1. PROJECT TITLE

-- Expansion of Image Training Data Set Through Image Processing/Transformation Using Matlab.

2. PROJECT DESCRIPTION

Four images will be read into the workspace for four common aquarium fish species. These four species are part of a larger image collection that will be used for later image classification:

1-- Siamese Fighting Fish (Betta splendens) The crowntail variety of the fish was selected due to its more dramatic fin structure

2-- Three Spot Gourami (Trichopodus trichopterus)

3-- Red-tailed Black Shark (Epalzeorhynchos bicolor)

4-- Tiger Barb (Puntigrus tetrazona)

This assignment will be used to create a means of expanding/refining the training image data set by creating slight variations (image size standardization, image flipping, image rotation) in the original images.

3. SET UP:

1-- Load the file, 'Assignment1.mlx', the needed image files (betta.jpeg, gourami.jpeg, redtail_shark.jpeg, tiger_barb.jpeg ), and the folder "Output Images" into the same folder and make a note of the directory path leading to this contents folder.

2-- Determine the present working directory with the "pwd" command in Matlab Command Window. Note the ans = 'result' where 'result' is the current working directory.

3-- In the Matlab Command Window, enter "cd" followed by the directory path leading to the contents folder noted in 2.). This will change the current working directory to the directory path leading to the contents folder.

4-- Verify the new present working directory change by retyping "pwd" in the Matlab Command Window.

3. PROJECT FOLDER CONTENTS

-- This README.pdf file.

-- “Assignment1.mlx” file.

-- “Assignment1.mlx_version2” file.

-- Four original .jpeg images: betta.jpeg, gourami.jpeg, redtail_shark.jpeg, tiger_barb.jpeg

-- “Output_Images” folder