Zocket Machine Learning (Computer Vision) Hackathon! 🤖

Problem Statement "AI-Enhanced Product Photoshoot Visuals and Filter"

Problem Description:

In the fast-paced world of e-commerce, the visual presentation of products is crucial for attracting customers and driving sales. **Your challenge is to develop an innovative AI solution that generates stunning product photoshoot visuals and implements a filter to identify specific products within a given list of objects. (Shoe, Sneaker, Bottle, Cup, Sandal, Perfume, Toy, Sunglasses, Car, Water Bottle, Chair, Office Chair, Can, Cap, Hat, Couch, Wristwatch, Glass, Bag, Handbag, Baggage, Suitcase, Headphones, Jar, Vase)**

Key Objectives-

1. **Generative AI for Visuals:**
 - Implement a generative AI model capable of creating realistic and visually appealing product photoshoot visuals.
 - The model should be able to understand and simulate various lighting conditions, backgrounds, and angles commonly used in product photography.

2. **Product Recognition Filter:**
 - Develop an AI filter that can identify and isolate specific products within a given image dataset.
 - The filter should be trained to recognize a predefined set of products (e.g., apparel, electronics, accessories) and enhance their features while maintaining the overall image integrity.

3. **Exclusion of Non-Relevant Images:**
 - Implement a mechanism to filter out images that do not contain any of the specified products. This ensures that only relevant visuals are processed and enhanced.

Evaluation Criteria:

Participants will be evaluated based on the following criteria:
1. **Visual Appeal:** The generated product visuals should be aesthetically pleasing and realistic.
2. **Product Recognition Accuracy:** The filter should accurately identify and enhance the specified products within the images.
3. **Exclusion of Non-Relevant Images:** The solution should effectively filter out images that do not contain the target products.
4. **Innovation and Creativity:** Bonus points will be awarded for innovative approaches and creative enhancements to the product visuals.

Note:

Participants are encouraged to leverage pre-existing generative models or develop custom models based on the specific requirements of the problem. Additionally, participants should consider **ethical considerations, ensuring that the solution respects privacy and intellectual property rights.**