**High Level Design**

**Project: Finance Banking**

**Module Name: Document Enhancement**

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**High Level Design of documents enhancement using OpenCV and PIL**

**FlowDiagram of Document enhancing process:**

1 Document: The document will be in form of PDF/JPG/PNG. The document will be received from Rest API.

2.Quality Check: Once the document is received, basic quality check which are some of function of used in main application logic will be used. This is including brightness, contract and deschew.

3.Discard Images: Some of the images which are below the threshold will be discard. This indicates these images can not be enhanced.

4.Croped Images: Although document detection performs the cropping the images. Optional check will be provide to crop images.This will be configured used using configuration files

5.Deskew: This step will make the image in proper horizontal and vertical alignment,

6.Alignment check: This will be performed to check the image alighed and will be optional and configurable.

7. Brightness/Contrast check: This step will be performing the brightness/contrast check and if required image will be enhanced.

8. Same as 7

9. Finally image will be saved in folder.ClientID\_Used\_DocumentCategory

Approach: All 3 approaches will be deployed with configuration to switch between then.

1. Open CV

2. EsrGAN

3. Unet.