**Synthetic Research MVP - Product Specification**

**1. Overview**

We are building an AI-powered synthetic research platform that enables marketing and product teams to gain fast, directional insights by simulating interviews and surveys with AI-generated personas. The MVP aims to showcase how businesses can use synthetic research to test messaging, positioning, and product concepts before launching expensive and time-consuming studies.

**2. Target Audience**

* Marketing Managers
* Product Marketers
* Founders / Strategy Leads
* VCs and Innovation Teams

Industries: Tech (SaaS), Healthcare, Fintech, Consumer Goods

**3. MVP Goals**

* Demonstrate the core functionality of synthetic qualitative research.
* Deliver a structured and insightful research output (PDF or interactive report).
* Prove that different personas can provide varied, realistic responses to the same stimulus.

**4. User Flow**

**Step 1: Define Research Topic**

* User enters a message, idea, or product concept to test.
* Chooses a content type (e.g. Product Message, Value Proposition, Landing Page, Campaign Hook).

**Step 2: Define Target Audience**

* Select industry (e.g. SaaS, eCommerce, Health).
* Select audience type (e.g. CMO, SMB Founder, HR Director, Gen Z Consumer).
* (Optional) Build a custom persona by filling in fields: Age, Job Title, Company Size, Interests.

**Step 3: Run Research**

* Platform generates 5–7 synthetic personas matching the selected audience.
* Each persona is interviewed via prompt engineering with OpenAI.
* Responses are logged individually.

**Step 4: Generate Research Output**

* A structured report is created:
  + Summary of responses
  + Common themes and concerns
  + Persona-level quotes
  + Key recommendations

**Step 5: Export or Share**

* Download PDF or presentation-style report.
* (Optional) Share link to interactive version.

**5. Behind the Scenes (MVP Logic)**

* Prompt templates adapt based on selected content type and audience.
* Each persona is defined by a unique prompt block (personality, behavior, psychographics).
* Interview prompts follow a guided script (e.g. What do you think about this? What would concern you? What might convince you?).
* Responses are parsed for tone, objections, insights.
* Summarizer module synthesizes feedback into clear bullet points.

**6. Output Format**

* PDF-style report with:
  + Title page (client name, research objective)
  + Executive summary
  + Audience overview
  + Full responses per persona
  + Key takeaways section (insights + recommendations)

**7. Out of Scope for MVP**

* Quantitative surveys
* Full persona customization UI
* API integrations
* Multi-language output
* Automatic financial modeling

**8. Future Expansion Areas**

* Polling engine for A/B testing
* Dashboards and tagging of insights
* Real-time comparison between messaging versions
* Research validity benchmarking (vs. real-world data)
* ROI projection and financial alignment tools

**9. Tech Stack (Initial Recommendation)**

* Frontend: Cursor (React-based)
* Backend: Node.js or Python (for prompt orchestration)
* LLM Provider: OpenAI (GPT-4o)
* Output: PDF generation via Puppeteer or HTML-to-PDF
* Data: All persona data stored locally or in lightweight JSON objects