Fashion Outfit Recommender System

Personalized Outfit Suggestions Based on Weather and Place

INTRODUCTION

- The fashion industry is evolving with AI-driven personalization.
- Choosing the right outfit based on weather and occasion is time-consuming.
- This project recommends suitable outfits based on temperature, gender, and place.

PROBLEM STATEMENT

- People struggle to decide what to wear for different conditions.
- Weather and events often affect clothing choices.
- A smart recommender can save time and enhance comfort.

OBJECTIVES

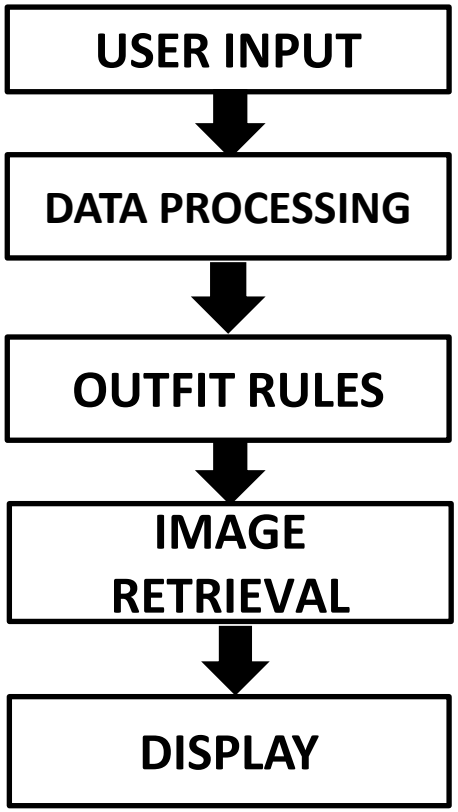
- Develop a Streamlit-based web app.
- Recommend outfits according to gender, temperature, and place.
- Display sample outfit images and fashion tips.
- Make the UI colorful, user-friendly, and creative.

TECHNOLOGIES USED

- Frontend: Streamlit (Python web framework)
- Backend: Python
- Libraries: PIL, OS, Streamlit
- Tools: Anaconda, Sublime Text, VS code

SYSTEM ARCHITECTURE

- User Input ,Data Processing ,Outfit Rules , Image Retrieval,Recommendation Display.



METHODOLOGY

1. User selects Category (Men/Women/Children)
2. Selects Temperature
3. Chooses Place
4. App displays fashion tips, sample outfits, and images.

DATASET

- Dataset of outfit images categorized as:
- /images/

  /men/hot/beach/…..

  /women/cold/restaurant/….

  /children/girl/sunny/park/….
- Images labeled by gender, weather, and place.

IMPLEMENTATION

- Developed in Python using Streamlit.
- Displays four images per recommendation.
- Gradient background with colors: #CCA25A, #FFB16E, #FFF5B8, #45ADAB.

FASHION RULES

Examples:

- Women + Hot: Light cotton dress 👗
- Men + Cold: Sweater + Jeans + Boots 🥾
- Children + Rainy: Raincoat + Boots 🌧️

OUTPUT SCREENSHOTS

- Add screenshots from your Streamlit app:
- Home Page
- Recommendation Screen
- Outfit Inspiration Section

RESULTS

- Successfully generates outfit tips and image recommendations.
- Interface tested for accuracy, usability, and speed.
- Supports all categories and weather types.

Advantages

- ✅ Easy-to-use web interface
- ✅ Visual outfit inspiration
- ✅ Personalized experience
- ✅ Can be extended with APIs (weather, fashion trends)

FUTURE ENHANCEMENTS

- Add AI-based image generation.
- Use real-time weather APIs.
- Include user feedback & ratings.
- Add voice interaction.

CONCLUSION

- A complete fashion recommender built using Streamlit.
- Combines style, weather, and occasion into smart suggestions.
- Improves user convenience and outfit decisions.

REFERENCES

- Streamlit Documentation
- Python.org
- IEEE Research Papers on Fashion AI
- Kaggle Datasets (Fashion & Weather)