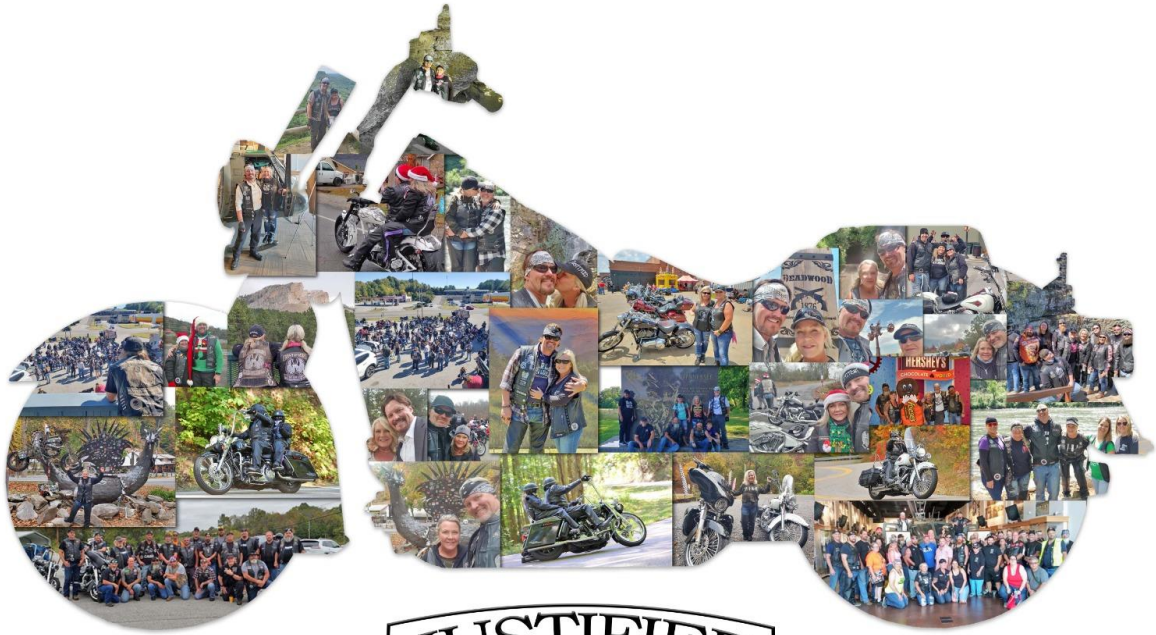A program to look through a directory of pictures, find the focal points in the photos (people) and evaluate the image to the include the full length and width of all subjects contained therein and then place the resulting output in a variety of silhouette based artwork, binding the altered photo to the boundaries of each shape. Each photos will then need to be re-scaled based on the number of analyzed photos to fit inside of the selected shape. The resulting image would be a collage of photos contained within the artwork with minimal overlapping (which can be set within the GUI). The GUI design will be similar to shapecollage.com with the addition of AI and ML to identify the subjects and bind the photos into the selected shape without cutting off the subjects with the edges of the the artwork. The photo do not necessarily need to be cropped as some of the extraneous (non subject) space may be used to fill blank silhouette space. I will need exclusive rights to the resulting code and GUI.

The MVP will be developed as follows:

• Develop a python program that will look through directory of pictures, find the focal points in the photos (Humans) and evaluate the image to place in silhouette (considering no overlaps and full height and weight of all subjects there in)

• For collage silhouette we would like to consider Heart and Circle Shapes. The motorcycle presented previously could be a feasibility test of the methods established for the heart and circle and more complex shapes may be introduced for testing purposes.

• The MVP GUI will only include directory of photos and silhouette (shapes) to create the collage

•The resulting output of the GUI "create" functionality will result in multiple output results with a PSD being the primary desired extension.

JUSTIFIED