

# **Functional Requirements (FRs)**

## **FR ID    Functional Requirement Description**

- FR01**    The system shall allow users to register using email, password, or phone number.
- FR02**    The system shall allow users to log in securely using valid credentials.
- FR03**    The system shall allow users to reset their password via email or OTP.
- FR04**    The system shall allow users to upload a photo from the gallery.
- FR05**    The system shall allow users to capture a photo using the camera.
- FR06**    The system shall analyze the uploaded photo to extract face and body attributes.
- FR07**    The system shall allow users to enter their preferences (colors, styles, body type, etc.).
- FR08**    The system shall generate personalized outfit recommendations.
- FR09**    The system shall provide suitable color palette suggestions based on user appearance.
- FR10**    The system shall recommend grooming and hairstyle tips based on face shape.
- FR11**    The system shall recommend accessories (glasses, jewelry, watches, etc.).
- FR12**    The system shall provide shopping links for the recommended clothing and products.
- FR13**    The system shall allow users to save recommended outfits to their favorites.
- FR14**    The system shall allow users to manage a virtual wardrobe (add, view, delete items).
- FR15**    The system shall allow users to view daily fashion and grooming tips.
- FR16**    The system shall send push notifications for daily tips or updates.
- FR17**    The system shall allow users to edit their profile information.
- FR18**    The system shall store all user data in encrypted form.
- FR19**    The system shall allow users to choose between local or cloud photo processing.
- FR20**    The system shall allow users to search for items within the virtual wardrobe.
- FR21**    The system shall generate occasion-based recommendations.
- FR22**    The system shall log user activity for improving personalized suggestions.
- FR23**    The system shall allow users to delete their account permanently.

# **Non-Functional Requirements (NFRs)**

## **1. Performance Requirements**

- The system shall respond to all user actions within 3 seconds.
- The system shall complete photo analysis within 5–8 seconds.
- The system shall support at least 5,000 concurrent users.
- The system shall load the main interface within 2 seconds.

## **2. Security Requirements**

- The system shall encrypt all stored user data and images.
- The system shall use secure authentication for all user accounts.
- The system shall protect all data transfer using HTTPS.
- The system shall apply role-based access control.
- The system shall not store user photos without explicit permission.

## **3. Usability Requirements**

- The system shall provide a simple and intuitive interface.
- The system shall display clear labels, icons, and navigation menus.
- The system shall support readable fonts and high-contrast themes.
- The system shall guide users clearly during photo upload and analysis.

## **4. Reliability Requirements**

- The system shall maintain 99% uptime.
- The system shall recover automatically after minor failures.
- The system shall perform scheduled backups for cloud users.

## **5. Scalability Requirements**

- The system shall scale to support increasing users and data.

- The system shall allow new modules to be added without redesign.

## **6. Maintainability Requirements**

- The system shall use modular and well-structured code.
- The system shall include proper documentation for all components.
- The system shall allow updates with minimal downtime.

## **7. Compatibility Requirements**

- The system shall support Android devices running version 8.0 or higher.
- The system shall adjust its layout to different screen sizes.
- The system shall remain compatible with major web browsers.