Project Design Phase-I
Proposed Solution Template

Date	30 October 2023
Team ID	Team-593479 (2.9)
Project Name	Malware Detection and Classification
Maximum Marks	2 Marks

Team Members:

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Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	**Parameter**	**Description**
1.	Problem Statement (Problem to be solved)	Developing a comprehensive system that encompasses the detection of malware, enhancing user awareness about potential threats, utilizing evolving threat identification techniques, and establishing a robust classification method for various type of malwares to ensure proactive and effective cybersecurity measures.
2.	Idea / Solution description	Creating a comprehensive cybersecurity solution integrating a user-friendly website with robust user authentication, AI-driven classification of threats, user education on malware risks, a cloud-based infrastructure that adheres to compliance rules, and implements zero-day vulnerability scanning alongside

		secure file upload and storage functionalities to ensure proactive and comprehensive protection for a secure experience.
3.	Novelty / Uniqueness	Educating users engages in a cyber awareness environment. The proposed solution represents a pioneering cybersecurity framework by amalgamating innovative elements such as a user-friendly website with robust authentication, AI-powered threat classification for adaptive detection. This comprehensive approach not only ensures user accessibility and security but also integrates cutting-edge technology for dynamic threat recognition, proactive user education, and meticulous adherence to regulatory requirements, thereby creating a holistic and forward-thinking defence system against evolving threats.
4.	Social Impact / Customer Satisfaction	The AI-driven threat classification and zero-day vulnerability scanning promise advanced and adaptive security measures, ensuring the protection of sensitive data. Compliance adherence and secure file handling not only inspire trust but also guarantee the safety and integrity of user information. Ultimately, this comprehensive solution is anticipated to enhance user confidence, trust, and satisfaction by delivering robust, user-centric cybersecurity while fostering a safer digital environment for all. This comprehensive approach ensures heightened safety in digital interactions, fostering a culture of awareness and trust. Users are empowered with advanced protection

		and knowledge, contributing to a more secure and informed digital landscape.
5.	Business Model (Revenue Model)	The business model can rely on a freemium model, offering basic services for free. Premium tiers could provide advanced AI-driven threat analysis, detailed reports, and faster scanning for a subscription fee. Additional revenue streams might include corporate licensing for enterprise-level security, customized solutions for businesses, and partnerships with cybersecurity firms.
6.	Scalability of the Solution	The proposed solution has significant scalability potential due to its modular design and reliance on cloud-based infrastructure. It can easily accommodate an increasing user base by leveraging the flexibility of cloud services, allowing seamless scaling to meet growing demands. The AI-driven threat classification and user education components can adapt and expand their capabilities with additional data and evolving threats. Furthermore, the solution's compliance adherence and secure file handling features can be optimized to handle larger volumes of data while maintaining stringent security protocols. Overall, the cloud-based architecture and adaptable components enable the solution to scale effectively and efficiently to meet the escalating needs of a growing user base.