



"TikTok vs Truth" Product Reality Checker



"TikTok vs Truth" Product Reality Checker PRD

1. 📌 Problem Statement

Current Situation

In the age of TikTok and Instagram, skincare products gain rapid popularity through influencer reviews, PR unboxings, and viral "miracle product" claims. Consumers, especially young adults and students, often buy these products based on influencer hype without critical information on efficacy or skin compatibility.

User Pain Points

- **Biased Reviews:** Influencers are often paid for promotions, making their reviews skewed.
- **Mismatched Results:** Even if the influencer's skin *type* matches, their **routine**, **environment**, and **genetics** may differ.
- **Lack of Ground Truth:** Consumers can't easily verify if a product is *scientifically sound*, suitable for their needs, or genuinely popular for good reasons.
- **Time-Consuming Research:** Digging through Reddit, INCI Decoder, and clinical studies is overwhelming.
- **Wasted Money:** Users end up spending on products that don't work, aren't safe, or exacerbate skin issues.

Business Impact

- Erodes consumer trust in beauty brands and platforms.
 - Increases returns and complaints.
 - Opportunity exists to build trust by offering **transparency, science-backed reality checks**, and **personalized filtering**.
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2. 🌟 Proposed Solution

Overview

An AI-powered automation tool that verifies viral skincare products on TikTok/Instagram against:

- **Independent reviews** (e.g., Reddit, Sephora, Paula's Choice)
- **Ingredient safety databases** (e.g., INCI Decoder, CosDNA)
- **Dermatologist sources**
- **User's skin profile**

Outputs a **"Reality Check Report"** with:

- Ingredient warnings
 - Independent sentiment summary
 - Suitability for your skin
 - Risk flags based on clinical data
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User Stories

- *As a skincare enthusiast*, I want to input a TikTok product or influencer handle and get an honest, AI-generated product assessment.
- *As a student on a budget*, I want to know if a product is worth buying before spending money.
- *As someone with sensitive skin*, I want to avoid products with hidden irritants even if they're popular online.

- *As a curious consumer*, I want to know if the influencer promoting a product has a history of paid partnerships with that brand.
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Success Metrics

- 🎯 90% of users agree the "Reality Check" was helpful in guiding their decision.
 - 💰 50% reduction in reported regret purchases by early users.
 - 🔄 At least 2 returning queries per user per week.
 - 🌱 Early traction: 100 active users within first month of MVP.
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3. 🛠 Requirements

Functional Requirements

- ☐ Accept product links (TikTok video, brand site, Sephora, etc.)
 - ☐ Accept optional influencer handle
 - ☐ Scrape and analyze product claims, ingredients, price, reviews
 - ☐ Summarize truth vs hype:
 - Paid promotions?
 - Scientifically backed?
 - Reddit/Sephora sentiment?
 - ☐ Accept user's skin profile (dry, acne-prone, sensitive, etc.)
 - ☐ Output a report with:
 - Ingredient risks
 - Trustworthiness score
 - Personal match % (based on skin profile)
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Technical Requirements

- Node.js + Puppeteer for scraping TikTok, Reddit, product pages

- Optional GPT-based LLM via Ollama or API to:
 - Summarize Reddit/Sephora reviews
 - Detect sentiment
 - Ingredient DB lookup (e.g., INCI decoder scraped or via API)
 - Skin profile matching engine (simple rule-based first)
 - Output to web frontend (or CLI, for MVP)
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Design Requirements

- Skincare-first, soothing UI (pastels, clean fonts)
 - Console or web interface with:
 - Input: Product URL + (optional) TikTok/IG handle + Skin Profile
 - Output: "Reality Check Report"
 - Hype meter, Trust score, Ingredient breakdown, Reviews
 - Clear callouts for:
 - 🚫 Irritants
 - 🧪 Unproven claims
 - 📉 Low user satisfaction
 - ✅ Matches your skin goals
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4. 🚀 Implementation

Dependencies

- TikTok page scraping (headless Puppeteer with stealth)
 - INCI Decoder or CosDNA parser
 - GPT-4 or Ollama model for summarizing review content
 - Basic user profile form or JSON schema
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Timeline

Week	Task
1	Set up Puppeteer scripts for TikTok + product pages
2	Ingredient extraction + safety flagging engine
3	Build GPT/Ollama pipeline to summarize Reddit/Sephora reviews
4	Create MVP frontend (or CLI + HTML report output)
5	Finalize UI, refine personal matching logic
6	Internal testing + alpha launch

Resources Needed

- Node.js + Puppeteer environment
- Scraping-safe proxies (for TikTok + review sites)
- GPT/OpenAI API or Ollama model
- Open-source ingredient database (or scraped offline copy)
- Optional: designer to polish frontend

5. ⚠️ Risks and Mitigations

Risk	Mitigation
TikTok scraping blocked	Use stealth Puppeteer; consider Zapier/TikTok API workarounds
Review scraping rate-limited	Cache common products, rotate proxies
Ingredient database unavailable	Build local store from top 1K products
Hype detection may be fuzzy	Start with simple keyword/sentiment logic; upgrade to trained classifier later
Users don't trust AI outputs	Show sources, transparency on what was checked and how