EXPERIMENT NO:- 01

Date of Performance:

Date of Submission:

Aim: One case study on AI applications published in IEEE/ACM/Springer or any prominent journal.

Theory: **A Generative Artificial Intelligence Based Tutor for Personalized Learning**

Publication Year: 2024

Abstract:

Personalized learning refers to a system of teaching and learning where the content, methods, and assessment are tailored to each learner's needs, capacities/skills/competencies, and pace. There is abundant literature about personalized learning, describing its advantages, challenges, and approaches to implementing it. This study has explored the abundant literature and realized that while there are substantial proposed ways to achieve personalized learning, these proposals are not implemented into actionable products. This research aims to construct a Generative Artificial Intelligence (Gen AI) tutor that implements personalized learning and teaching in a higher education level course. The research methodology involved exploring literature to determine the requirements for personalized learning and designing a tutor system. The resultant system uses Custom GPT technology, Application Programming Interface (API), a repository for storing content, learners' profile information, and performance metrics. Out of the six components that make the proposed system, only the "Custom GPT" component has been implemented and tested on a course named "Applied Cryptography" in a postgraduate program. Though the preliminary results are promising, an effective assessment of the system will be made when the full implementation is completed. Further, issues related to ethics, scaling and integration with learning management systems should also be considered. Subsequent work to this study will focus on those issues.

Conclusion: Thus, We have Studied case study on AI applications published in IEEE/ACM/Springer or any prominent journal.

Sign and Remark:

R1 (2 Marks)	R2 (4 Marks)	R3 (4 Marks)	Total (10 Marks)	Signature