Prepared by [Abdullah Zunorain]

Date: [14-Dec-2024]

Introduction

Overview of the Concept:

> Develop an application that combines realtime weather data with outfit suggestions.

• Purpose:

Helps users select weather-appropriate outfits for comfort, safety, and style.

Problem Statement

User Pain Points:

- Difficulty in choosing weather-appropriate outfits, especially with sudden weather changes.
- Checking weather manually and deciding wardrobe choices is inconvenient.

Market Need:

Lack of personalized, weather-based outfit suggestion apps in the market.

Aim

- Primary Aim:
 - Develop an app that provides outfit suggestions based on real-time weather conditions and user preferences.

Objectives

- 1. Real-Time Weather Integration
- 2. User Preferences
- 3. Personalized Suggestions
- 4. Sustainability Focus
- 5. Accessibility and Convenience

Methodology

- Weather Data Collection:
 - Use APIs to get real-time weather.
- 2. Outfit Suggestion Algorithm:
 - Match weather data with clothing choices.
- 3. User Profile & Preferences:
 - Allow users to input preferences.
- 4. Machine Learning:
 - For better personalization.
- 5. App Development and Testing:
 - Use frameworks like Google Colab and Hugging Face

Application Steps

- The following steps are involve in developing an application
 - Model Selection (llama from Groq)
 - API (groq and openweathermap)
 - Google Colab
 - For Testing
 - > Hugging Face
 - For Deployment

1. User Interface (UI)

- > Home Screen: A welcoming screen where the user can sign in, set location, and see the current weather.
- Weather & Outfit Screen: Displays the current weather and recommended outfits based on user settings and location.
- > **Settings**: Allows the user to set preferences, e.g., style, temperature sensitivity, favorite clothing items, etc.
- Wardrobe & Saved Outfits: Allows the user to view their wardrobe, save recommended outfits, or create custom looks.

Data Collection and Input

- Location Detection: Use GPS or user-provided location to get the user's current city or region.
- Weather Data Retrieval: Integrate a weather API (e.g., OpenWeatherMap or Weatherstack) to fetch real-time weather data based on the location.
- Weather Information Needed: Temperature, humidity, wind speed, precipitation, etc.

3. Weather Analysis

- Weather Classification: Based on weather data, classify conditions as hot, warm, cool, cold, rainy, windy, etc.
- Outfit Category Mapping: Map each weather category to general outfit categories (e.g., raincoat and boots for rain, light layers for warm weather).

4. Outfit Recommendation Engine

- User Profile & Preferences: Store user information like style preferences, common color choices, temperature comfort range, and sensitivity (cold-tolerant or cold-sensitive).
- Outfit Database: A database containing clothing items, categorized by type (e.g., tops, bottoms, accessories) and weather suitability (e.g., jackets for cold, shorts for warm).
- Basic Filtering: Filter outfits by current weather, user preferences, and clothing availability.
- > Al Outfit Suggestions: Use a machine learning model (like collaborative filtering or content-based filtering) to recommend specific items based on user behavior (e.g., past likes/dislikes).
- Styling Rules: Ensure suggested outfits meet basic styling rules (e.g., match colors, balance formality).

5. Analytics & Improvement

- Usage Analytics: Track outfit suggestions, user feedback, and frequently selected items to analyze trends.
- Model Retraining (if using AI): Periodically retrain the recommendation model based on accumulated data to refine outfit suggestions

Frame 1



Application

- User Journey:
 - Displays app flow from weather data input to outfit suggestions.
- Example Scenarios:
 - Outfit suggestions for rain, snow, sunny, and windy conditions.
- User Interface:
 - Highlights unique features like notifications and fashion trends.

Benefits

- 1. Time-Saving
- Comfort and Safety
- 3. Sustainable Fashion Encouragement
- 4. Improved User Satisfaction

Conclusion

Summary:

- Design an application that integrates real-time weather data to provide customized outfit recommendations.
- Helps users select weather-appropriate outfits for comfort, safety, and style.

Future Plans:

Potential for features like social sharing, wardrobe integration, and a virtual closet.

Closing Statement:

Emphasizes the app's role in enhancing daily experiences by integrating technology, fashion, and weather insights.



Enter your location:	
E.g. Peshawar	
Select your gender	
Male	~
Enter your personalized style (optional)	
E.g. Peshawari	
Select your preferred fabric	
Cotton	~
Select time of day	
Morning	~
Select your activity	
Work	~



Enter your location: Current temperature in Peshawar: 24.08°C Peshawar Weather: smoke 😂 Weather Category: Smoky 8 Select your gender Male * Outfit Suggestion * Male Considering the smoky weather and your traditional style preference, I'd suggest an outfit that's comfortable, Female breathable, and modest. Here's a recommendation: Top: Choose a cotton kurta (a traditional Indian-style tunic) in a light to medium shade, such as beige, cream, or off-Select your preferred fabric white. This will complement the smoky surroundings and keep you cool. Look for a kurta made from 100% cotton for Cotton breathability and comfort. Select time of day **Bottom:** Pair the kurta with a pair of cotton dhoti or pyjama pants in a neutral shade like beige, cream, or light gray. These pants are comfortable, breathable, and will match the smoky atmosphere. Morning Footwear: Opt for traditional cotton slippers or shoes, such as mojaris or chappals, in a neutral color that will blend Select your activity with the surroundings. You can also wear sandals if you prefer. Work v Additional tips:



Enter your location: Peshawar Select your gender Male Enter your personalized style (optional) traditional Select your preferred fabric Cotton Cotton Linen Wool Polyester Silk

Current temperature in Peshawar: 24.08°C

Weather: smoke 😂

Weather Category: Smoky



What a unique weather condition!

Considering the smoky weather, it's essential to dress in a way that not only keeps you comfortable but also protects your skin and eyes from the smoke. For a traditional style outfit made of cotton fabric, I would suggest the following:

Top: A lightweight, pastel-colored cotton kurta (a traditional South Asian garment) with a relaxed fit would be perfect. Look for one with a relaxed neck and short sleeves to keep you cool and comfortable. You can opt for a pale yellow, beige, or light blue hue to complement the smoky environment.

Bottom: Pair the kurta with a pair of loose-fitting, beige or cream-colored cotton pyjama pants or linen pants. The loose fit will allow for a comfortable range of motion while working, and the light color will help reflect the smoke.

Accessories: To add a touch of elegance, consider a cotton or silk scarf in a subtle pattern and color. Tie it around your neck or use it as a pocket square.

Enter your location: Peshawar Select your gender Male Enter your personalized style (optional) traditional Select your preferred fabric Cotton Select time of day Morning v Morning Afternoon Evening

Current temperature in Peshawar: 24.08°C

Weather: smoke 88

Weather Category: Smoky 88

XX Outfit Suggestion XX

Considering the smoky weather and the fact that you'll be working, I'd recommend wearing a comfortable and practical outfit while still maintaining a traditional style. Since you prefer cotton fabric, I've suggested the following outfit:

Top: Go for a crisp, white cotton shirt with a relaxed fit. You can opt for a classic button-down collar or a soft, ruffled collar for a more traditional look. A cotton shirt in a light color will help reflect the sun's rays and keep you cool in the smoky weather.

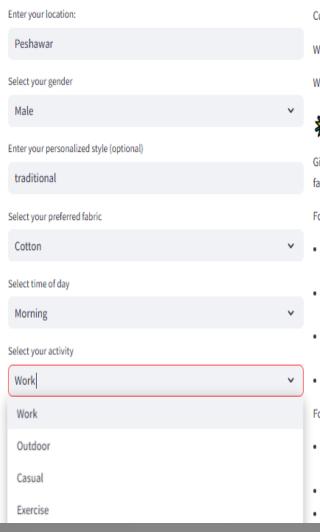
Bottom: Pair the shirt with a pair of light beige or cream-colored cotton trousers. These neutral colors will complement the smoky atmosphere and add a touch of elegance to your outfit. Make sure they're loose-fitting and comfortable for a day at work.

Shoes: Opt for comfortable, lace-up oxfords made from breathable materials like leather or suede. These will keep your feet cool and dry in the smoky conditions. Choose a pair in a neutral color that will match with your outfit and won't attract attention.

Accessories: Keep jewelry minimal and understated. A simple watch, a classic belt buckle, and a pair of cufflinks will complete your look without drawing attention to yourself.

This outfit should make you feel comfortable, traditional, and professional for a day at work, even in the smoky weather.





Current temperature in Peshawar: 24.08°C

Weather: smoke 🕮

Weather Category: Smoky 😂

X Outfit Suggestion X

Given the smoky weather, I would recommend a traditional outfit that's both comfortable and breathable. Considering the user's preference for cotton fabric, I suggest the following:

For Men:

- A lightweight, cotton kurta with a relaxed fit, in a neutral shade like beige, white, or light gray. This will help keep you cool and comfortable in the smoky weather.
- A pair of cotton pyjama pants in a similar neutral shade, with a slight stretch for convenience. You can opt for a subtle embroidery or pattern to add some visual interest.
- A traditional cotton bandhani dupatta in a muted color like beige, gray, or cream. This will add a touch of elegance to your outfit while keeping you covered from the smoky air.
- Comfortable cotton loafers or sandals to complete your look. Choose a pair with a breathable design to keep your feet cool.

For Women:

- A flowy, cotton salwar kameez in a lightweight fabric with a breathable weave. Opt for a neutral shade like beige, white, or pastel pink to complement the smoky weather.
- · A pair of loose-fitting cotton leggings in a matching shade to the salwar. This will add length and flow to your outfit while keeping you cool.
- · A lightweight, cotton dupatta in a subtle print or embroidery. You can also opt for a cotton scarf in a coordinating shade to add a pop of color.

Thank You