**Model Development Phase Template**

|  |  |
| --- | --- |
| Date | 15 March 2024 |
| Team ID | SWTID1720707508 |
| Project Title | WarLens: Transfer Learning for Event Classification in Conflict Zones |
| Maximum Marks | 5 Marks |

**Feature Selection Report Template**

In the forthcoming update, each feature will be accompanied by a brief description. Users will indicate whether it's selected or not, providing reasoning for their decision. This process will streamline decision-making and enhance transparency in feature selection.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature** | **Description** | **Selected (Yes/No)** | **Reasoning** |
| Image Augmentation | Techniques to artificially increase the size of the dataset by creating modified versions of images. | Yes | Helps in improving model generalization and handling class imbalance. |
| Image Normalization | Standardizing image sizes and quality. | Yes | Ensures consistency in input data, improving model training and performance. |
| Duplicate Removal | Identifying and removing duplicate images. | **Yes** | Ensures dataset uniqueness, preventing skewed model training and evaluation. |
| Image Enhancement | Improving the quality of images using algorithms. | **Yes** | Enhances low-quality images, improving model input data. |
| Train-Test Split | Splitting data into training and testing sets. | Yes | Necessary for model evaluation and validation. |
| Predicting and Reporting | Predicting on the test set and generating a classification report and confusion matrix. | Yes | Essential for assessing model accuracy and identifying misclassifications. |
| Plotting Accuracy/Loss | Plotting training and validation accuracy and loss over epochs. | Yes | Visual aid for understanding model convergence and performance trends. |