



**Problem Statement Title: Conversational Fashion
Outfit Generator powered by GenAI**

Team Name: 686157-U4QIV917

Team members details

Team Name	686157-U4QIV917		
Institute Name	THAPAR INSTITUTE OF ENGINEERING AND TECHNOLOGY		
Team Members	1 (Leader)	2	3
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Batch	2025	2025	2025

Solution statement/ Proposed approach



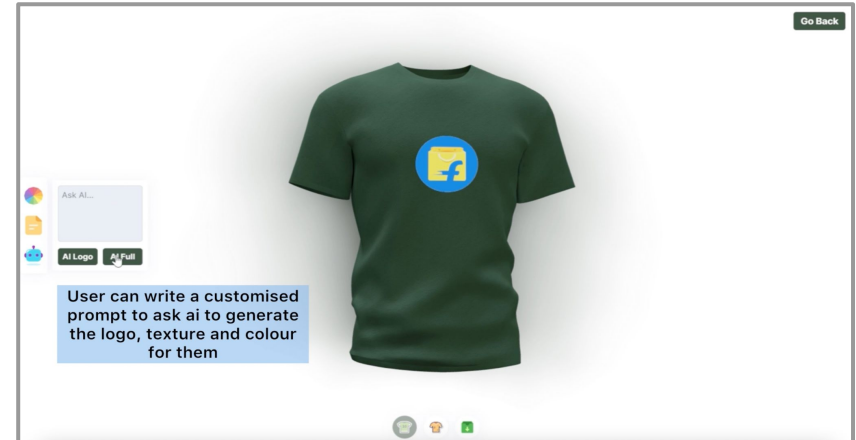
- Style Sculpt offers users with the ultimate **3D Customisation tool**. It allows them to **unleash their imagination** and define their own style.
- It allows users to **input their desired colour, texture and logo**. They can even toggle them off and on to **mix and match the best suitable style**.
- Not only this, the users can **Leverage AI to do all this for them**.
- Style Sculpt also offers users an **AI trend Search feature**, which allows them to view their desired products that are currently trending on the internet.
- This also **provides the users with a reference for their styling needs**.

Deliverables/Expectations for Level 2 :



Solution Breakdown:

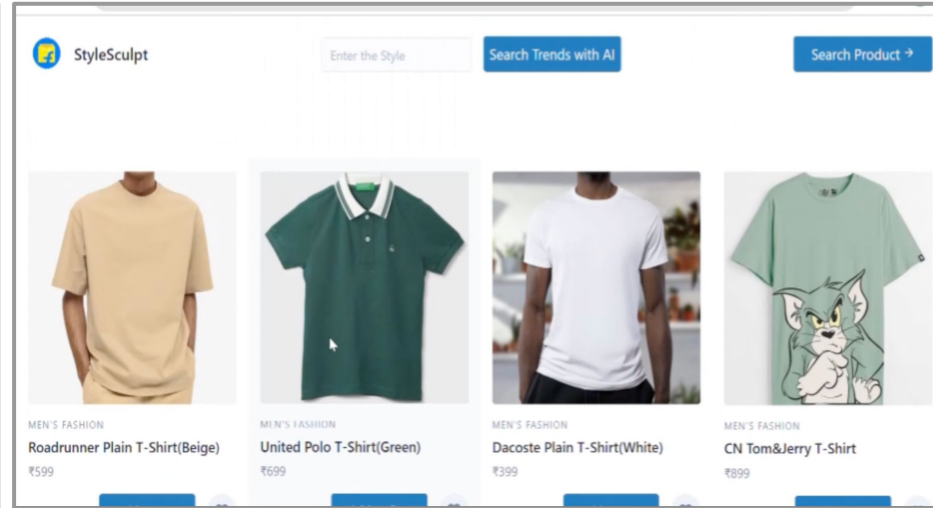
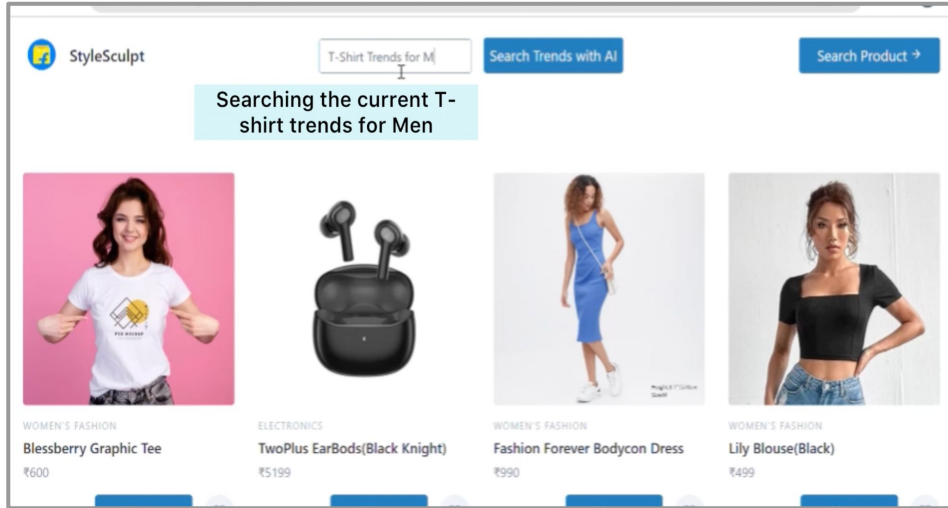
- Customization - Manual & AI
- Prompt based design generation
- 3D view for a realistic experience
- Trend analysis and recommendation



