

IMAGICAL – THE IMAGE EDITOR

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- Our application provides a handful of tools to the user to apply different filters to one or more image(s) selected by the user.
- We have implemented some filters, which are already available in most of applications in playstore and some brand-new creative ideas for advanced users.
- We have used
 1. *dlib*,
 2. *numpy* and
 3. *opencv* in backend.
- For frontend, we have used
 1. *react*,

2. *HTML*,
3. *CSS* and
4. *DOM*.

- We have implemented the following basic features:
 1. Cartoon Image: The image provided by the user is animated in an unrealistic or semi-realistic style.
 2. Edge Detection: It shows out the points of major difference.
 3. Cropping: Lets user select a part of the image and crops it.
 4. Grayscale: The image becomes grayscale.
 5. Blur: The image becomes blurred.
 6. Canny: Edge Detection
 7. Applying Border: Border can be applied to the image to make it look more beautiful.
 8. Adding Text String: Text string can also be added.
 9. Cartoon Filter – converts an image into its cartoon version

- Some of the advanced features are listed below:
 1. Denoising – Removes the noise from image
 2. Image Addition – Adds two images pixel by pixel
 3. Image Subtraction - Subtracts two images pixel by pixel
 4. Lipstick Filter – Detects lips and adds lipstick effect of given color
 5. Dog Filter – Detects face and adds dog features
 6. Specs and Hat Filter – Detects face and eyes and add cowboy hat and shades.