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# Virtual Assistance for Banking System using AI and ML

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**Abstract:** *Virtual assistance has emerged as a transformative technology in the realm of banking, offering an efficient and user-friendly means of engaging with financial services. This abstract explores the concept of a virtual assistant for the banking system, a sophisticated digital entity designed to facilitate and enhance customer interactions within the financial sector. A groundbreaking solution to empower blind individuals in navigating the complex landscape of banking operations. Rooted in the ethos of inclusivity, the project merges cutting-edge technologies with a user-friendly interface, ensuring a seamless and independent banking experience for visually impaired users. The frontend of the application is developed using Flutter, offering a responsive and visually appealing cross-platform interface that caters to a diverse range of user preferences. Meanwhile, the Python backend orchestrates the intricate ballet of banking operations, communicating securely with banking APIs to perform tasks such as balance inquiries, fund transfers, and transaction history retrieval. Central to the project's innovation is the integration of speech-to-text and text-to-speech functionalities. Users can interact with the application through spoken commands, which are accurately transcribed into text, and receive information through synthesized speech, providing a natural and conversational experience. A sophisticated chat box further facilitates communication, enabling users to seek assistance and guidance effortlessly. The text-based conversation within the chat box becomes a crucial element in ensuring a user-friendly and accessible interface. Security is paramount, with robust measures in place to safeguard sensitive information, employing encryption for data such as login credentials and transaction details*

**Keywords:** Convolutional neural network, NLP, Chatbot, Voicebot