**Project Initialization and Planning Phase**

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| Date | 15 March 2024 |
| Team ID | SWTID1720707508 |
| Project Title | WarLens: Transfer Learning for Event Classification in Conflict Zones |
| Maximum Marks | 3 Marks |

**Project Proposal (Proposed Solution) template**

This project proposal outlines a solution to address a specific problem. With a clear objective, defined scope, and a concise problem statement, the proposed solution details the approach, key features, and resource requirements, including hardware, software, and personnel.

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| **Project Overview** | |
| Objective | To develop an advanced system that accurately classifies events in conflict zones using transfer learning techniques to analyze multimedia data such as images and videos. |
| Scope | The project involves developing and deploying a deep learning model fine-tuned on conflict-specific data to classify events like protests, military activities, humanitarian crises, and infrastructure damage. |
| **Problem Statement** | |
| Description | Organizations operating in conflict zones face significant challenges in gathering and analyzing multimedia data quickly and accurately. Current methods are time-consuming, prone to error, and often lack completeness, which hampers effective decision-making and timely response. |
| Impact | Solving this problem will enable humanitarian organizations, NGOs, government agencies, and media outlets to make informed decisions swiftly, allocate resources more efficiently, and enhance the safety and effectiveness of their operations. Accurate and timely data will improve response times, ensure appropriate aid distribution, and provide credible reports, thereby mitigating the effects of conflicts on affected populations. |
| **Proposed Solution** | |
| Approach | WarLens will use transfer learning with pre-trained deep learning models (such as MobileNetV2) and fine-tune them on a dataset specific to conflict zones. The methodology includes data augmentation, model training with early stopping, and validation to ensure high accuracy. The system will be implemented using Python frameworks and libraries, and deployed using a user-friendly interface. |
| Key Features | Transfer Learning, Real-time Analysis, User-friendly Interface, Scalability, Safety |

**Resource Requirements**

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| **Resource Type** | **Description** | **Specification/Allocation** |
| **Hardware** | | |
| Computing Resources | CPU/GPU specifications, number of cores | e.g., 2 x NVIDIA V100 GPUs |
| Memory | RAM specifications | e.g., 8 GB |
| Storage | Disk space for data, models, and logs | e.g., 1 TB SSD |
| **Software** | | |
| Frameworks | Python frameworks | e.g., Flask |
| Libraries | Additional libraries | e.g., scikit-learn, pandas, numpy |
| Development Environment | IDE, version control | e.g., Jupyter Notebook, Git |
| **Data** | | |
| Data | Source, size, format | e.g., Kaggle dataset, 10,000 images |