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Vellore Institute of Technology

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SCHOOL OF COMPUTER SCIENCE ENGINEERING and INFORMATION SYSTEMS

FALL Semester – 2025-26

BITE497J – Project I

B.Tech (IT)

0th Review

Register Number	22BIT0013, 22BIT0100
Student Name	Tanish Maheshwari, Manya Dsouza
Project Code (Course Code)	BITE497J – Project I
Project Domain	Artificial Intelligence & Natural Language Processing
Project Title	PhilanthroBot: A Trust-Centric Conversational Agent for NGO Discovery and Recommendation using Stateful RAG Architecture
Abstract (Mini-200 Words)	The non-profit sector faces a significant "trust deficit," where potential donors struggle to identify, vet, and connect with organizations that align with their values due to information asymmetry and a lack of transparency. Traditional web platforms often fail to provide a guided and personalized discovery experience. This project proposes the design and implementation of PhilanthroBot, a novel conversational agent aimed at bridging this gap. PhilanthroBot leverages a Retrieval-Augmented Generation (RAG) architecture, grounded in a curated knowledge base of NGO profiles, to provide users with factual and contextually relevant information. The system is orchestrated using LangGraph to manage a stateful, multi-turn dialogue, enabling the capture of user preferences and the delivery of personalized NGO recommendations. Powered by the gemini-2.0-flash large language model, the agent is designed for rapid, accurate, and natural interactions. This report details the complete architectural blueprint, from data structuring and RAG pipeline construction to the implementation of the stateful conversational agent and its optional deployment via the WhatsApp platform, presenting a robust framework for building trust-centric AI in the philanthropic domain.

Keywords	Conversational AI, Retrieval-Augmented Generation (RAG), LangGraph, NGO, Philanthropy, Trust, Chatbot
Approval Status	Approved.
Meeting date & Time	22/7/25
Student Guide Interaction meeting	The points were discussed during the meeting - disussion on the title - abstract ok.
Guide Name	Dr. Chiranji Lal Chaudary
Guide Signature	
Approval Date	22/07/25

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