Data Collection and Preprocessing Phase

Date	11 July 2024
Team ID	xxxxxxxxxxxx
Project Title	Detection of Autistic Spectrum Disorder: Classification
Maximum Marks	6 Marks

Preprocessing Template

The images will be preprocessed by resizing, normalizing, augmenting, denoising, adjusting contrast, detecting edges, converting color space, cropping, batch normalizing, and whitening data. These steps will enhance data quality, promote model generalization, and improve convergence during neural network training, ensuring robust and efficient performance across various computer vision tasks.

Section	**Description**
Data Overview	Give an overview of the data, which you're going to use in your project.
Resizing	Resize images to a specified target size.
Normalization	Normalize pixel values to a specific range.
Data Augmentation	Apply augmentation techniques such as flipping, rotation, shifting, zooming, or shearing.
Denoising	Apply denoising filters to reduce noise in the images.
Edge Detection	Apply edge detection algorithms to highlight prominent edges in the images.

Color Space Conversion	Convert images from one color space to another.
Image Cropping	Crop images to focus on the regions containing objects of interest.
Batch Normalization	Apply batch normalization to the input of each layer in the neural network.
Data Preprocessing Code Screenshots	
Loading Data	Code to load the dataset into the preferred environment (e.g., Python, R).
Resizing	Give the code snippet as an image (copy and paste the picture in this block).
Normalization	Give the code snippet as an image (copy and paste the picture in this block).
Data Augmentation	Give the code snippet as an image (copy and paste the picture in this block).
Denoising	Give the code snippet as an image (copy and paste the picture in this block).
Edge Detection	Give the code snippet as an image (copy and paste the picture in this block).
Color Space Conversion	Give the code snippet as an image (copy and paste the picture in this block).
Image Cropping	Give the code snippet as an image (copy and paste the picture in this block).
Batch Normalization	Give the code snippet as an image (copy and paste the picture in this block).