Gallery Organizer

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Aim:
The aim of our project is to create an application which will organize pictures into multiple sets where each set would contain pictures in which a particular person's face can be seen. If multiple people are present in a single image then the image must be visible in all the sets corresponding to the faces identified by the application.

Approach and Roadmap:
We will begin developing this application by finalizing upon a facial recognition algorithm and creating a well defined interface for the same so that it can be integrated seamlessly with the application. Parallely, we will work on a high level design of the application which would enlist each module within the application, how these modules would interact with one another and finally how a user will interact with the application. Finally, we will work on developing each of the modules that are in the design and integrate them with each other and with the classifier. Each of the first three tasks would be picked by one of the members in our team and the final development and integration would be done together as we proceed.

Testing and Quantifiable Results:
We plan to test the application as a whole by measuring its accuracy in correctly obtaining all images of a particular person among several images, that is, precision and recall or effectively F1 score. This will also serve as a "measurable aspect" of our application. In addition to this we will also create multiple unit and integration tests as we move further in the development cycle especially during the design of the application.

R0.8: We input a picture of a person and the application outputs all the images with that person in it.
R1.0: We provide the application a directory with pictures of 4 people and it outputs sets of images. Each set would consist of images of the corresponding person in it.
R1.2: We provide the application a directory with pictures of several people and it prompts all the different people that were identified in the directory. The user will then pick a particular person or a group of people and the application will return the corresponding set(s) of images.