

## Mahmoud Medhat <mahmoud.abozeid98@eng-st.cu.edu.eg>

## **Questions Regarding Image Processing Project (OMR)**

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Wed, Dec 16, 2020 at 2:29 PM

Hello Mahmoud Inline.

On Wed, 16 Dec 2020, 13:24 Mahmoud Medhat, <mahmoud.abozeid98@eng-st.cu.edu.eg> wrote:

Dear, eng. Yousef

Would you kindly answer some of our questions regarding the project?

1. Will the resolution and ppi of any test case be low enough to cause any extraction issues? (this is especially important for camera-captured images)

Hopefully not. But in any case it is a competition, so if any test case is unrecognisable, it will fail for all submissions.

1. Will a test case differ drastically from another one in terms of resolution?

## Yes it may.

- 1. Can an image be rotated till it's nearly 90 degrees?
- 1. Can an image be rotated till it's upside down?
- 2. What's a skewed image? Is it like (1) or (2) or something completely different?





Either of them is possible and other combinations with rotation and scaling.

- 1
- 2. How severe is this skewing effect?
- 1. Will we be provided with any handwritten test cases?

## Before delivery.

1. Can we use a simple neural network after all the segmentation steps to recognize just a single note?

After extracting features from it, you can use a classifier. But NN cannot be used to extract features & classification

1. Can we use opency alongside scikit-image?

It is your responsibility to make sure it works in the given docker environment.

1. We know that erosion, for example, is a primitive function. Are "hough\_lines()" and "probabilistic\_hough\_line()" considered primitive functions?

Yes.