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

Project No: 222	Name of Student: Latha Kamath M K	Section: 4MCA-05
Project Title: AI-Powered Virtual Health Assistant		

ABSTRACT

The Virtual Health Assistant System is a machine learning-powered web application designed to assist users in self-assessing their health by predicting possible diseases based on input symptoms. Built using Python and Flask for the backend and standard HTML for the frontend, the system takes user-inputted symptoms and processes them through a pre-trained machine learning model. The model, serialized using pickle, classifies the input into one of several potential medical conditions with associated recommendations. This intelligent application further enriches user interaction by dynamically retrieving symptom descriptions and precautionary advice from CSV files. The system eliminates the need for database integration by using static files for data management, ensuring lightweight performance and ease of deployment. The interface includes supplementary pages like About, Contact, Developer, and Blog to provide users with additional context, information about the project, and developer contact details. This makes the system not only functional but also user-friendly and informative. The primary objective of this tool is to deliver an accessible, real-time medical pre-diagnosis experience for users while promoting awareness of health symptoms. Although not a replacement for professional consultation, it serves as a valuable first-level health guide and can be extended to incorporate real-time doctor suggestions and voice-based interaction in future developments.

Keywords: Machine Learning, Symptom Analysis, Flask, Python, Personalized Medicine, Healthcare AI, CSV Data, Real-time Prediction, Pickle Model, Web Application, Self-Diagnosis, Static Web Pages.

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 ☐ Reject ☐
Supervisor's Signature with Name	_____
Date:	_____