

## Project Overview

Welcome to the Intelligent Wardrobe Management System project! This initiative aims to revolutionize wardrobe management using cutting-edge technologies such as deep learning, artificial intelligence, and machine learning. The focus is on creating a user-friendly app that seamlessly organizes wardrobes and provides personalized outfit recommendations based on user preferences, real-time weather data, and fashion trends.

## Roles and Responsibilities Clarification

### What We Deliver

As the frontend and app development team, our primary responsibilities include:

- **User Registration and Preferences:**
  - Implementing user registration functionalities.
  - Developing user profile management features.
- **Wardrobe Initialization:**
  - Creating interfaces for users to add and manage clothing items.
- **Mobile App Interaction:**
  - Building mobile app screens for wardrobe views, outfit recommendations, and user preferences.
  - Ensuring smooth user interactions and experience.
- **Search and Filter:**
  - Developing search functionality for specific wardrobe items.
  - Implementing filters for sorting and organizing the wardrobe.
- **Weather Integration:**
  - Integrating real-time weather data into the app interface.
  - Adjusting outfit recommendations based on weather conditions.

### What We Expect

Interns will contribute by delivering three ML models as black boxes:

1. **Image Recognition and Object Detection Model:**
  - Utilizing CNNs for image recognition.
  - Implementing object detection algorithms for clothing items.
2. **Collaborative Filtering Model:**
  - Developing collaborative filtering algorithms for personalized outfit recommendations.
3. **Deep Learning Model for Trend Analysis:**
  - Using RNNs or LSTMs to analyze temporal trends in fashion data.

*Note: The interns' focus will be on ML model development; app development falls within our domain.*

## Next Steps

### Deliverables

Our immediate focus is on the design phase. Over the next two weeks, we plan to deliver:

- Finalized UI/UX Design Mockups
  - Collaborate on UI/UX design mockups.
  - Finalize design elements and user flows.
- Detailed Functionality Specifications
  - Define detailed functionality specifications.
  - Begin development work on the agreed-upon design.

## Tech Stack

Our current tech stack includes:

- Frontend: React Native
- Backend: MERN Stack (MongoDB, Express.js, React.js, Node.js)
- Additional APIs: FastAPI for ML model integration
- Database: SQL (Structure to be finalized)

*Note: Finalization of the tech stack details will be part of the ongoing development process.*

## Feedback and Questions

Please feel free to provide any feedback or ask questions about the project. Your input is valuable to us!

## Conclusion

Thank you for your continued support and collaboration. We are excited about the progress we've made and look forward to delivering a sophisticated Intelligent Wardrobe Management System. If you have any further questions or concerns, please don't hesitate to reach out. Together, we'll create something amazing!