Product Requirements Document (PRD) – Wardrobe AI

# 1. Product Overview

Wardrobe AI is a fashion-tech social platform that merges virtual identity, AI fashion styling, and gamified communities. It enables users to:  
- Create a hyper-realistic avatar identical to themselves.  
- Add real-world clothes to a digital wardrobe.  
- Experiment with outfits virtually, share looks, and socialize with friends/communities.  
- Earn skins, badges, and rewards through streaks and engagement.  
- Switch between unique modes (bubbly, delulu, rizz, bro, professional, etc.) for different experiences.  
- Receive AI-powered outfit suggestions based on skin-tone, events, and trends.  
- Participate in anonymous rating communities, share looks to social media, and rent outfits.  
- Engage with fantasy-driven storytelling (Delulu mode) tailored to interests, hobbies, and fantasies.  
Wardrobe AI aims to be the next big social media app, surpassing Instagram, Snapchat, and TikTok.

# 2. Objectives

- Drive engagement with streaks, delusional stories, and gamified communities.  
- Deliver personalization via interest-based profiles and AI.  
- Provide fashion intelligence using real-world styling logic.  
- Establish revenue streams from skins, rentals, e-commerce, and premium features.  
- Build scalable, secure infrastructure with smooth 3D rendering.

# 3. Target Audience

- Gen Z / Millennials: Fashion + social engagement.  
- Young Professionals: Professional styling and office looks.  
- Fashion Enthusiasts: Wardrobe rentals and AI styling.  
- Older Generations (40+): Simplified, nostalgic experiences.

# 4. Key Features

## 4.1 Virtual Avatar System

- AI-powered avatars based on selfies.  
- Preset poses, dances, gestures.  
- Optimized 3D rendering for scalability.  
- AR-based try-on (future).

## 4.2 Virtual Wardrobe

- Upload clothes via photo + AI tagging.  
- AI outfit pairing suggestions.  
- Occasion-based styling.  
- Least-used dress tracking.

## 4.3 Social & Community

- Google authentication + mobile number login.  
- Wardrobe sharing (private, friends, public).  
- Anonymous look rating in communities.  
- Daily looks → streak system.  
- Share to multiple social platforms.

## 4.4 Gamification & Rewards

- Streaks unlock skins (10 days = goggles, 25 = hat, 50 = jacket, etc.).  
- Badges: Most Generous, Fashion Icon, Community Star.  
- Personalized skins (Gym, Harry Potter, Biker themes).  
- AI-generated fantasy stories in Delulu mode.  
- In-app currency “Threads” for skins, rentals, and cosmetics.

## 4.5 Modes & UI Themes

- Bubbly, Bro, Delulu, Rizz, Professional, Sweet 60, 45th Legend.  
- Event-specific modes (Valentine’s, Diwali, Christmas).  
- Admin-enabled festival themes.  
- Custom UI/UX per mode.

## 4.6 Fashion AI

- Skin-tone based color matching.  
- Shirt–Pant–Accessory smart pairing.  
- Swipe-style look previews.  
- AI stylist chat assistant.  
- Trend-sync via fashion APIs.

## 4.7 Public Wardrobe & Rentals

- Public wardrobe sharing.  
- Outfit rentals inside app.  
- Brand integration for real-world rentals.  
- UGC fashion marketplace (users design/sell skins).

## 4.8 Avatar Social Features

- Virtual lounges & voice chat.  
- Collaborative lookbooks.  
- AI-generated photoshoots with global locations.  
- AR Mirrors for malls/events.

## 4.9 Analytics & Insights

- Personal style analytics: most worn colors, top looks, evolution timeline.  
- Premium advanced insights.

# 5. Infrastructure & Security

- Platforms: Web (React/Next.js), Android/iOS (React Native/Flutter).  
- Backend: Node.js/Python with microservices on Kubernetes.  
- Databases: PostgreSQL + MongoDB/DynamoDB.  
- Rendering: Unity/Unreal + ARKit/ARCore.  
- Authentication: Google OAuth2/Firebase Auth.  
- Anti-hack: Encrypted storage, API signing, secure cloud rendering.

# 6. Monetization Strategy

- Virtual skins & cosmetics (in-app purchases).  
- Premium subscriptions (AI stylist, wardrobe space, insights).  
- Affiliate sales (clothing e-commerce).  
- User-generated marketplace commissions.  
- Brand partnerships and sponsored events.  
- In-app currency 'Threads' (buyable and earnable).

# 7. KPIs & Metrics

- DAU/MAU.  
- Average wardrobe size.  
- Outfit trials per user.  
- Community participation rate.  
- Streak retention.  
- Top sharers and most generous users.  
- AR mirror engagement.  
- Revenue per user.

# 8. Timeline & Roadmap

Phase 1 (0–6 months): MVP  
- Avatar creation, wardrobe upload.  
- Outfit try-on + sharing.  
- Streak & basic rewards.  
- Bubbly/Bro/Professional modes.  
- Google authentication.  
  
Phase 2 (6–12 months): Expansion  
- Communities + ratings.  
- Delulu mode + fantasy stories.  
- Public wardrobe + rentals.  
- Skins & gamified economy.  
- Festival/special modes.  
  
Phase 3 (12–24 months): Scale  
- Global brand partnerships.  
- Optimized lightweight 3D avatars.  
- Cross-platform (VR/AR glasses).  
- Full-fledged virtual economy.

# 9. Risks & Challenges

- High cost of 3D rendering at scale.  
- Community moderation challenges.  
- Licensing/IP risks for branded skins.  
- Privacy concerns with user wardrobe/body data.  
- Monetization acceptance balance.

# 10. Vision

Wardrobe AI will redefine social media by combining fashion, personalization, and gamification. It will evolve from a wardrobe app into a lifestyle identity platform, allowing users to live their real, virtual, and fantasy selves in one space.