**Data Collection and Preprocessing Phase**

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| Date | 01 May 2025 |
| Team ID | 739942 |
| Project Title | CovidVision: Advanced COVID-19 Detection From Lung X-Rays With Deep Learning Using IBM Cloud |
| 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.

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| **Section** | **Description** |
| Data Overview | Overview of the dataset is sourced from **kaggle,** consisting of **chest X-ray images to train and evaluate its deep learning model for detecting COVID-19 cases.** |
| Resizing | Images are resized to a target size of **224x224 pixels** |
| Normalization | Normalize pixel values to a range of **[0,1]** by dividing by 255. |
| Data Augmentation | Augmentation techniques such as flipping, zooming, and shearing are applied enhance the dataset. |
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| **Data Preprocessing Code Screenshots** | |
| Loading Data |  |
| Resizing |  |
| Normalization |  |
| Data Augmentation |  |
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