

Investment Tracking App

Create an application that tracks investments. Let the user type a ticker symbol into a text box, enter the number of shares, and set the purchase date.

The price per share should be obtained from a data file that is read when the application started. The combo box contains a list of investment types.

When the user selects an investment type and clicks the **Confirm** button, the total purchase amount displays in the bottom right corner of the form.

A *ticker symbol* is a short abbreviation that uniquely identifies the name of an investment such as a stock. The term *ticker* refers to the noise made by ticker tape machines that were once used to print stock prices.

Implementation

Define a class named *PriceType* with two properties: Ticker (string), and Price (Double). Define an enumerated type named *InvestmentType* that lists four types of investments:

stock, mutual fund, commodity, and money market.

Define a class named *Investment* containing the following public properties:

- Ticker symbol
- Investment type
- Purchase date
- Price per share
- Number of shares purchased
- Purchase amount (read-only)

The class should contain a shared collection of *PriceType* objects. Also, create a shared method in the *Investment* class that loads *PriceType* information from a comma-delimited text file (in real life, we would expect these values to change constantly). Each line in the text file should look like the following, in which the first value is the ticker symbol, and the second value is the current price:

AMB, 32.2

The file should contain at least ten lines like this, each with a different ticker symbol and price.

Create a method in the Investment class that receives a ticker symbol and returns the price of the investment associated with that ticker symbol.

User Interface Notes

As the user begins to type the ticker symbol into a text box, the application should search for the symbol and display the price per share. As soon as the ticker symbol matches an existing symbol in the collection, the price should appear in a label on the form. Write an event handler for the TextChanged event of the TextBox control. When the user clicks the *Confirm* button, its click handler should create an Investment object and initialize its properties with values in the controls on the form

Data File

Symbol,Price

AMB,32.2

BCHS,42.1

CADM,81.4

DNGA,77.1

FBNS,81.4

GNR,67.2

XYZ,49.4

The screenshot shows a window titled "Investment Tracking" with a standard Windows title bar (minimize, maximize, close buttons). Inside the window is a form titled "Investment Purchase Information". The form contains the following fields and controls:

- Investment type:** A dropdown menu with "Mutual fund" selected.
- Ticker symbol:** A text box containing "AMB".
- Price per share:** A label displaying "32.20".
- Purchase date:** A date picker showing "7/28/2019".
- Number of shares:** A text box containing "100".
- Total amount:** A text box displaying "\$3,220.00".
- Buttons:** Two buttons at the bottom, "Confirm" and "Close". The "Confirm" button is highlighted with a blue dashed border.