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Project title: Reward Point Calculation Portal for TAC

PROBLEM STATEMENT:

The process of calculating reward points (RP) for Technical Advisory Committee (TAC) projects presents several challenges, necessitating the development of an automated solution. These challenges can be categorized into the following subdivisions:

- **Accuracy concerns:** The current method of calculating reward points relies heavily on manual intervention, leading to inefficiencies and errors. Manual data entry, calculation, and verification increase the likelihood of inaccuracies and consume valuable time and resources.
- **Time Consumption and Delays:** Manual RP calculation involves time-consuming tasks like inputting scores by reviewers, aggregating data by administrators, and awaiting assessments, causing project lifecycle prolongation.
- **Data accessibility:** Centralizing database access facilitates seamless data retrieval and analysis, enhancing overall system functionality and user experience.
- **Manual processes:** Laborious tasks such as work log calculation and plagiarism detection hinder efficiency, necessitating automated solutions for improved productivity.

PROJECT-FLOW:

Purpose:

The project aims to develop an automated system for computing reward points in Technical Advisory Committee (TAC) projects. By centralizing data and automating manual processes such as work log calculation and plagiarism detection, the system seeks to improve accuracy, efficiency, and transparency in reward point calculation. This initiative ultimately optimizes the evaluation process for TAC projects, ensuring fair and consistent assessments while reducing administrative overhead.

Scope:

The system will provide separate user interfaces and functionalities for administrators and reviewers. It will automate the calculation of final reward points based on predefined criteria and provide a transparent and efficient process for managing TAC projects.

Business Context:

Efficient management of reward points for Technical Advisory Committee (TAC) projects is essential within academic institutions to ensure fair assessment and recognition of student efforts. By automating the reward point calculation process, the project aims to streamline evaluation methods, aligning with institutional goals of promoting academic excellence and fostering innovation among students. This automation enhances efficiency in assessing project performance, facilitating a transparent and equitable evaluation process.

Consideration:

- Both admin and reviewer users must possess active accounts on the platform for authentication and access.
- Access to internet-enabled devices is necessary for both admin and reviewer users to interact with the system efficiently.

Users:

- **Admin:** They are responsible for adding reviewers, assigning tasks, and providing scores for initial submissions and final reports. They lack direct access to review marks, team communication, plagiarism reports, or work logs. However, their actions influence criteria such as plagiarism and work log skills based on stored data.

- **Reviewer:** Reviewers play a crucial role in the evaluation of TAC projects by providing review marks and feedback. They possess access to review marks and team communication, enabling them to thoroughly assess project submissions. Importantly, their evaluations significantly impact the overall assessment of TAC projects, directly influencing the final reward points calculation.

Functional Requirements:

1) Automated Calculation Process:

- The system shall automate the process of calculating final reward points for TAC projects.
- Automated calculations shall occur when reviewers submit their assessment marks for each criterion.

2) Inclusion of Criteria:

- The reward point calculation process shall incorporate criteria such as Initial Submission, Final Report, Plagiarism check, Review Marks, Team Communication, and Work Log.
- Each criterion shall contribute to the overall reward point calculation based on predefined weights.

3) Data Retrieval from Database:

- Data required for assessing plagiarism, team communication, and work log skills shall be retrieved from the database.
- The system shall utilize this data to compute corresponding reward points accurately.

4) Algorithm Implementation:

- Predefined algorithms shall be implemented to calculate reward points for each criterion.
- These algorithms shall ensure consistency and fairness in the assessment process.

5) Accuracy and Consistency:

- The system shall prioritize accuracy and consistency in calculating reward points to ensure fairness in TAC project assessments.
- Calculation results shall be reliable and reflect the true performance of project teams.

6) Validation and Verification:

- The automated reward point calculation process shall undergo validation and verification procedures to ensure its reliability and effectiveness.
- Regular testing and quality assurance measures shall be conducted to validate the accuracy of calculation results.

FLOW CHART:

