Real-Time C.P.R & F.I.S.T
Candlestick Pattern Recognition and Financial Analysis for Intraday & Short-Term Trading
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Objectives
- Create a Robo-Advisor while reducing the clutter and complexity of financial advising websites/platforms
- Create a user-friendly web-interface for novice traders
- Create a robust back-end trading and prediction algorithm for intraday and short-term trading
- Provide accurate predictions and BUY, SELL, HOLD signals using a seamless user-interface

Methodology & Flow-Chart

Short-Term Trading (5-10 Days)
Extract 40 Days of Historical Data for all 6,500+ Stocks
Load Data into Personalized Schema
Perform Analysis & Store the Results
Use Middleware Frameworks to Transform Data Format
Display Stock Suggestions & Transaction Signals in a Seamless UI

Intraday Trading (1-2 Days)
Retrieve Prices from API Every Minute
Intraday Time-Series Data
Transform Price Data Into Candlestick Open-High-Low-Close Format
Perform Candlestick Pattern Recognition Analysis Every Minute
Display Minute-by-Minute BUY-SELL-HOLD Signals

Financial Analysis
- (12,26,9) Moving Avg. Convergence-Divergence
- (20,2) Bollinger Bands
- Relative Strength Index (RSI)

Results
- Successfully implemented our trading & prediction algorithm for both short-term and intraday minute-by-minute trading
- Successfully turned a profit on ~80% of equities during trading simulations
- Successfully created feature to analyze an equity while taking into account its respective ETF and Index
- Successfully created a sleek user-interface

Future Development
- Obtain a Series-7 FINRA Certification for legal release
- Release an open-source real-time financial analysis API

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