



Refining Your Product Thinking: ChatGPT Chatbot

Juliette Lee | October 2025
ENES 660

Product Overview: ChatGPT Chatbot

ChatGPT is an AI-powered conversational assistant developed by OpenAI, launched in November 2022 with over 100 million users globally. It uses GPT-5 technology to generate natural, context-aware responses across text, code, and creative tasks through simple chat prompts.

🔑 Core Features

- 🧠 Conversational Intelligence
- ✍️ Content Generation
- 💻 Coding & Analysis
- 📖 Learning Aid
- 🎨 Creative Assistance
- 🌐 Cross-Platform Access
- 💬 Custom GPTs (user-created bots for specific tasks)

Value Proposition: ChatGPT helps people think faster, write better, and create smarter by turning natural language into actionable, high-quality output.

Business Model: Freemium → Plus subscription for GPT-5 speed & advanced features





User Persona + JTBD Overview

Name	Hermione Granger
Age	22
Role	University Student – History & Literature Major
Location	Boston, MA
Tech Comfort	Advanced
Lifestyle	Balances coursework, archival research, and TA duties; values precision & academic excellence.

Storyline: Hermione is in her first year of her master's program, balancing library research with academic writing. She wants to transform endless readings and thesis drafts into polished papers, quickly and without sacrificing depth or sleep. Hermione's challenge is time scarcity and cognitive fatigue. She feels guilty using AI tools unless they align with her value of academic integrity.

Core Job To Be Done

When overwhelmed or feeling stuck by complex research tasks, Hermione hires ChatGPT to transform scattered academic content into clear, cohesive, high-quality writing quickly and confidently.

Pain Points & Desired Outcomes

Hermione's Pain Points

- Hermione receives hundreds of pages of sources weekly across multiple assignments, easily overwhelming her with information overload. She must remain organized not just on her desk, but mentally.

Scenario: When drafting her Victorian literature thesis, Hermione manually synthesizes 47 academic sources: extracting, paraphrasing, and weaving quotes into her paper. This consumes nights better spent on projects or with friends.

- Writer's block on thesis chapters slows progress on tight deadlines.
- Maintaining coherent argument flow across long papers while synthesizing complex information is challenging.
- Juggling classes, TA duties, extracurriculars, and personal projects leaves limited time for friends. Deadline stress compounds her workload.

Hermione's Desired Outcomes

Time, not money, is Hermione's constraint. Her parents cover her budget. She needs tools to automate repetitive tasks so she can prioritize coursework, side projects, and friendships.

Hermione will hire ChatGPT if it helps her to:

- Quickly summarize sources for easy future retrieval.
- Draft accurate outlines faster.
- Complete assignments faster to free time for side projects and friends.
- Organize large information volumes to stay productive and clear-headed.
- Maintain academic integrity while augmenting her own thinking and judgment.

Functional & Emotional Requirements

Functional MUST hAVEs

Intuitive coaching: Easy-to-learn interface that guides Hermione on crafting effective prompts and optimizing her workflow.

Access to specialized sources: Academic databases and repositories beyond basic Google searches for obscure research materials.

Long-term context retention: Remember chat discussions for 1+ years to avoid repeating questions on ongoing research topics.

Structured templates: Pre-built outlines for essays and research tasks to reduce repetitive prompting.

Citation integration: She reads 1–1.5 academic texts daily, so quick access to previously researched materials is essential.

Emotional must haves

Academic Integrity: Hermione values her scholarship as earned, not outsourced. ChatGPT reassures her that she's augmenting her thinking and not delegating it thereby enabling guilt-free adoption.

Mastery & Control: Hermione plans before acting. ChatGPT's predictive insights based on historical data give her confidence in decisions, reducing anxiety about making the wrong choice.

Relief from Overwhelm: An intuitive interface lets her organize chats logically, clearing mental clutter and maintaining her sense of order.

Elation: Crafting effective prompts transforms her research process, making goals achievable faster than traditional methods and creating a sense of accomplishment.

