**`project Development Phase**

**Model Performance Test**

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| Date | 19 November 2023 |
| Team ID | **Team 592303** |
| Project Name | Project – Predicting lumpy skin disease |
| Maximum Marks | 4Marks |

**Model Performance Testing:**

Project team shall fill the following information when working for VAPT testing for a target .

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| **S.No.** | **Parameter** | **Values** | **Screenshot** |
|  | Information gathering | Footprinting -  Recconicessines - | - Search Engines: Using search engines to gather information about a target by searching for publicly available data.  - Social Engineering: Extracting information from social media platforms, forums, or other online sources where individuals may share details about their work, interests, or affiliations.  - WHOIS Databases: Extracting information about domain registrations, including details about the domain owner, registration date, and contact information.  1. Literature Review:  - Conduct a thorough review of scientific literature, research papers, and articles related to lumpy diseases in the context of agriculture or veterinary science. Look for information on symptoms, causative agents, affected species, and existing classification methodologies.  2. Online Databases and Repositories:  - Explore relevant online databases, repositories, and academic journals that may contain data or studies related to lumpy diseases. This could include databases related to plant pathology or veterinary medicine.  3. Government and Agricultural Reports:  - Check for reports from government agricultural agencies or veterinary organizations that might contain valuable information about the prevalence and classification of lumpy diseases in specific regions. |
|  | Scanning the target | Scanning info -  Risk factors - | Risk factors for a project involving the classification of lumpy diseases can be diverse, spanning technical, ethical, and operational aspects. Here are some potential risk factors to consider:   1. **Data Quality and Availability:**    * **Risk:** Insufficient or poor-quality data can lead to inaccurate classification models.    * **Mitigation:** Ensure the availability of high-quality, diverse, and representative datasets. Implement data preprocessing techniques to handle missing or noisy data. 2. **Model Accuracy and Generalization:**    * **Risk:** Overfitting to the training data may result in a model that performs poorly on new, unseen data.    * **Mitigation:** Use appropriate model validation techniques, such as cross-validation, and consider employing regularization methods to improve generalization. |
| 3. | Gaining access | Access process -  Vulnerability found - | Access Process:  - Description: Establish secure access procedures to lumpy disease data, ensuring only authorized personnel with a legitimate need can retrieve or manipulate the information.  - Objective: Safeguard sensitive agricultural and veterinary data, mitigating the risk of unauthorized access and maintaining confidentiality.  Vulnerability Found:  - Identification: Detected a potential weakness in the lumpy disease data classification system.  - Implication: Address the vulnerability promptly to prevent unauthorized access or exploitation, enhancing the overall security of the classification process. |
| 4 | Maintaining access - Automation ( AI implementation ) | AI tools used -  Automation implemented - | AI Tools Used:  - Description: Employed TensorFlow and PyTorch, advanced AI frameworks, for precise lumpy disease data classification.  Automation Implemented:  - Description: Automated data preprocessing and model training, enhancing efficiency in lumpy disease classification workflows. |
| 5 | Covering Tracks & Report | Vulnerability risk factors -  VAPT report - | Vulnerability Risk Factors:  - Description: Identified potential risks in lumpy disease data classification, including data bias, model vulnerability, and privacy concerns.  - Mitigation: Addressing these factors ensures robust, ethical, and secure development and deployment of the classification system.  VAPT Report:  - Description: Conducted Vulnerability Assessment and Penetration Testing (VAPT) to analyze and fortify the security of the lumpy disease data classification system.  - Outcome: The report highlights vulnerabilities, recommends mitigation strategies, and validates the resilience of security measures. |