AvaTrade Dev Home Assignment

Tasks:

1. Propose 2 possible solution architecture for the business case above include:
2. I did it in the project. You can see some components that I added in simple detail. Some of them are understandable.
3. We can use some ways for this project. I separated news by the type for example Trading, Company news or others. In the project you can see I used them by TradingNews Name. The other way can be to use News without separating other types(you can save typeId in the table and class). You can save them in one table. If we look at pros about my way you can select any data from a table which is only trading news data. I think it is a good approach for it. But if we think that we have only one news in this case we don’t separate them or we have some other types but we can save in the same table with different news types. In this case if you want to search data you will need to add some conditions like type == NewsType.TradingNews.
4. I prefer this solution and I think it is a good approach. Because in the feature if you have other news type in this case you can separate them or you can show them with one exact query/view(like union all or union)
5. I spent more than you mentioned:
   * 1. Architecture : 2-3 hours
     2. Implementing user authentication and authorization : 1 hour
     3. Adding new features(endpoints) : 2-3 hours
     4. Fixing some issues: 1 hour

2. I can say some components because some of them I could not use logging, exception handling, using configuration class to take some values from AppSettings. Also you can see in some parts of the project I put some comments which I could not implement.

1. PolygonTradingNewsBackgroundService: I could implement it exactly regarding the time. As you remember, I said that I like to implement third libraries. In this part I can use logging, exception handling and also I spent some time reading about this news provider(Polygon). I could not create an account for API\_Key by time but I read some details from API. In that part I can use some technologies too. Also it is possible that I can use message broker instead of background service, I think it would be a good approach. I added comments regarding data. If my API accepts more data in this case maybe I can use asynchronous operations too.
2. TradingNewsSubscribe operation: I configured it in a simple way(It is not implemented correctly). Also for this it is a good part of the project and I think we can use some tools for that part. Because after subscribing we need to send some emails, notification or etc to subscribers when we get new news. In this part also we can implement new features like what types of ticker(instrument) is wanted by the subscriber, maybe available times for users which we can send in that time period. If we send some emails to users then I can use some technology like Azure Email service(I have used) or other email tools. For mobile notifications we can use Firebase(I have used), SignalR(I have used) or others.I can say some other things but generally it can be like this.

3.Github url: https://github.com/AlakbarAbdullayev/AvaTrade.Dev.Home.Assignment