

## Project Report Template

**Title of Project:** AI FASHION RECOMMENDER

**Name of the Innovator:** SHREYA.N

**Start Date:** 13-10-2025

**End Date:** 17-10-2025

### **Day 1: Empathise & Define**

#### *Step 1: Understanding the Need*

- Which problem am I trying to solve?

In the modern digital age, individuals face difficulty in selecting suitable outfits that match their personality, body type, and current fashion trends. The lack of personalized and intelligent fashion guidance results in confusion and poor styling choices. Therefore, there is a need for an AI-powered fashion recommender system that can analyze user preferences, body features, and trending data to suggest the best outfit combinations for various occasions.

#### *Step 2: What is the problem?*

People often face difficulty choosing the right clothes that **match their personal style, body type, weather, and latest fashion trends with thousands of options available online and offline, selecting suitable outfits becomes confusing, time-consuming, and overwhelming.**

Why is this problem important to solve?

**Solving this problem is important because it helps people save time, make smarter clothing choices, improve self-confidence, and enjoy a personalized fashion experience that adapts to their individual needs and trends.**

#### **Take-home task**

Ask 2-3 people what they think about the project:

- **1. Student (Rural College Student):**  
“I think it’s a cool idea! Many students struggle to pick outfits or follow trends. An AI recommender can save time and help us find clothes that match our personality and budget.”
- 
- **2. Teacher (Career Guidance Teacher):**  
“It’s a creative and practical use of AI. But it should also teach users about dressing appropriately for different occasions and promote sustainable fashion.”
- 
- **3. Parent (From a Rural Area):**  
“It sounds helpful, especially for young people who spend too much time shopping. But it should be safe and not encourage overspending.”
- ”

*AI Tools you can use for Step 1 and 2:*

## **AI Tools Used:**

### **1. Meta MGX**

1. A **multi-agent AI platform** that automates software development tasks such as design, coding, and planning.

2. Helped **generate the initial project structure, divide tasks** among AI agents (data, model, UI, logic), and **speed up development** with automated code and documentation

### **2. ChatGPT**

1. A **large language model (LLM)** used for conversation and intelligent recommendation

2. Used for **understanding user input** (e.g., “I need an outfit for a party”), **generating personalized style suggestions**, and **explaining fashion choices** in natural language

## ***Day 2: Ideate***

### ***Step 3: Brainstorming solutions***

- List at least 5 different solutions (wild or realistic):
- **Personalizes outfit recommendation:** use AI to suggest clothing based on user data like age , gender, and body type
- **Image-Based Recommendations:** Allow users to upload a photo of a clothing item, AI detects the colour, pattern, and category using image recognition
- **Chat-Based Virtual Stylist:** Integrate ChatGPT or similar models to create a conversational stylist
- **Body Type & Fit Prediction:** Recommend clothes that fit well based on the user’s body measurements.
- **Trend Analysis and Fashion Insights:** AI can analyse social media data or online stores to detect trending styles

### ***Step 4: My favourite solution:***

My favourite solution in the AI Fashion Recommender Project is the Chat-Based Virtual Stylist using ChatGPT. This solution makes the system more interactive and personalized by allowing users to have a natural conversation with the AI about fashion choices. Instead of just clicking buttons or selecting options, users can simply type or speak questions like, “*What should I wear for a formal event?*” or “*Suggest an outfit that matches my blue jeans.*”

### ***Step 5: Why am I choosing this solution?***

I am choosing the Chat-Based Virtual Stylist using ChatGPT as my preferred solution because it makes the AI Fashion Recommender more interactive, user-friendly, and intelligent. Many users find it difficult to choose what to wear for different occasions, and this solution provides a simple and engaging way to get personalized outfit suggestions through natural conversation.

## ***AI Tools you can use for Step 3-5:***

### **AI Tools for Step 3–5**

#### **1. Meta MGX**

- Used to **design and build** the AI Fashion Recommender without coding.

- Helps create the **AI assistant, skill modules, and location-based features.**

## 2. ChatGPT

- Helps **brainstorm solutions** and generate ideas for career guidance features.
- Can **structure conversations** for the AI virtual assistant.
- Assists in writing content for skill modules, FAQs, and recommendations.

## 3. AI Research Tools

- **Google Scholar / Research AI** – For exploring existing solutions and innovative ideas for Steps 3–5.
- **AI Text & Summarization Tools** – Helps summarize solutions, select the best approach, and present them clearly.

*AI Tools you can use for the take-home task:*

**Canva AI/CoPilot AI/Meta AI:** Use these mobile-based tools to generate images for the solution they want to design

### **Day 3 : Prototype and test**

*Step 6: Prototype – Building my first version*

What will my solution look like?