JTBD Summary: Hermione hires ChatGPT to streamline research, turning information overload into polished, cohesive scholarship. ChatGPT builds trust by positioning itself as an augmentation partner rather than a shortcut, empowering her to maintain high standards without burning out.



Competitor Analysis: Google Gemini

Google Gemini is Google's multimodal AI assistant built on DeepMind's Gemini 1.5 architecture. It merges LLM reasoning with Google Search, Workspace (Gmail, Docs, Sheets), and YouTube data.

Pros

Real-time web access: Continuously updated information through Search integration.

Tight Workspace integration: Excels at summarizing Docs, drafting Gmail responses, and analyzing Sheets data.

Strong trust ecosystem: Backed by Google's reputation for data security and reliability.

Visual capabilities: Processes text and images in one query, useful for multimodal problem-solving.

Summary: Gemini excels in **factual precision, integration, and enterprise productivity**, but lacks ChatGPT's open creativity and flexible ecosystem.

Cons

Limited creativity: Strong in factual retrieval, weak in ideation and storytelling.

Context window constraints: Struggles to sustain long iterative projects.

Ecosystem dependency: Performs best within Google Workspace; less effective elsewhere.

ANTHROPIC



Talk to Claude

claude.ai

Competitor Analysis: Claude AI (Anthropic)

Claude is Anthropic's conversational AI model that functions much the same as ChatGPT, but its strengths lie in **reasoning, logic, and contextual understanding**. It's designed to operate as a thoughtful partner, emphasizing safe, balanced, and transparent communication.

Pros

Claude's greatest strength is its **contextual reasoning**, making it particularly effective for **academic and legal analysis, research synthesis, and cross-document insights**. Its long memory allows it to interpret and connect ideas across extended texts with precision.

Summary: Claude stands out for structured reasoning and analytical depth but trades off flexibility and creative speed for stability and precision.

