecosystem integration.	• **Strengths:** The professional interface is designed for serious, complex work. Its massive 200K context window is the standout feature, allowing it to process and analyze entire books or lengthy contracts in a single conversation. This makes Claude superior for processing long documents, deep research & synthesis, high-quality, long-form writing, and enterprise applications where safety and reliability are critical. • **Weakness:** It is not natively multimodal for image analysis and can be slower and more expensive for simple tasks. Its cautious nature means other models are preferable for tasks requiring direct image analysis or generation, for open-ended conversations where a more playful personality is desired, and situations where the absolute lowest cost or fastest speed for simple tasks is the primary goal.	• **Strengths:** The interface is perfectly designed for its purpose as an answer engine. It is incredibly fast and efficient. The AI Model Selector for Pro users is a powerful differentiator, allowing you to choose the best "brain" for your query. This makes Perplexity superior for quick fact-checking & research, model comparison, learning a new topic with a guided approach, and any task where source credibility is critical, such as academic work and professional reports. • **Weakness:** It is not designed for long-form collaboration or complex creative tasks. The interface is transactional and feels less like a conversation. This means other models are preferable for collaborative writing projects, brainstorming without a specific goal, or coding entire applications. It is also not ideal for users seeking an AI companion for long conversations/or for tasks requiring deep integration with other apps like Google Workspace or Microsoft 365.

Part 2: UX/UI Spotlight – Perplexity AI Interface Analysis

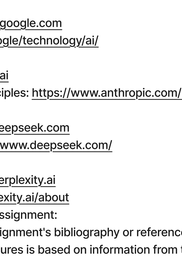
For this part, I decided to analyze Perplexity AI, because it's one of the most unique AI search engines that combines chat interaction with real-time research and verified sources. What caught my attention is how clean and professional its interface looks, and how much it focuses on credibility by showing where its answers come from.

When you open Perplexity, the layout is very simple — a main search bar in the center, a large area for the AI's response, and small citation cards under each paragraph that link directly to the original sources. On the left, there's a sidebar that shows your previous threads or chats, and on top, a menu to change settings or the "focus" mode (like Web, Academic, or Writing).

Great UX Design Choice



Search/Chat Input Bar – centered or at the bottom of the page, inviting natural-language queries.



The "Answer" section with the "Sources" button is a very smart design. It gives a clear, summarized response while keeping the original sources one click away. This builds trust and makes it easier for researchers to verify information without leaving th...

This feature lets the user choose which AI model they want their answer from — like ChatGPT, Claude, or Gemini. It's a brilliant design choice because it gives users control and personalization. Researchers or professionals can pick the AI that best fits their goal — for example, ChatGPT for creative writing, Claude for detailed explanations, or Gemini for Google-integrated results. This flexibility makes the experience smarter and more tailored, showing how Perplexity focuses on user needs instead of a one-size-fits-all approach.

Focus Mode' bar at the top of the chat. You can switch between modes like Web, Academic, Math, or Writing, and it changes how the AI answers. For example, "Academic" mode gives more formal, cited answers, while "Writing" mode makes it sound more creative.
I think this is a clever idea because it gives users control over the tone and depth of the answers, which is something not all AI search engines offer. It shows how Perplexity values personalization and user preference — a big part of good UX design.

Poor UX Design

All the threads look exactly the same — same color, same small font, and most of them are just called "Untitled." There's no color-coding, no thumbnails, and no clear visual hierarchy to tell which one is the latest or most important.
Because of that, it's easy to lose track of old searches or repeat the same question again. I think it would be much better if they added small icons, bold text for active threads, or even a way to pin or rename chats faster.

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Part 3: Final Verdict

In the diverse ecosystem of AI assistants, ChatGPT stands apart as the undisputed champion of daily utility, designed not for a single job, but for the unpredictable, messy reality of human life.Its supreme advantage is a radical versatility that directly serves about 90% of what ordinary people need on a daily basis. Where other AIs excel in specific lanes—Perplexity as a research librarian, Claude as a legal analyst, DeepSeek as a code specialist—ChatGPT operates as a universal workshop. You don't need to know which tool to pick; you just bring your problem.

This is what truly makes it different. Its genius lies in a user experience that is both incredibly powerful and deceptively simple. The same chat box that helps you debug a complex piece of code in the morning can, in the afternoon, brainstorm a birthday party theme, generate an image for your presentation, and then patiently explain a scientific concept to you like you're a beginner. It's this ability to seamlessly shift between roles—programmer, creative writer, tutor, and artist—without the user ever needing to switch apps or modes, that is revolutionary. Furthermore, you can mold its communication style on the fly, asking it to be more concise, more detailed, or even adopt a specific personality, making the interaction feel less like using software and more like collaborating with a highly adaptable human intelligence.

For these reasons, Claude, despite its strengths, presents the most problematic user experience for the general public. Its limitations are too fundamental for daily use. The inability to genuinely analyze an image—a critical feature in a visual world—severely restricts its application. Its ingrained caution, often causing it to refuse creative or hypothetical tasks, makes it feel like a hesitant and rigid partner rather than an enabling one. When the most powerful version is also slower and more costly for simple queries, it fails the test of convenience. For the average person seeking a helpful, responsive, and multifaceted tool, Claude's specialized, guarded nature feels more like a barrier than a bridge, cementing ChatGPT's position as the most essential and human-centric AI companion.Final Verdict: The Universal Tool and The Specialized Instrument

Citation

1. ChatGPT (OpenAI)
   - Official Website: https://chat.openai.com
   - About OpenAI: https://openai.com/about
2. Google Gemini (Google AI)
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3. Claude (Anthropic)
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   - Anthropic's Constitution & Principles: https://www.anthropic.com/news/anthropics-constitution
4. DeepSeek (DeepSeek AI)
   - Official Website: https://www.deepseek.com
   - DeepSeek Introduction: https://www.deepseek.com/
5. Perplexity AI
   - Official Website: https://www.perplexity.ai
   - About Page: https://www.perplexity.ai/about

How to Use These Links for Your Assignment:
You can use these links in your assignment's bibliography or reference section. For example, you can state:
- "The analysis of ChatGPT's features is based on information from the official OpenAI website (openai.com)."
- "The description of Claude's 'Constitutional AI' principle was referenced from Anthropic's official publication (anthropic.com)."

For the UX/UI Spotlight section (Part 2 of your assignment):
When you take your own screenshots of the interface, you can cite the URL where you accessed the tool. For example: "Screenshot taken from chat.openai.com on [Date]."
For the theoretical frameworks (JTBD, Hook Model, Dark Patterns):
These are established concepts in design and marketing. You can cite their original sources:
- Jobs-to-Be-Done: Reference Clay Christensen's work. A good source is the book "Competing Against Luck" or articles from his institute.
- Hook Model: Reference Nir Eyal's book "Hooked: How to Build Habit-Forming Products."
- Dark Patterns: Reference the official website https://www.darkpatterns.org.