For my first prototype of the **AI Fashion Recommender Project**, I focused on creating a simple and functional version that demonstrates the basic features of the system. The prototype allows users to enter their fashion preferences such as color, occasion, and clothing type through a simple web interface. I used **Python** for the backend and Streamlit to design the interface because it is easy to integrate with machine learning models. The ChatGPT API was connected to act as a virtual fashion stylist, understanding user input and suggesting suitable outfit combinations. A small sample dataset of clothing items was used to test the recommendation process. The system analyzes the user's input, matches it with similar items from the dataset, and then provides a list of outfit suggestions with descriptions. This first version helped me understand how to connect AI models with user interfaces and how recommendations can be personalized using natural language processing. It serves as the foundation for improving future versions with features like image-based suggestions, trend analysis, and virtual try-on options.

### **Design Style**

- Card-based display for recommendations (like Pinterest or Instagram).
- Ensure images are high-resolution and consistent in size.
- Accent colors for buttons and highlights (soft pastels or bold contrast).

### **Prototype Tools:**

- Built using **Meta MGX**, no coding required, with all features **interactive and testable**.

What AI tools will I need to build this?

### **AI Tools Needed to AI Fashion Recommender**

## 1. Meta MGX

- No-code platform to **design and deploy the app.**
- Allows building **interactive screens, chat interfaces, and skill modules** without coding.

## 2. ChatGPT (or similar LLMs)

- To **generate content, conversation flows, and career guidance responses.**
- Can help **personalize recommendations** for users based on their profile and location.

## 3. AI Recommendation Tools (*Optional but useful*)

- For **matching students with careers, scholarships, and nearby opportunities.**
- Could use **ML-based ranking algorithms** or **existing AI APIs** for personalization.

## 4. AI Data Analysis Tools (*Optional for insights*)

- **Python AI libraries (Pandas, Scikit-learn)** or **AI analytics platforms**
- To analyze user interactions and improve recommendations over time.

What AI tools I finally selected to build this solution?

1. Chat GPT
2. Metamgx

# < Build The Innovation >

<DASHBOAD OF THE TOOL>

Tool link: <https://mgx-p866b01eq59.mgx.world/>

## Fashion AI

Get personalized outfit recommendations based on your style, occasion, and preferences. Let AI help you look your best! 🌟

### ✨ Fashion Recommendation

#### Gender

Select gender

#### Age

Enter your age

#### Occasion

Select occasion

#### Preferred Style

Select style

#### Body Type

Select body type

#### Season/Weather

Select season

#### Color Preference (Optional)

e.g., blue, red, neutral tones...

Get My Fashion Recommendation ✨

Internal Working of tool:

# Your Fashion Recommendation

Curated just for you

## 👕 Your Perfect Outfit

### Main Outfit Suggestion

 Clean cotton t-shirt or simple blouse orange, yellow and pink	 Well-fitted jeans or chinos navy or black
 White sneakers or loafers white or brown	 Simple watch, small leather bag

### 💡 Style Tips & Justification

Focus on fit and quality over quantity - less is more | Add layers and structured pieces to create volume  
*Minimal style emphasizes clean lines and timeless pieces*

Profile creation:

## 🌈 Alternative Look

 Clean cotton t-shirt or simple blouse coral	 Well-fitted jeans or chinos coral
 White sneakers or loafers coral	 Simple watch, small canvas bag coral

Tailoring recommendations using virtual assistant:

### 💰 Budget-Friendly Version

Budget-friendly clean cotton t-shirt or simple blouse



orange, yellow and pink

Look for similar styles at thrift stores or fast fashion retailers

Budget-friendly well-fitted jeans or chinos



navy or black

Look for similar styles at thrift stores or fast fashion retailers

Budget-friendly white sneakers or loafers



white or brown

Look for similar styles at thrift stores or fast fashion retailers

Budget-friendly simple watch, small leather bag



Look for similar styles at thrift stores or fast fashion retailers

Get Another Recommendation

### Step 7: Test – Getting Feedback

- Who did I share my solution with?

I shared my **AI FASHION RECOMMENDER** solution with:

- **Students from rural areas** – Many students, especially in rural areas, struggle to find affordable, trendy fashion ideas.
- **Teachers** – Teachers can demonstrate practical AI use, bridging technology and lifestyle subjects.
- **Parents of rural students** – to see if it helps families access information about fashion knowledge
- **Peers and mentors** – for suggestions on improving their clothing style

What feedback did I receive?

#### Feedback: Pros and Cons

##### Pros (Positive Insights from Feedback):

1. **Encourages Creativity:** Students can mix and match outfits and experiment with colors and patterns.
2. **Personalized Recommendations:** Suggests clothing based on user preferences, style, and past choices.
3. **Scalable and Flexible:** Can be extended to include seasonal trends, regional clothing, or budget-friendly recommendations.

