Trendily

A ML based fashion recommending app/bot

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6:23 AM

* + What problem we are trying to solve?
    - A personalized style & fashion recommending app/bot that aids in making your own mark for any event/occasion based on your body type.
    - This smart fashion app/bot will take user's images and data as input and makes fashion recommendations to users for a particular occasion/event based on the user's personal profile data attributes/features such as
      * **Primary Attributes/Features - Phase1**
        + User Image
        + Body Type
        + Body Size
        + Event/Occasion
      * **Secondary Attributes/Features - Phase2**

**Note:** Will consider these additional features in our model in phase2 of the project

* + Gender
  + Age
  + Height
  + Weight
  + Event Type - Day, Noon, Evening, Night

* + **Target Users:** 
    - **All**
      * **Phase1 - Females**
      * **Phase2 - Males and all other genders**

* + MVLP Features, Design & Development Approach
  + MVLP (Minimal Viable & Lovable Product) Features
    - Signup/Login Page
    - Make it a paid app by integrating with Paypal/Stripe
    - Webapp (using Flask/Django)
      * Inputs:
        + Image, Body Dimensions & Size

Determine Body Type based on image or body dimensions input

* + - * + Size - XS, S, M, L, XL, XXL, XXXL
        + Event/Occasion

* + Output:
    - Recommend Apparels based on above inputs
  + Deploy on Heroku/Other Better & Cheaper Cloud Platforms
  + Demo

* + Design
  + Key Design Aspects
    - Finding Dataset
      * Dataset Source (Amazon, Pinterest, DeepFashion)
      * Model Training
        + Training Dataset (75%)
        + Validation Dataset - Do we really need this?
        + Testing Dataset (25%)
    - Applying a ML Model(s)
      * Image Classification, Decision Tree, Random Forest
    - Review the ML Model results
      * Data Visualization
      * Confusion Matrix
      * Loss & Accuracy

* + Implementation Approach
  + Build Webapp
    - Signup & Login Page
      * Flask/Django - Webapp
      * Firebase for user authentication
      * PayPal/Stripe - Paywall
    - Collect User Input Data Page
    - Apparels Recommendation Results Page
      * Display apparels
      * Display Time taken took to process, Loss, Accuracy

* + Build Model - Key Development Steps - Using Python
    - Step1 - Import Libraries
    - Step2 - Import Data
    - Step3 - Prepare the Data
    - Step4 - Fit the Model
    - Step5 - Visualize Results
    - Step6 - Predict New Case

* + Integrate Webapp & ML Model
  + Deploy App
  + Live Demo