Eleven matlab files are used

- morphing_starter.m
- correspondences.m
- tridel.m
- morphed_im.m
- warp.m
- mytsearch.m
- computeAffine.m
- outofbounds.m
- meanface.m
- meanfaceTransfo.m
- averageTransfo.m

To run the code, you need to open and run the morphing_starter.m file.

The code needs pictures of the same size to work. For that, two students images (amandine.jpg and stas.jpg have been resized to 1600x1200 like the others images).

The images used in the assignment is already in the code (amandine.jpg and branson.jpg). To change it for another image (more images are available in the images/students folder), change the code at line 4 & 5 of mophing_starter.m, make sure to change the name correspondingly on line 7, 8 & 9 to fit the firstname of the person.

The code to save the outputs images and video or print the figures have been commented

When needed (morph, mean face transformation and average transformations) if the corresponding points between the two images already exists (either .mat or .txt), the cpselect tool will open them directly. Once opened the user can add/remove or adjust the points. If the corresponding points do not already exist, the user will have to defined them in the cpselect tool.

The corresponding points are the only user inputs needed. The program will run the code for the morph sequence, the mean face computation, the mean face transformations and then the average face transformations.

The user should be able to see through messages in the console the current step being computed.

The outputs will be located in the video folder (as an .avi) and:

- images/outputs/morphed folder for the morphing sequence
- images/outputs/meanface folder for the mean face computation and transformations
- images/outputs/averages folder for the average faces transformations

The folder points contains the differents points in differents formats (.mat or .txt), defined by myself or the other students.

The folder images also contains:

- students folder for the original pictures
- studentspts folder the pictures with the points
- average folder for the average face from online
- triangulations folder for the outputs triangulation of the code