Test for PHP Developer

The investor John T. Thompson has shares in companies around the world. Since John likes to travel he is also constantly searching for new opportunities. To be able to compare stock prices over different markets from anywhere in the world, John would like to have a web application that helps him to decide which stocks are interesting for him.

Currently John´s focus is on stocks that are traded on the following markets::

- New York Stock Exchange
- London Stock Exchange
- Hong Kong Stock Exchange
- Shanghai Stock Exchange
- Deutsche Börse Frankfurt

Your task consists of multiple steps. Please read the whole document before beginning to avoid any surprises while you work on the exercise.

1. The business logic

Please help John building an application for him that can do the following things:

- Possibility to create new company profiles in the system
- Add company stocks and corresponding prices to an exchange market
  - no historical values need to be saved (one current stock value is sufficient)
  - all markets will use the same currency
- Display reports of the stock and company exchanges (details on the second part)

For the implementation, you can use following, simplified context for financial markets:

Companies can trade different types of stock (typically common stock and preferred stock) on multiple markets. The company can choose individually per market, whether both, neither or just one of the stock types is traded. Each market has their own trade value for stock traded on their exchange.

2. The frontend

John is a businessman and does not know how to access databases. Please help him by creating multiple forms so that he is able to enter company profiles and add stock to the company and markets. Since he would also like to see different key figures please create dashboards showing the following information.

- Overview of all companies and what stock they have on which markets
- Overview of all stock exchanges and what companies stock is traded there
- The possibility to see the currently highest trade value and corresponding markets

3. Working parameters

The assignment is deliberately kept vague in terms of implementation. You are encouraged to find a solution of your own design. Feel free to use a backend framework you are familiar and comfortable with. At EQS we usually tend to use the framework Symfony or components provided by symfony.

For the backend part we would like you to organize the code according to best practices of the used framework, validate the input provided by the forms and write some basic functional or unit tests for the logic parts. The possibility to start the project without the need to run a web server will be greatly appreciated.

Frontend wise we would like a functional design with some basic design similar to the provided mockups for better understanding. Please use them to design your overview pages to make your own styling. You are free to choose the preferred tools of choice like Sass, Less or the template engine provided by the framework you are using.

Happy coding and good luck!!