**Purpose:** The purpose of this project was to creatively apply makeup to the face of

Nicholas cage. The image was contained in a shared folder, and had to be accessed using the google drive API, before being altered programmatically.

**Challenges:** Some challenges faced when creating a solution was to find an appropriate

package capable of completing the apply\_makeup task. A few packages were either broken or out of date(pyvisage), and some other packages may have overly

complicated the task.

**Modules:** auth, drive\_access, my\_image\_processing

**Architecture:** drive\_access obtains details for access to the google drive folder

sends the details to auth.py for authorization of access

drive\_access then downloads the image of nicholas\_cage.jpg

sends the image over to my\_image\_processing

my\_image\_processing uses a function: apply\_makeup to change the picture

my\_image\_processing finally displays the altered image.

Below is a sample of the final product!

BEFORE AFTER





Acknowledgement and Modules: Google-API-Tutorial (Sam Lopez), Image and ImageFilter modules \*\*\*Please feel free to delete the image of Nicholascage in the zipped folder, and run the code. It is only present for completion purposes.