Challenge Week – 2

Problem Statement: Black Box Challenge - Innovative Problem Submission System

The challenge is to design and build an innovative "Black Box" that will be placed at various locations in the college. The Black Box serves as a problem submission system, allowing students to submit intriguing challenges, problem statements, and ideas anonymously. Participants are encouraged to leverage suitable technologies like IoT, Networking, or Web technologies to create a seamless and efficient problem submission process. The Black Box should collect and store the submitted problem statements securely until they are either collected by the centralized authority or automatically transferred to the centralized authority for review and consideration.

Set of Rules:

Technology Choices: Participants are free to use suitable technologies such as IoT (Internet of Things), Networking, Web Technologies, or any other innovative approach to design the Black Box. The chosen technology should align with the problem statement's objectives.

Problem Statement Format: The Black Box should accept problem statements in a specified format, allowing students to describe their challenges or ideas concisely.

Data Security: Participants must prioritize data security and implement measures to protect the integrity of the submitted problem statements during storage and transfer.

Storage Capacity: The Black Box should have sufficient storage capacity to accommodate a significant number of problem statements, ensuring that it does not reach its limit quickly.

Notification System: If the Black Box is equipped with IoT or networking capabilities, participants should implement a notification system to alert the centralized authority when new problem statements are submitted.

Transfer Mechanism: If automatic transfer to the centralized authority is part of the design, participants must ensure a reliable and efficient mechanism for data transfer.

Power Efficiency: For IoT or electronic-based designs, participants should aim to make the Black Box power-efficient, optimizing power consumption for prolonged operation.

User-Friendly Interface: The Black Box should have an intuitive and user-friendly interface for students to interact with when submitting their problem statements.

Centralized Authority Access: The centralized authority should have secure and controlled access to the stored problem statements, ensuring they can review and act upon them appropriately.

Maintenance and Reliability: Participants must consider the maintenance requirements and reliability of the Black Box design, aiming for a robust and long-lasting solution.

Documentation: All participants must provide comprehensive documentation for their Black Box design, including its architecture, components, technical details, and operational instructions.

Original Work: Participants must ensure that their Black Box design is entirely their original work. Plagiarism or copyright infringement will lead to disqualification.

Winner Selection: The entries will be evaluated based on innovation, functionality, usability, data security, and adherence to the problem statement and rules. The panel of judges will declare the winner, and their decision will be final.

Participants are encouraged to approach the challenge with enthusiasm and inventiveness, creating a problem submission system that enhances the college's problem-solving culture and fosters student engagement. Good luck and let your innovation shine through the Black Box!