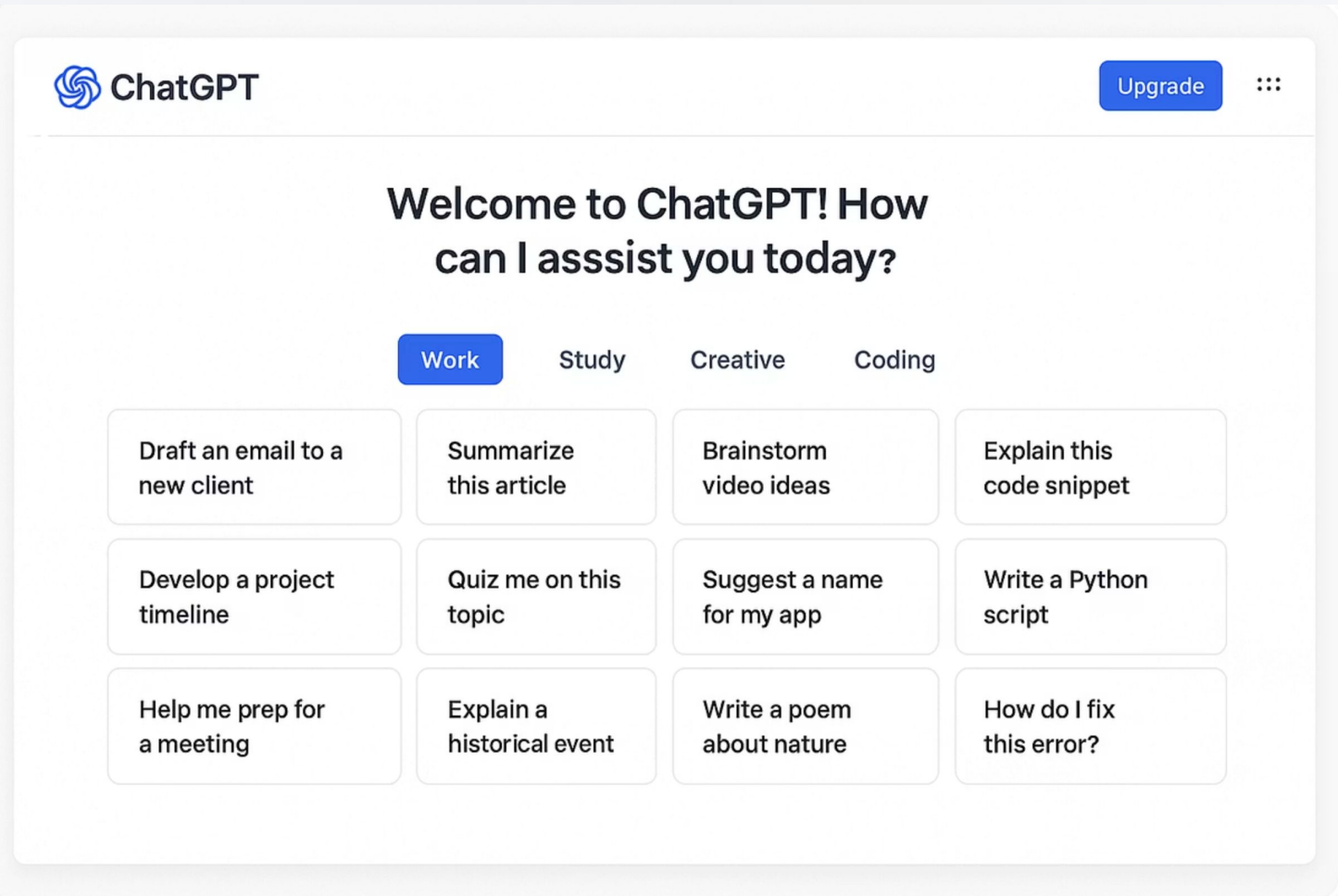
Cons

Claude's **ecosystem is narrower** than ChatGPT or Gemini. It offers limited plug-ins and API integrations, and feature rollouts occur more slowly. While strong for analytical and reasoning-based tasks, it lacks ChatGPT's creative range and fast-developing ecosystem.

Competitive Summary

Feature	ChatGPT	Gemini	Claude AI
Conversational Memory	✓	⚠ Partial	✓
Tone Customization	✓✓	⚠ Limited	⚠ Moderate
Ecosystem Integration	✓✓ Plugins	✓✓ Workspace	⚠ Limited
Creativity	✓✓	⚠ Moderate	✓
Accuracy	✓	✓✓	✓✓
Trust & Brand	✓✓	✓✓	⚠ Moderate

Insight: While Gemini dominates in factual precision and enterprise integration, and Claude excels in reasoning and ethics, ChatGPT remains the most balanced AI assistant offering unmatched versatility, user-friendliness, and creative agility.



What Currently Exists in ChatGPT (Baseline Context)

Existing Prompt Guidance

- Occasional home-screen suggestions ("Summarize this text," "Plan a trip to Tokyo")
- Explore GPTs tab with pre-built bots ("Resume Writer," "Math Tutor")
- Contextual follow-ups after responses ("Try asking me about...")

Limitations

- Inconsistent visibility for new users
- No category organization by intent (Work, Study, Creative, Coding)
- Minimal onboarding guidance

Opportunity

- ❏ **Standardizing and categorizing guided templates can reduce blank-prompt anxiety, increase retention, and boost paid conversion.**

A/B Test Design

 **Hypothesis:** By helping users like Hermione start tasks faster and reduce blank-prompt anxiety, guiding templates will increase retention and paid conversion by **10%**.

 **Target Metric:** Measure **user engagement and upgrade behavior** across Groups A and B.

Compare A (Control) vs B (Desktop Redesign): Determine if the new categorized templates improve user retention and upgrade frequency.

