**Data Collection and Preprocessing Phase**

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| Date | 15 March 2024 |
| Team ID | 739877 |
| Project Title | WCE Curated Colon Disease Classification using Deep Learning |
| Maximum Marks | 6 Marks |

**Preprocessing**

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.

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| **Section** | **Description** |
| Data Overview | The dataset is sourced from **Kaggle**, consisting of colonoscopy images labeled with different colon diseases. |
| Resizing | Images are resized to a target size of **224x224 pixels** |
| Normalization | Pixel values are normalized to the range **[0, 1]** by dividing by **255**. |
| Data Augmentation | Augmentation techniques like **shearing**, **zooming**, and **horizontal flipping** are applied to enhance the dataset. |
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| **Data Preprocessing Code Screenshots** | |

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| Loading Data |  |
| Resizing |  |
| Normalization |  |
| Data Augmentation |  |