

## PRESIDENCY UNIVERSITY PRESIDENCY SCHOOL OF INFORMATION SCIENCE MCA PROJECT 2025 ABSTRACT REVIEW FORM

Project No: 222 Name of Student: L	atha Kamath M K	Section: 4MCA-05
Project Title: AI-Powered Virtual Health Assistant		
ABSTRACT		
The rapid advancement of Artificial Intelligence (AI) has transformed healthcare, leading to the development of AI-powered virtual health assistants that enhance accessibility, efficiency, and personalization in medical services. This paper presents HealSmart, an intelligent virtual health assistant that leverages Natural Language Processing (NLP), Machine Learning (ML), and Blockchain to provide real-time healthcare support. The system is designed to assist users with symptom analysis, AI-driven chatbot interactions, doctor recommendations, and secure medical record management. HealSmart utilizes deep learning models trained from scratch to understand patient symptoms and offer preliminary diagnoses while ensuring high accuracy through continuous learning. Its chatbot, powered by advanced NLP, engages in natural conversations, answering health-related queries and guiding users on potential medical conditions. Furthermore, the platform integrates a doctor recommendation system that suggests healthcare professionals based on symptom severity, user location, and medical history. To address security and privacy concerns, Blockchain technology is incorporated to store and manage medical records securely, enabling users to share their health data with professionals in a tamper-proof and decentralized manner. The system is available as both a web and mobile application, ensuring accessibility across different user demographics. By combining AI, blockchain, and user-friendly design, HealSmart aims to bridge the gap between patients and healthcare providers, making medical assistance more proactive, efficient, and secure. This paper discusses the system's architecture, AI training methods, and potential impact on the healthcare industry.   Keywords: AI healthcare, Virtual health assistant, NLP, Machine Learning, Blockchain, Symptom		
analysis, Medical records, Doctor recommendation.		
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Criteria	Rating (1 to 5)	
Clarity of the Problem Statement		
Relevance of the Project		
Objectives		
Innovation and Originality		
Suitability for Research Publication		
Overall Assessment	Comments	
Strengths of the Abstract:		
Weaknesses or Areas for		
Improvement:		
Recommendations	Approve Revise Rej	iect
Supervisor's Signature with Name		
Date:		