Metrics Observed:

- Retention Rate (how many users return within 7 days)
- Upgrade Rate (how many free users convert to paid Pro)
- Engagement (session length, template clicks, and prompt completion rate)

Simplified Summary: The goal is to determine whether redesigning ChatGPT's home screen helps new users stay longer and convert more often to Pro.

Variant	Description
A – Control	Current home screen with occasional non-categorized suggestions
B – Test (Web)	Redesigned desktop home screen with four intent categories (Work, Study, Creative, Coding)

 **Measurement & Duration:** 14-day experiment across 5,000–10,000 new users (1/2 per variant).

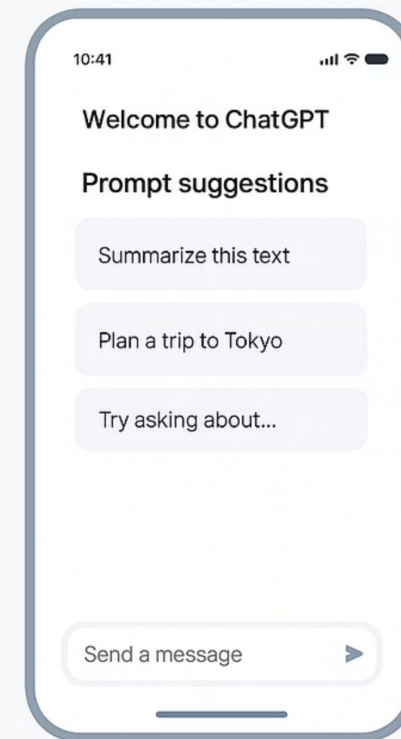


Expected Outcome

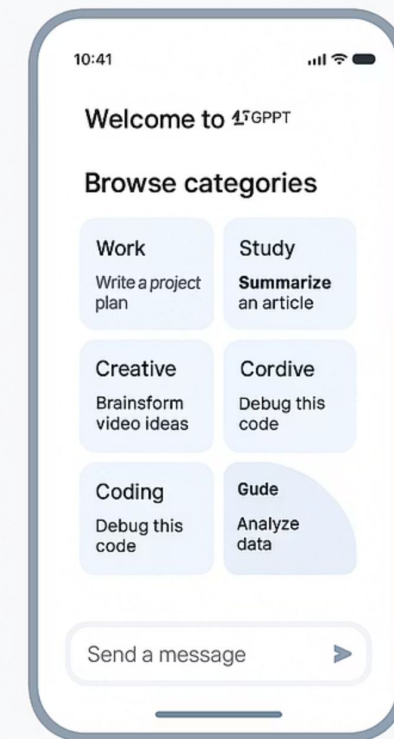
Group B (desktop redesign) is expected to show a moderate increase (8–10%) in retention and Pro-plan upgrades due to clearer onboarding and reduced prompt friction.

✅ **Conclusion:** The redesigned experience should **meet and slightly exceed the success criterion** ($\geq 10\%$ uplift overall).

A – Control



B – Test



7-Day Retention Rate



Pro-Plan Conversion Rate



References + AI Assistance Disclosure

Text & Research Sources

OpenAI (2025). *ChatGPT Product Overview*. <https://openai.com/chatgpt>

OpenAI (2025). *Introducing GPT-5 – Next-Generation Language Model*. <https://openai.com/gpt-5>

Anthropic (2025). *Claude AI Product Documentation*. <https://anthropic.com/claude>

Google (2025). *Gemini (AI Platform) Overview*. <https://gemini.google.com>

Harvard Business Review (2016). *Jobs to Be Done Theory Explained*. <https://hbr.org>

Exponent (2024). *A/B Testing Framework for Product Managers*. <https://tryexponent.com>

Christensen, C.M. et al. (2016). *Competing Against Luck*. Harper Business.

Nielsen Norman Group (2023). *Personas and User Research in Product Design*.

<https://nngroup.com>

AI Assistance Disclosure

This presentation was developed with support from ChatGPT (GPT-5) for brainstorming, research, and draft organization. I used my own independent judgment for all analysis, decision-making, and verification.