**Project Initialization and Planning Phase**

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| Date | July, 2024 |
| Team ID | 739831 |
| Project Title | Zombie detector using Machine Learning |
| Maximum Marks | 3 Marks |

**Project Proposal (Proposed Solution) template**

The concept of zombies, though fictional, captivates the imagination and serves as a metaphor for various real-world threats. The Zombie Detector project aims to develop a system capable of identifying "zombie-like" behaviors in a simulated environment. This could include detecting erratic movement patterns, unusual physiological signs, or specific auditory/visual cues.

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| **Project Overview** | |
| Objective | Enhance understanding of pattern recognition and anomaly detection.  Create a platform for testing and developing advanced machine learning algorithms.  Provide a novel approach to understanding crowd dynamics and behavioral analysis. |
| Scope | This project enables the learner to understand the zombie detection during the zombie apcolyes |
| **Problem Statement** | |
| Description | The Zombie Detector project aims to create an innovative system capable of identifying "zombie-like" behaviors in a simulated environment. The system will use a combination of sensors, cameras, and machine learning algorithms to detect erratic movement patterns, unusual physiological signs, and specific auditory/visual cues indicative of such behaviors. |
| Impact | Scientific Contribution: Advance the fields of machine learning, pattern recognition, and behavioral analysis.  Practical Applications: Improve security systems by detecting abnormal behaviors in real-time.  Educational Value: Serve as a case study for interdisciplinary research combining computer science, engineering, and behavioral sciences. |
| **Proposed Solution** | |
| Approach | By utilizing the advanced analytics tools to analyze and segment customer data effectively. |
| Key Features | -businesses can improve customer satisfaction and loyalty.  -Segmentation provides insights into customer preferences and demands, aiding in the development of new products or customization of existing offerings.  -enables businesses to differentiate themselves from competitors by offering unique value |

**Resource Requirements**

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| **Resource Type** | **Description** | **Specification/Allocation** |
| **Hardware** | | |
| Computing Resources | CPU/GPU specifications, number of cores | T4 GPU |
| Memory | RAM specifications | 8 GB |
| Storage | Disk space for data, models, and logs | 1 TB SSD |
| **Software** | | |
| Frameworks | Python frameworks | Flask |
| Libraries | Additional libraries | scikit-learn, pandas, NumPy, seaborn, matplotlib |
| Development Environment | IDE, version control | Jupyter Notebook, VS code |
| **Data** | | |
| Data | Source, size, format | Kaggle dataset, 614, csv |