

You are an employee of a company that develops programs for the stock exchange. Your task is to display real-time trades on currency pairs, for example, dollar / euro. To accomplish this task, you are asked to create solution (C#) that contains 3 projects:

- 1) UILayer
- 2) BusinessLayer
- 3) DataLayer

Also, in SQL server need to create 2 table:

- 1) Currency table, which should store data about the country, name of currency and the abbreviation of the currency (For example Israel, shekel, ILS)
- 2) Currency pair, which contains information about trading pairs, for example dollar/shekel (USD/ILS) and the minimum and maximum value for the trading pair.

For simplicity, these tables can be filled with a SQL script. (4 currency, and 3 trading pairs)

In a DataLayer project implement logic to connect to database and function of loading data and saving the minimum and maximum values of trading pair.

In a BusinessLayer implement a function that emulates trades and changes (randomly) the value of trading pairs (for example every 2 seconds) and save data (if minimum or maximum changed) to DB.

In UI layer using (data grid control for example, or something else) display data on trading pairs in a real time.

To work with the database you can use ADO.NET or Entity Framework

To work with the UI you can use Windows Form, WPF, ASP.NET or Angular

The application can be written using the .Net (.Net core)