

1)User Entry Point

Start

User Visits Website / App



User Authentication

- New User → Register
- Existing User → Login
- Guest User → Continue without login (limited features)

2)Product Browsing Flow

Browse Clothing Catalog

- Categories (Men / Women / Kids)
- Filters (Price, Size, Color, Brand)

Database Tables that will be used

- Products
- Categories
- Product_Images
- Inventory

3)Feature Selection Decision Point

Does user want AI Try-On?

Decision Node

- IF YES → AI Try-On Flow
- IF NO → Normal Purchase Flow

4) AI Try-On Flow (If customer wants to use)

User Uploads Image

- Front view
- Proper lighting validation

Database Tables that will be used

- User_Images
- AI_Input_Data

User Enters Body Measurements(for instances):-

- Chest size
- Waist size
- Shoulder width
- Hip size
- Height
- Fit preference (Slim / Regular / Loose)

Database Tables that will be used

- User_Measurements

AI Processing Module

- Image preprocessing
- Body segmentation
- Size mapping
- Cloth overlay rendering

AI Model that will be uses

- User image
- Measurements
- Product cloth data

AI Generated Try-On Preview

- 2D/3D visual output

Database Tables Used

- AI_Output
- TryOn_History

User Decision

- Like the look → Add to Cart
- Try another product
- Exit AI Try-On

5) Normal Purchase Flow (if user does not want to use AI Try-On)

User Selects Product

- Choose Size (S / M / L / Custom)
- Choose Color
- Quantity

Database Tables Used

- `Cart`
- `Cart_Items`

Add to Cart

6) Cart & Checkout (COMMON FLOW)

View Cart

- Product details
- AI Try-On flag (Yes / No)

Apply Offers / Coupons

Database Tables that will be used

- `Coupons`
- `Discounts`

Proceed to Checkout

7) Order Processing

Enter Delivery Address

Database Tables Used

- **User_Address**

Payment Gateway

- UPI
- Card
- Net Banking
- Wallet

Database Tables Used

- **Payments**

Order Confirmation

Database Tables Used

- **Orders**
- **Order_Items**

8) Post-Order Flow

Inventory Update

Database Tables that will be used

- **Inventory**

Order Tracking

Database Tables Used

- Shipping
- Order_Status

Feedback & Reviews

Database Tables Used

- Reviews
- Ratings

End

Key Database Enhancement for AI Try-On

NEW Tables Added:

- User_Measurements
- User_Images
- AI_Input_Data
- AI_Output
- TryOn_History