



DEPARTMENT OF APEX INSTITUTE OF TECHNOLOGY

PROJECTPROPOSAL

1. Project Title: - Banking BoT using Machine Learning Techniques .

2. Project Scope: - (Max 500 words) :-

The goal of the Banking Bot project, which employs machine learning techniques, is to develop a sophisticated virtual assistant that transforms the banking environment. The objective of this program is to improve customer service, optimize operational procedures, and increase user happiness in the banking industry.

The main goal is to create a bot that can comprehend and react to a wide variety of consumer inquiries about financial services. Through natural language interactions, the Bot will handle duties like fund transfers, transaction histories, account queries, and general customer service. Crucially, it will be made to offer customized answers according to unique client profiles, inclinations, and transaction patterns.

In this project, security and compliance are crucial. Strong safeguards will be put in place to guarantee the security of private client information, stop fraud, and follow strict banking guidelines and data privacy legislation.

For real-time functionality, the Bot must be integrated with the databases, APIs, and banking systems that are currently in place. This will improve the user experience across several channels, including web interfaces, mobile apps, and chat platforms, by enabling the Bot to effortlessly access and update customer information.

The gathering and preparation of many data sources, including customer interactions, transaction logs, FAQs, and historical data, is a crucial part of data management. In order to help the Bot comprehend user inquiries, machine learning models will be created for natural language processing tasks including intent categorization and sentiment analysis.

To guarantee the accuracy, responsiveness, and user happiness of the Bot, the project comprises thorough testing and evaluation phases. The next step will be deployment in a production environment, where low latency, scalability, and reliability are prioritized to support several user interactions at once.

The Bot will be updated and able to react to changing user needs through the implementation of ongoing maintenance and monitoring systems. The project's complexities will be thoroughly documented, and end users and banking employees will receive training sessions, guaranteeing a seamless and fruitful Banking Bot adoption.

The project's main focus is on using machine learning to develop an advanced banking bot that will meet the changing needs of the digital age by automating repetitive operations and giving users a personalized, safe, and effective banking experience.

3. Requirements: -

➤ Hardware Requirements

1. Compute Resources
2. Networking

➤ Software Requirements

Programming Language: Python

Machine Learning framework:

1. TensorFlow/Keras
2. Scikit Learn
3. Natural Language Toolkit or spaCy
4. Pandas
5. NumPy
6. ChatterBot

STUDENTS DETAILS

Name	UID	Signature
Deepanshi Tomar	21CDO1034	
Mummareddy Devaharsha	21CDO1039	
Dikshesh Kumar	21CDO1045	
Ashutosh Jena	21CDO1052	
Aneesh	21CDO1056	

APPROVAL AND AUTHORITY TO PROCEED

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

Name	Title	Signature (With Date)
Dr. Preet Kamal	Supervisor	