AI-Powered Prototyping Prompt Cheat Sheet

From Concept to Code: Rapid Prototyping with ChatGPT & Beyond

Introduction:

This cheat sheet provides a structured collection of prompts and best practices to leverage AI (primarily ChatGPT) throughout the prototyping process. It covers concept development, wireframing, visual prototyping guidance, basic code generation, and feedback simulation and even extends to non-software prototyping. Use these prompts to accelerate your workflow, explore ideas rapidly, and build better products. Remember to replace bracketed placeholders with your specific details.

I. Concept & Wireframing (Text-Based)

1. **Feature Concept & Value Proposition:**
    - **Prompt:** *"Act as a UX designer. I'm developing a new feature for a [app type, e.g., news app, fitness app]: a [feature description, e.g., a personalized news feed, workout tracker]. Describe the core functionality the user needs it addresses, and explicitly articulate the value proposition for the user – why would they choose this feature? Also, suggest potential benefits for the business."*
    - **When to Use:** At the very beginning, define the feature's purpose, user value, and business impact.
2. **User Persona (Target Audience Definition):**
    - **Prompt:** *"Act as a UX researcher. Generate a user persona for a [target audience, e.g., busy professionals, students] who would use this [app/feature]. Include their demographics, goals, pain points, and how they'd benefit from the feature."*
    - **When to Use:** Before designing the feature or wireframe, understand the target user.
3. **Text-Based Wireframe (Core User Flow):**
    - **Prompt:** *"Act as a UX designer. I'm developing a [feature] for a [app type]. Assume the target user is a [brief user description, e.g., busy professional]. Generate a text-based wireframe outlining the key screens and user interactions. Focus on a clean, intuitive user interface. The user should be able to [list key user actions]."*
    - **When to Use:** To create a quick, text-based blueprint of the user flow and screen content.
4. **Wireframe Iteration (Specific Feedback):**
    - **Prompt:** *"Here's a text-based wireframe for a [feature]: [Paste wireframe text]. Suggest [number] specific improvements, focusing on [Feedback Type – e.g., Nielsen's Usability Heuristics, WCAG accessibility guidelines]. For each suggestion, explain which heuristic/guideline it addresses."*
    - **When to Use:** To refine the wireframe based on established UX principles.
5. **Alternative Layouts (Exploration):**
    - **Prompt**: *"Here's a text-based wireframe for a [feature]: [Paste wireframe text]. Suggest two alternative layouts for the [specific screen] that might improve*

[aspect, e.g., user engagement]. For each layout, explain your reasoning – why might this layout be better?"

- **When to Use:** To explore different design approaches for a specific screen.

6. **Dark Mode/Accessibility (Variations):**
   - **Prompt:** *"Can you add a dark mode version of this wireframe, keeping in mind overall accessibility guidelines, including color contrast, font sizes, and clear visual hierarchy?"*
   - **When to Use:** When you have a basic wireframe **II. Visual Prototyping Guidance**

These prompts help you translate your text-based wireframe into a visual prototype using common tools. *ChatGPT provides guidance, not the visuals themselves.*

7. **Visual Prototyping Instructions (Tool-Specific):**
   - **Prompt:** *"Act as a UX designer. Based on this wireframe: [Paste wireframe text], provide step-by-step instructions on how to create a visual prototype using [tool, e.g., PowerPoint, Figma]. Assume I want to create a prototype with [level of interactivity – e.g., basic screen linking, more advanced animations]. Include details on shapes, colors, text placement, and how to simulate basic interactions (e.g., button clicks)."*
   - **When to Use:** To get detailed, tool-specific guidance on creating a visual prototype.
8. **Specific Screen Design (Platform-Specific):**
   - **Prompt:** *"I'm creating a visual prototype in [tool] for the [screen name] of my [feature], which will be part of a [platform – e.g., mobile app (iOS), website]. Describe how I should visually represent the following elements: [List elements]. Suggest colors, fonts, and layout options, keeping in mind design conventions for [platform]."*
   - **When to Use:** To get detailed design suggestions for specific screen elements, considering platform best practices.
9. **Prototyping Tool Selection:**
   - **Prompt:** *"What are other tools I could use to make a visual prototype? What are the key criteria I should consider when choosing a prototyping tool? (e.g., ease of use, interactivity features, collaboration capabilities, platform compatibility, cost). Then, suggest 2-3 specific tools and explain why they are good choices based on these criteria."*
   - **When to Use:** When exploring different prototyping tool options.

III. Basic Code Generation (Functional Prototypes)

These prompts generate *basic* code snippets to add rudimentary functionality. *Always review, test, and secure AI-generated code.*

10. **Code Snippet (Specific Functionality):**
    - **Prompt:** *"Generate well-commented [language, e.g., JavaScript, Python] code for a function that [describe desired functionality]. Assume we're using [storage*

mechanism, e.g., local storage]. Prioritize code readability and explain each step in simple terms."

- **When to Use:** To add basic interactivity to your prototype (e.g., saving data, simple calculations).

11. **Pseudocode (Logic Planning):**
    - **Prompt:** *"Act as a software developer. For a feature that [describe functionality], generate pseudocode or a high-level algorithm outlining the key steps. Explain each step in simple terms."*
    - **When to Use:** To plan the logic of a feature *before* writing specific code.
    - **Important Note:** *AI-generated code is a starting point and not production-ready. Always review for correctness, security, and best practices.*

IV. Simulated User Feedback & Iteration

Use these prompts to get *simulated* feedback from ChatGPT. *This is not a replacement for real user testing.*

12. **General Feedback (Persona-Based):**
    - **Prompt:** *"Act as a potential user. Specifically, act as a [User Persona, e.g., beginner user, expert user]. Here's a description of my [app/feature]: [Paste description/wireframe/prototype link]. Provide both positive feedback (what works well?) and constructive criticism (what could be improved?). Be specific."*
    - **When to Use:** To get early feedback on your design from a specific user perspective.
13. **Specific Element Feedback:**
    - **Prompt:** *"Act as a user. What are your thoughts on the [specific element] in this prototype: [Paste description/link]? Provide both positive and negative feedback. Be specific."*
    - **When to Use:** To focus feedback on a particular aspect of your design.
14. **Iterative Refinement (Prioritized):**
    - **Prompt:** *"Based on this feedback: [Paste AI-generated feedback], suggest [number] specific changes to improve the [aspect] of my prototype. Prioritize changes that are likely to have the biggest impact on usability and user goals."*
    - **When to Use:** To translate feedback into concrete, prioritized design changes.
15. **Simulated A/B Testing (Qualitative Focus):**
    - **Prompt:** *"Act as a UX researcher. I have two designs for my [element]. [Describe Design A and Design B]. Simulate user feedback from [number] different users on each design, focusing on [aspect]. Ask the simulated users to explain *why* they prefer one design over the other, providing qualitative reasoning. Based on the feedback, suggest which design would likely perform better and explain the qualitative reasons."*
    - **When to Use:** To compare design variations and understand the *reasons* behind user preferences.

16. **User Testing Plan:**
    - **Prompt**: *"Act as a UX researcher. Generate a user testing plan for this prototype: [Paste description/wireframe]. Include 3-5 key tasks for participants, questions to ask, and metrics to evaluate success (e.g., time to complete, error rate)."*
    - **When to Use:** To prepare for real user testing after refining based on simulated feedback.

V. Beyond Software Prototyping

17. **Board Game Prototyping:**
    - **Prompt:** *"Act as a board game designer. I'm creating an educational board game about [topic]. Generate three distinct game mechanics that could make learning [topic] engaging and fun. Ensure the mechanics are suitable for ages [age range]."*
    - **When to Use:** When brainstorming concepts for physical or board game prototypes.
18. **E-Learning Module Prototyping:**
    - **Prompt:** *"Act as an instructional designer. I want to create an interactive e-learning module to teach users how to [Skill]. Provide a structured outline for this module, including key sections, interactive elements, and assessment methods."*
    - **When to Use:** When planning interactive educational content and module structure.

VI. Key Tips for AI-Powered Prototyping

- **Start with a Validated Concept:** Briefly validate your concept through initial market research or user interviews *before* heavily investing in AI-powered prototyping.
- **Use the PROMPT Framework:** Provide clear *Purpose, Role, Output, Markers, Patterns,* and *Tone* in your prompts.
- **Iterate, Iterate, Iterate:** Prototyping is an iterative process. Use AI to quickly generate variations and refine.
- **Simulated Feedback is a *Starting Point*:** Don't treat AI-generated feedback as definitive. It's a simulation to help you generate hypotheses, not a replacement for real user testing.
- **Prototype at Different Fidelity Levels:** Use AI for low-fidelity (text-based) prototypes early on, then gradually increase fidelity.
- **AI-Generated Code Needs Review:** Always review, test, and secure any code snippets generated by AI.
- **Combine AI with Dedicated Tools:** Use ChatGPT for brainstorming, guidance, and basic code, but use specialized design tools (Figma, Adobe XD, etc.) for high-fidelity visual prototyping.
- **Ethical Prototyping:** Be mindful of ethical implications. Ensure prototypes are used responsibly, and be transparent about AI's role.
- **Document Everything:** Track your prompts, AI outputs, design decisions, and feedback. This creates a valuable record of your process.

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