

Problem Definition

Someone who is new in investing domain or just looking to have a fresh start and make a transition from theory to practice often struggle because as a beginner, when it comes to put in practice what you have learned so far, even after spending 2 or 3 months of reading economy books / articles and getting knowledge from other sources about this, it could still be hard to put real money into an account and have that feeling that you risk losing a part of it. This is normal especially because of the lack of practical experience, which is obtained only by doing. Traditional educational resources may not offer practical learning experiences, leaving novice investors unprepared to make good decisions in the future. My app addresses this gap combining more features like artificial intelligence by predicting stock prices based on news sentiment and credibility analysis for offering the users an overview for the prices of some stocks on long term, educational modules with learning materials, quizzes with rewards for motivating the users to learn, a simulated trading platform with virtual amount of money that can be pumped up only by solving quizzes. Even if the user already starts with a virtual amount, he needs to go through the other modules step by step and be able to solve quizzes for getting more money, otherwise one will not be able to get his portfolio bigger and bigger due to the lack of funds.

State of the Art:

There are many apps and tools available that help beginners learn about investing, but most of them only cover certain aspects. Some apps, like Investopedia, offer educational courses and videos that teach the basics of investing. While these are great for getting knowledge, they often lack practice or real-world simulations.

On the other hand, trading simulators integrated in platforms like Trading 212 or Etoro allow users to practice investing without using real money on the real time data. These platforms help users get familiar with trading stocks but don't provide much educational content or guidance, which can leave beginners feeling lost.

When it comes to predicting stock prices, there are some advanced tools and research methods out there. Some apps use sentiment analysis analyzing news or social media to see how they might affect stock prices. However,

most of these tools do not combine predictions with practical stuff. The sentiment analysis is done on some text given as input (most of the time news), which means the news have to be verified and assigned with a credibility to give an impact to the sentiment analysis (decrease sentiment impact if news not trusted 100%) and a lot of apps omit this too.

In terms of prediction models, methods like Long-Short Term Memory - LSTM and AutoRegressive Integrated Moving Average - ARIMA are often used for predicting stock prices. These models analyze historical price data to forecast future trends. However, most of the apps don't incorporate these advanced techniques, especially combined with sentiment analysis of news.

Overall, there's a gap in the market for an app that not only teaches investing but also allows beginners to practice in a virtual safe environment and get stock predictions based on analysis of news sentiment and credibility. The proposed app aims to fill this gap by bringing together learning materials, quizzes with rewards, a safe practice platform without real risks associated, and AI based stock price long term predictions, all integrated together for an experience as accurate as possible.