Project Idea – Investment Software

Project Aim

Our aim is to develop a software program utilising AI that will automate transactions for manage funds based on user details and their personally determined settings.

The software will take such user details into account:

* Age
* Saving/debt levels
* Assets
* Current earning levels
* Job security

The user will then be able to determine aspects of the software such as:

* Risk level of investments
* Intended usage duration
* Funds wanting to be gained
* Funds willing to be lost

Utilising these details, the software will then be able to calculate a personalised investment strategy for each specific user based on their direct needs and goals. This will eliminate the need for human interaction with financial planners etc, saving money on such fees as advice and commission.

How it Works

Once the software has developed the personal investment strategy for the user it will begin to administer and implement the data that has been collected on such things as:

* Current economic climates
* Developing political situations
* Social media trends
* Resource demands
* Weather forecasts and its possible impact on resources
* Financial strength of organisations and governments
* Logistical data
* Historical data

The software would then be able to make accurate investment predictions and decisions, without direct human interference. Once all the data has been input and accessed, algorithms fed, and possibilities fed into the programming an outcome can be predicted and investment executed based on all these factors.

The electric signal from the software will be able to make decisions much faster and much more accurately than humans, who deal with obstacles such as emotions and time restraints. In the time a human would take to read the news, understand the message, make a call or go in the computer and execute a decision, the electric signal would have already executed the decision maximising on possible investment returns. The software would be a step ahead of human traders and be able to take opportunities of slightly cheaper buying prices and sell faster than normal operators if the market is trending down.

Industry Skills and Tools

To be able to successfully develop a software system this advanced the need for input from such industry experts as data scientists, software engineers, financial consultants, political experts, social media experts, and resource developers is crucial. A base level of algorithms would need to be developed for the AI to be able to operate accurately and effectively and input from such industry professionals would be crucial to this endeavour. The need for front end developers to create a simple yet comprehensive user interface is also crucial, the need for an easy to understand but effective interface is paramount.

Along with these industry skills there would need to be a familiarity and understanding of tools such as Python, Java, Django, Flask, and Keras (which can be utilised with Python). A high level of competency with these and similar tools will be required as the collecting, handling, and analysing of data is the most crucial aspect of making this project idea a success.

Beginning to Implement Knowledge

While being able to successfully deliver this project as a whole for people at our level of experience and education would be impossible, we are now able to explore avenues of our learning and research and how they will be of use in developing such a project.  
  
As a group we will be able to look into, and implement, things such as:

* Specific types of data that would need to be retrieved
* How the data would be collected and processed
* Extra tools that will be needed to make the project a success
* Determine features and user tools that would be useful for such an idea
* Creating a simple yet extensive user interface displaying these features

We will also need to take into consideration and explore possible solutions to some problems that may accompany such a project such as:

* The AI being misguided by incorrect or unreliable news and data
* Security associated with the handling off financial data
* Possible loss of control due to AI development
* The possibility of job losses among financial professionals because of the project

While we will not be able to develop the project completely, we will be able to deliver an understanding of what will be required to make it a success. This will include designs, tools, and a visualisation as to how it could possibly be presented.

Summary

The overall objective is to create a tool which is web-based and easily accessed by anyone  
with a computer who wants to invest in a higher range of portfolios without having to  
make decisions and worry about the risk. The intention to utilize AI is due to computers  
having an infinite superiority to calculate numbers and probabilities compared to humans, also  
the speed that the information is received by the AI would allow it to make quick decisions on the  
investor's behalf, giving him an edge compared to investors using traditional (human) solutions.