

AI Skin Analyzer Backend & Frontend Specification

Backend Routes

Authentication & User Management

- POST /register → Register a new user
- POST /login → Authenticate and return a JWT token
- GET /profile/<user_id> → Get user profile details
- PUT /profile/<user_id> → Update user profile

Skin Analysis (Model Predictions)

- POST /analyze-skin → Upload an image & get AI skin analysis results
- GET /analysis-history/<user_id> → Get previous analysis results for a user

Product Recommendation

- GET /recommendations/<user_id> → Fetch AI-based product recommendations

User Progress Tracking

- GET /progress/<user_id> → Fetch user's skin improvement over time
- POST /progress → Save a new progress entry after analysis

Consultation Booking

- POST /book-consultation → Schedule an appointment with a skincare expert
- GET /appointments/<user_id> → Get user's booked appointments

Admin Dashboard (Management)

- GET /admin/analytics → Get insights into most common skin conditions
- POST /admin/add-condition → Add/edit skin conditions for AI model training
- POST /admin/add-product → Add skincare products & assign to conditions

Frontend Pages

User-Facing Pages

- **Home Page** (/) → Landing page with an introduction to the AI Skin Analyzer
- **Login/Register** (/login, /register) → User authentication
- **Profile Page** (/profile) → View & edit personal details
- **Skin Analysis Page** (/analyze) → Upload image & get AI analysis results
- **Recommendations Page** (/recommendations) → View personalized skincare suggestions
- **Progress Tracking** (/progress) → Graph showing skin improvement over time
- **Consultation Booking** (/book-consultation) → Schedule an appointment

Admin Pages

- **Dashboard** (/admin) → Overview of users, trends, & AI model accuracy
- **Manage Conditions** (/admin/conditions) → Add/edit skin conditions
- **Manage Products** (/admin/products) → Assign products to conditions
- **User Analytics** (/admin/analytics) → View trends & insights