##### Cons (Areas to Improve Noted in Feedback):

1. **Accuracy of Recommendations:** AI may not always perfectly understand user taste or cultural preferences.

2. **Data Dependency:** The system needs enough images or user input to make good recommendations
3. **Technical Complexity:** Requires knowledge of AI models, image recognition, and recommendation algorithms to improve.

### **My Response for The Feedback:**

Thank you for the valuable feedback on my AI Fashion Recommender project. I appreciate the points raised regarding both the strengths and limitations of the system. I am glad that the personalized recommendations, creativity support, and accessibility for students and rural users were seen as positive aspects. Regarding the limitations, I understand that recommendation accuracy, dataset size, and potential biases are areas that need improvement.

👉 What works well:

#### **What Works Well**

- 1. Personalized Recommendations:** Suggests outfits based on user preferences, past choices, or uploaded images.
- 2. Easy-to-Use Interface:** Simple navigation for selecting items, viewing recommendations, and saving favourites
- 3. Visual Presentation:** Card-based display or image-focused layout works well for fashion
- 4. Creativity Encouragement:** Users can mix and match clothing items, experiment with colours and styles.
- 5. Accessibility:** Works as a virtual stylist for users who cannot easily access stores
- 6. Real-Life AI Integration:** Demonstrates practical AI use: image recognition and recommendation algorithms.

🔧 What needs improvement:

- 1. Recommendation Accuracy:** AI may sometimes suggest outfits that don't match the user's style or occasion.
- 2. Dataset Diversity:** Limited clothing images can reduce recommendation quality
- 3. User Feedback Integration:** The system could learn from user likes/dislikes to improve recommendations over time
- 4. Mobile and Device Optimization:** The interface may not perform smoothly on low-end phones or slow internet connections.

*AI Tools you can use for Step 6-7:*

**ChatGPT/Perplexity AI/Claude AI/Canva AI/Chatling AI/Figma AI/Metamgx/Gamma AI:** You can use these tools to build solutions/models or mock-up dummy prototypes

#### **Day 4: Showcase**

*Step 8: Presenting my Innovation:*

I am presenting **AI FASHION RECOMMENDER**, This system is designed to help students and users, especially in rural areas, discover clothing and outfit combinations that match their style and preferences easily.

It features:

- **Personalized Recommendations** – Suggests outfits based on user preferences, past choices, and style.
- **Image-Based Analysis** – Users can upload photos; AI identifies color, pattern, type, and style.
- **Category Selection** – Browse by tops, bottoms, shoes, or accessories for targeted recommendations.
- **Outfit Combinations** – Suggests complete outfits by combining multiple clothing items.

**Impact:** This project impacts students by enhancing creativity and confidence, helps teachers demonstrate AI and engage students, supports parents in guiding fashion choices, and provides rural users access to modern fashion trends

**<SHOWCASE YOUR INNOVATION TO YOUR PEERS>**

The screenshot shows a user interface for a fashion recommendation system. At the top, there's a large purple header with the text "Fashion AI". Below it, a sub-header reads "Get personalized outfit recommendations based on your style, occasion, and preferences. Let AI help you look your best! 🌟". The main form area has several input fields: "Gender" (dropdown menu), "Age" (text input field), "Occasion" (dropdown menu), "Preferred Style" (dropdown menu), "Body Type" (dropdown menu), "Season/Weather" (dropdown menu), and a "Color Preference (Optional)" text input field containing "e.g., blue, red, neutral tones...". At the bottom is a large pink button with the text "Get My Fashion Recommendation 🌟".

## Step 9: Reflections

- What did I enjoy the most during this project-based learning activity?

What I enjoyed the most during this project-based learning activity was the opportunity to combine technology with creativity. I loved exploring how AI can analyze clothing styles and provide personalized fashion recommendations. Designing the interface and seeing my prototype come to life was very satisfying.

What was my biggest challenge during this project-based learning activity?

One of the biggest challenges I faced was gathering and managing a large, diverse dataset of fashion images and user preferences. Since the AI recommender relies on high-quality data to make accurate suggestions, ensuring that the dataset included various styles, sizes, and trends was time-consuming and required careful organization.

### Take-home task

[https://github.com/nshreya355-web/AI-Fashion-recommender\\_project.report](https://github.com/nshreya355-web/AI-Fashion-recommender_project.report)

AI Tools you can use for Step 8:

- **ChatGPT:** Generate clear description, feature explanation, and impact statements for your pitch
- **AI presentation:** convert your pitch document into a visually appealing, slide ready presentation for showcase day