DEPARTMENT OF APEX INSTITUTE OF TECHNOLOGY

PROJECTPROPOSAL

1. Project Title: -Ecommerce Fake Product Reviews Monitor and Deletion System

2. Project Scope: - (Max 500 words)

The **Ecommerce Fake Product Reviews Monitor and Deletion System** is a comprehensive project designed to tackle the rampant issue of fake and fraudulent product reviews within the ecommerce industry. In an age where online shopping heavily relies on customer feedback and ratings, the proliferation of fake reviews poses a significant threat to consumer trust and overall market integrity. This project aims to develop a robust system that monitors, detects, and removes fake product reviews, thereby ensuring that the reviews presented to potential buyers are genuine and reliable.

1. **Review Data Collection:** The system will integrate with ecommerce platforms' review sections and collect review data for analysis. This data will encompass product information, reviewer profiles, ratings, and textual content.

2. **Machine Learning Algorithms:** Implementing advanced natural language processing (NLP) and machine learning techniques, the system will analyze the reviews' text to identify potential indicators of fake content. It will consider factors like language patterns, sentiment analysis, and review frequency to establish a credibility score for each review.

3. **User Behavior Analysis:** The project will also monitor user behavior to detect patterns of suspicious activity. This includes identifying users who post a disproportionately high number of reviews, exhibit inconsistent reviewing behaviors, or engage in review exchange networks.

4. **Review Verification:** To enhance the accuracy of the detection process, the system may incorporate mechanisms to validate reviews. This could involve reaching out to purchasers to verify the authenticity of their feedback.

5. **Automated Deletion and Reporting:** Reviews that are confidently identified as fake will be automatically removed from the platform. Simultaneously, the system will generate detailed reports for the platform administrators, outlining the reasons for removal and offering insights into the current state of fake reviews.

6. **User Notification:** If a review is removed, the respective user will receive a notification explaining the reason. This promotes transparency and educates users about the platform's commitment to maintaining genuine feedback.

7. **Admin Dashboard:** A comprehensive dashboard will be developed for ecommerce platform administrators. This dashboard will display real-time statistics, including the number of fake reviews detected, removed, and prevented. It will also facilitate manual review if a review's authenticity is in doubt.

In conclusion, the Ecommerce Fake Product Reviews Monitor and Deletion System addresses a critical concern in the ecommerce landscape. By leveraging advanced technologies and strategies, it aims to restore consumer trust in online reviews, promote fair competition among sellers, and enhance the overall shopping experience. The project's scope encompasses every stage of the review management process, from data collection to system enhancement, and prioritizes accuracy, transparency, and user privacy throughout.

3. Requirements: -

- Hardware Requirements
  1. **GPU Acceleration**
  2. **Server:**
     - Processor: Quad-core or higher, modern processors (e.g., Intel Core i5 or equivalent(i3 11th gen)
     - Memory (RAM): 8GB or more
     - Storage: 256GB SSD or higher
  3. **Network**
  4. **Database:**
     - Storage: 500GB HDD or SSD
     - Database Software: MySQL or PostgreSQL
  5. **Monitoring and Management**
- Software Requirements

  1.**Operating System**(Mac OS, Windows OS)

  2. **Development Environment:**
     - Integrated Development Environment (IDE) like Visual Studio Code, PyCharm, or Jupyter Notebook for software development and testing.

  3**. Web Framework :**
     - Flask or Django: If you plan to build a web-based dashboard for administrators, a web framework can facilitate its development.

STUDENTS DETAILS

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APPROVAL AND AUTHORITY TO PROCEED

We approve the project as described above, and authorize the team to proceed.

Name	Title	Signature (With Date)