Product Requirements Document (PRD)

Title  
Context AI Snippet: Highlight-to-Understand Chrome Extension  
  
Overview  
Context AI Snippet is a Chrome extension that enables users to highlight text on any webpage and instantly receive a concise, AI-generated explanation based on both the highlighted content and the surrounding page context. The tool leverages OpenAI’s GPT-3.5 API to deliver accurate, context-aware summaries and definitions without users needing to leave the page.  
  
Goal  
To enhance user understanding of complex or unfamiliar web content by providing AI-generated explanations directly within the browser through an intuitive, low-latency interface.  
  
Target Users  
- Students and researchers  
- Professionals reading technical documentation  
- News readers and casual learners  
- Non-native English speakers needing clarification on terminology  
  
Key Features  
  
1. Highlight to Trigger  
- User highlights a phrase or sentence on any webpage  
- When feature is enabled, the highlight automatically triggers a GPT query  
- A small popup bubble appears near the highlight with the generated explanation  
  
2. UI Behavior  
- A movable nib sits on the side of the browser window  
- When hovered, it expands to expose a toggle switch  
- Toggle turns the feature on/off  
- When on, the extension listens for highlights and processes queries  
- The explanation bubble:  
 - Appears adjacent to the highlighted text  
 - Is approximately 100px wide by 200px tall  
 - Supports scroll behavior if the explanation exceeds the container height  
  
3. GPT-3.5 Query  
- The extension extracts:  
 - Highlighted text  
 - Context from surrounding text (~200–500 words)  
 - Metadata including page title and topic  
- Constructs the following prompt:  
 "Explain the following text in plain English using the surrounding context: [highlighted text] [context around highlighted text] [metadata: page title] [metadata: page topic]"  
- Sends the prompt to OpenAI’s GPT-3.5 Turbo API  
- Returns a concise explanation (~100–300 tokens)  
  
Technical Requirements  
  
Chrome Extension  
- Manifest V3 compliant  
- Content script: handles highlight detection, DOM parsing, and UI rendering  
- Background script: handles toggle state and API communication  
- UI: movable nib, toggle, and dynamically positioned popup bubble  
  
LLM Integration  
- Model: GPT-3.5 Turbo  
- Input size: ~300–600 tokens  
- Output size: ~100–300 tokens  
- Estimated cost per query: ~$0.0009  
  
Backend  
- Not required for MVP  
- No user data or query history will be stored  
- No daily usage limits during initial testing phase  
  
Success Criteria  
  
Metric | Target  
--------------------------|--------------------------  
Average response time | < 2 seconds  
Token cost per query | <$0.001  
User engagement rate | 20% repeat usage weekly  
Query success rate | > 98%  
Bug reports / error rate | < 1% of sessions  
  
Milestones  
  
Date | Milestone  
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Week 1 | UI prototype and toggle nib  
Week 2 | DOM parsing and context extraction logic  
Week 3 | GPT-3.5 integration and response handling  
Week 4 | Full UI integration, popup interaction  
Week 5 | Bug fixes, beta release, user feedback  
  
Open Questions (Resolved)  
1. Should there be a daily usage limit for free-tier users? No, not initially for testing  
2. Will we store any query history or user analytics? No, not initially  
3. Should users be allowed to modify the prompt formatting? No