WALKING POTATOES

VIETNAM DATATHON 2023

Mirror

Project proposal

Designed by
team **Walking Potatoes**

Introduction

The fashion market still has a lot of pressure on creating trends and choosing clothing combinations.

Mirror is designed using an advanced machine learning model along with augmented reality (AR) technology. It will be a solution to help consumers have outfits that are not only beautiful but also economical.

Problem statement

Creating trends, or designing clothing combinations, is an extremely difficult task for the fashion industry. Because these creations are seasonal and easily influenced and led by top models or stylists.

While chatbot applications of major e-commerce platforms focus on design to help customers easily manage the delivery process, and provide current "hot" promotions to customers, then by using Using advanced machine learning technology along with augmented reality (AR), **Mirror** is pleased to be a chatbot that brings outfit coordination solutions to users and at the same time supports rend creation for stylists.

Solution Overview

Using artificial intelligence (AI) to make recommendations in product consulting. A chatbot is a sophisticated conversational interface designed to increase customer interaction and satisfaction. Leveraging advanced AI techniques, chatbots aim to provide an interaction motivated by natural language processing (NLP).

AI Techniques:

- Natural Language Processing (NLP)
- Machine Learning (ML) Models
- Deep Learning for Dialogue Management
- Consolidation Learning
- Multimedia Capabilities
- Learning Compatibility
- Real-Time Analysis
- Contextual Feedback
- Personalized

Project Team

Pham Trieu Duong
Leader

Le Hong Vu
Team member

Trinh Chan Duy
Team member

Cao Dinh Giap
Team member

Methodologies

The AI model architecture adheres to modular design to support efficient processing. Main ingredients include:

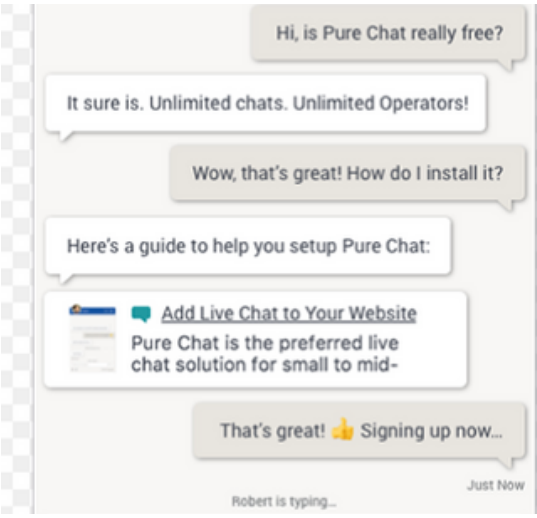
- Input Processing Module
- Intent Recognition Module
- Context Management Module
- User Profile Creation Module
- Compatible Learning Modules

Technology used:

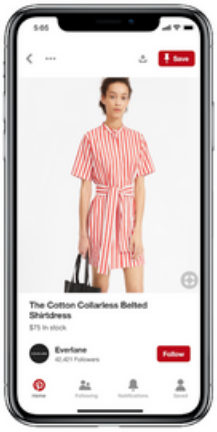
- Natural Language Processing Library
- Machine Learning Framework
- Deep Learning Models
- Reinforcement Learning Library
- Multimedia Integration Tools
- Real-Time Analytics Platform

Core Functionality

- Chatbot will interact with users through a separate chat window.
- Based on some pre-programmed data models to answer some questions about product information and parameters.
- The system advises and recommends products to customers based on the data tables provided and presented in the form of summary information blocks.



- Integrate additional outfit coordination features for customers using the virtual dressing room method



Performance Metrics

- The system is the key to helping users find the right product without having to go to a physical store.
  - A lot of shopping web, app that upload images and people can choose product with these images.

- The virtual dressing room is a tool that allows users to test a variety of products with quick time and simple operations, improving the convenience of having to try on clothes at a physical store.
  - Not exactly but fast and suitable for busy people,...
- Chatbot also reduces the burden of professional personnel problems when it can help shops advise users through available data.
  - Convenient, save money, time,...

User Interface and Interactive Components

The interface includes many key components to support effective communication between users and the chatbot's artificial intelligence-driven features:

- Chat Interface
- Multimedia Support
- Show Context
- Rich Media Presentation
- User Feedback Mechanism
- Interact with AI-Based Features
- Recognizing Intent
- Learning Compatibility
- Personalized
- Understanding Context

Limitations and Future Enhancements

- The product is still a new idea, not sure about its feasibility, so it needs much help from a mentor.
- Team members are freshmen so the knowledge and experience are not much.

Conclusion

- This chatbot is new idea so that can have some failure.
- My team will try and improve it better through each stage

WALKING POTATOES

VIETNAM DATATHON 2023

Thank You!