**Workflow**

1. **Watermark Creation:**
   * A secret key will be used to generate a predictable watermark for embedding.
   * The watermark will be embedded in the product image.
   * Initially, PDF files will be used to ensure lossless image transfer and verification.(later we have option for .ai and .cdr as other lossess formats )
2. **Data Preparation:**
   * A dataset will be prepared to simulate real-world image scenarios, including defocusing, blurring, and other distortions common in mobile phone images.
3. **Model Development:**
   * **Encoder-Decoder Architecture** will be developed using three Convolutional Neural Networks (CNN).
   * **Encoder:** Embeds the generated watermark into the image.
   * **Decoder:** Predicts if the image is genuine or altered by checking for the watermark's presence.
4. **Image Capture and Verification:**
   * A high-resolution image capture application will be created.
   * Captured images will be sent via API for verification to check if the watermark is present.