Skincare Recommendation System

Price Prediction for Products - Regression Model for Price Prediction
Develop a regression model to accurately predict the price of products listed on our e-commerce platform based on various product features.
- **Dataset**: Product_info.csv
- **Main Features**: Brand ID, Variation Value (Product Quantity), and Primary Category, brand_id
- **Model/Technique**: A regression technique will be used, given the continuous nature of the target variable (Price). We will explore multiple regression algorithms, including Linear Regression for a baseline, and potentially more complex models like Random Forest and Gradient Boosting for more accuracy.
- **Rationale**: Regression analysis is best suited for predicting prices, a continuous variable, based on the product's key features. This will allow us to understand how different features contribute to the final price of a product.

Recommendation Flag Prediction based on Customer Reviews
Create a machine learning model to predict product recommendations by customers.
- **Dataset**: reviews.csv
- **Main Features**: total_neg_feedback_count, and total_pos_feedback_count, skin_tone, eye_color, skin_type, and hair_color.
- **Model / Technique**: Binary Classification. Utilize a classification algorithm (e.g., Logistic Regression, Random Forest, or Gradient Boosting) to predict the binary outcome of is_recommended based on both quantitative feedback metrics and derived features from sentiment analysis.
- **Rationale:** Personalization of product recommendations to customers based on their traits and preferences.