

Project Title & Abstract

Title : ‘VociTrade’ Designing a Conversational Interface for Accessible Stock Market Interactions.

Abstract :- Trading platforms for current stocks use complex graphical user interfaces that can be both intimidating for newbies and inefficient for experts. I'm driven by a passion for utilizing data science to uncover the intricate details of financial markets, requiring meticulous attention to detail. I have recently completed my internship in the field, and my experience has confirmed the importance of creating more intuitive user interfaces for financial systems.

This project aims to design and develop "VociTrade" proof-of-concept system that allows users to execute stock trades using natural language voice commands, the next step in advancing this idea. The system will interpret verbal communication, such as "buying 10 shares of Reliance," and convert it into a secure, executable order on the Indian Stock Market. The main objective is to develop a user-friendly, seamless interface that maximizes efficiency and enhances user experience.

The development will take place iteratively, starting with a limited prototype that implements a subset of core commands for a small number of stocks. This initial version will integrate a speech-to-text engine and trading API with a strong user confirmation step to ensure accuracy first and active learning later. Once validated, the system will be made scalable as we will demonstrate one of the most powerful HCI approaches to making FinTech more usable and hence accessible to bigger audiences.

The system will be scalable and demonstrate a powerful HCI approach to making financial technology more usable for a wider audience. The primary takeaways from this work would be its transitions from a traditional GUI to a Voice User Interface (VUI) and replaces menu navigation with direct user input. The goal is to create a superior user experience (UX) that is not only more efficient but also more engaging & Fun. Voice-first approach ultimately improves accessibility and usability by focusing on accessibility and enabling future multilingual support for a demographic previously underrepresented by technical platforms