Project Name:

AI-Powered Outfit Suggestion Mobile App

Objective:

Develop a mobile app that helps users manage their wardrobe, receive outfit suggestions based on AI and color theory, and adapt suggestions to weather and occasions.

Project Scope:

Phase 1: Core Features

1. **Database and Backend Architecture**

   o Develop the backend infrastructure for user and wardrobe data management.

   o Integrate APIs to communicate with the frontend.

2. **Frontend Interface**

   o Design a mobile-responsive UI with options for registration, uploading wardrobe images, and receiving outfit suggestions.

3. **AI/ML Integration**

   o Implement pre-trained AI models to classify wardrobe items by type, color, and season.

4. **Outfit Suggestion Logic**

   o Generate wardrobe-only outfit suggestions.

   o Introduce color theory-based matching algorithms.

5. **Weather Integration**

   o Incorporate a weather API to adjust outfit suggestions.

6. **User Features**

   o Enable users to tag wardrobe items manually.

   o Include options for saving and retrieving favorite outfits.

Deliverables:

1. Fully functional mobile app for Phase 1.

2. Backend API documentation.

3. Tested AI/ML integrations.

4. User-friendly and responsive UI/UX.

5. Deployment-ready codebase with scalability for future phases.

Technical Requirements:

Frontend:

- **Platform:** React Native or Flutter (cross-platform support for iOS and Android).
- **Features:**
    o   Registration (email, Google, Apple).
    o   Wardrobe management interface (upload and manage items).
    o   Daily outfit suggestions.

Backend:

- **Platform:** Node.js or Django.
- **Database:** PostgreSQL or MongoDB.
- **Features:**
    o   Data storage and retrieval for wardrobe and user data.
    o   API endpoints for AI/ML and outfit suggestions.

AI/ML Models:

- **Pre-trained Dataset:** Clothing type, color, season.
- **Functionality:**
    o   Image recognition for wardrobe items.
    o   Matching logic for outfit suggestions based on color theory.

Weather API Integration:

- API: OpenWeatherMap or similar for weather data.
- Usage: Influence outfit recommendations based on temperature and conditions.

Quality Assurance:

- Automated testing for critical workflows.

- Regression and UI/UX testing.

Dependencies:

1. AI/ML integration depends on backend architecture and database setup.

2. Outfit suggestion logic depends on wardrobe management and classification features.

3. Weather integration requires the weather API setup.

Freelancer Evaluation Requirements:

What You Need to Provide:

1. **Estimated Cost:**

   o Detailed breakdown for each feature or Epic.

2. **Timeline:**

   o Estimate in weeks or days for each feature or Epic.

3. **Past Work Samples:**

   o Relevant experience in AI, mobile apps, or e-commerce solutions.

Key Questions for Freelancers:

1. Which technologies would you suggest for implementing this app, and why?

2. How would you ensure scalability for future phases (shopping, social features)?

3. What are the potential challenges, and how would you address them?

4. Can you commit to delivering a deployable Phase 1 app within the timeline?

Structured steps for dependencies and development.