SmartWardrobe

-Intelligent Outfit Recommender-

Idea:

o A mobile application that suggests outfits based on the current weather and the clothes in a user's wardrobe.

Concept:

- o Allows users to upload photos of their clothes and automatically generates outfit suggestions based on the current weather and personal preferences
- o This helps users save time, stay organized, and dress appropriately for any day or event

System Architecture:

- ⇒ The system consists of **three main layers**:
- **1.**<u>Frontend</u> (React / Next.js): User interface for uploading images, viewing wardrobe, and receiving outfit suggestions
- **2.** <u>Backend</u> (FastAPI / Spring Boot): Manages APIs, image processing, weather data, and outfit logic
- **3.**<u>Database</u> (Firebase): Stores users, clothing items, and saved outfits

User Flow:

- 1. User logs in and uploads clothing images
- **2.** The app classifies items (tops, bottoms, shoes)
- 3. Weather API fetches current conditions
- **4.** The system suggests an outfit.
- 5. User can save, like, or modify the suggestion

Technology Stack

- o Frontend: React, Next.js, TailwindCSS
- Backend: FastAPI (Python) / Spring Boot (Java)
- Database: Firebase (Firestore / Realtime Database)
- External APIs: OpenWeatherMap (weather), Cloudinary (image storage)
- Al Tools: TensorFlow / Teachable Machine (image classification)