Deliverables/Expectations for Level 2 :



Deliverables/Expectations for Level 2 :



Repository Link:

https://github.com/jimbo-exe/grid_5

Demo Video drive link:

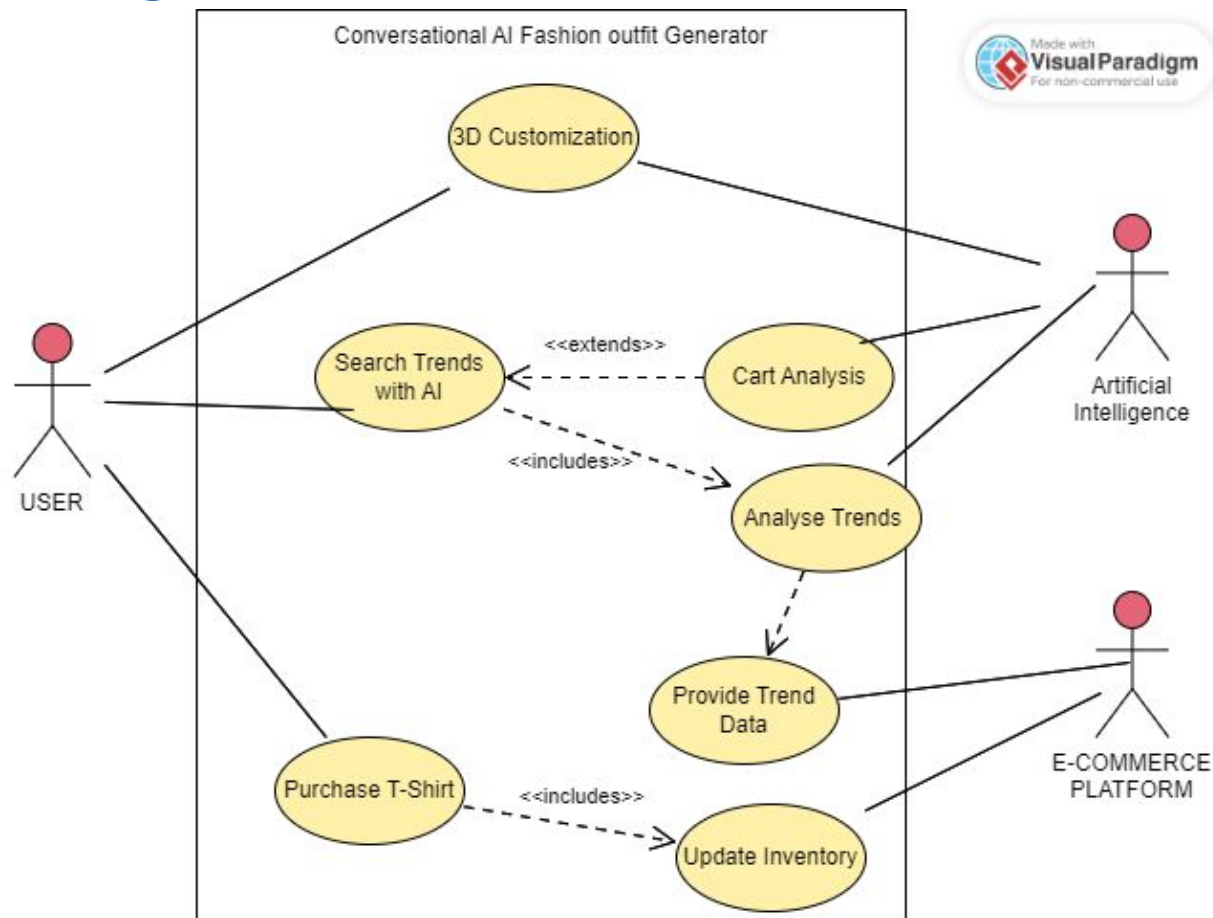
https://drive.google.com/file/d/1p6G_p5krsgNINqjgxETCddEpNBy5mpJ6/view?usp=sharing

Salient Features

1. User will be able to change the Product's **colour, texture**, as well as **upload their own logo**, or write a **customised prompt** to ask AI to generate the logo or the texture for them.
2. User can **toggle the logo and texture on and off** for comparison.
3. User can even **download the final customised product**.
4. **Responsiveness** across all devices to improve site's performance.
5. 3-D features have **practical applications for product showcasing**.



Use Case Diagram



Use-cases

1. 3D Customisation

Users can create their unique and exclusive clothes using the **3D customization feature**. They can unleash their imagination and define their own style.

2. Trend Analysis

Users stay updated on the **latest fashion trends** from various sources such as **social media**.

3. Outfit Recommendations based on User Purchase History

Users receive personalised outfit suggestions **based on their preferences and style**.

4. Cart Analysis

Users receive **personalised recommendations** as per items in the cart.

5. Occasion and Location Specific Suggestions

Users receive suggestions as to what they could wear for different **popular occasions**. The suggestions are also tailored to the user's age and region.

Limitations

1. **Dependence on AI Accuracy**

In the even that the AI stylist fails to understand user preferences, users may lose trust and interest in the platform.

2. **Lack of willing vendors**

It may be difficult to find vendors willing to sell customisable products to this extent.

3. **Lack of Human Touch**

While the AI can offer recommendations, it lacks the human touch and emotional connection that comes with interacting with a human stylist.

Future Scope

1. AR Integration

Implement AR features that allow users to **virtually try** on recommended outfits.

2. Fashion Gamification

Gamify the platform by **introducing challenges, quests, and rewards** that encourage users to explore different fashion styles and achieve milestones.

3. Virtual Fashion Shows and Events

Organize **virtual fashion shows**, events, and challenges where users can participate and showcase their creativity.

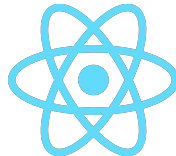
4. Advanced Trend Analysis

Integrate machine learning models that can **predict emerging fashion trends** with higher accuracy. Utilize sentiment analysis on social media and fashion blogs.



Tech Stack Used

1. HTML5
2. CSS
3. JS
4. THREEJS
5. EXPRESSJS
6. REACT
7. NODEJS
8. VITE
9. TAILWIND
10. OPENAI API
11. DALL-E
12. FRAMER MOTION LIBRARY





Thank You