Background:

At WMDA, one of our main products is called Search And Match. This is where a user can send us their patient and run searches against them. We’d like you to implement a simplified version of this.

Expectation:

We’d like you to create a .NET 5/6 Web Api project that has two endpoints, a “create patient” endpoint and a “create search” endpoint. The create patient endpoint is a simple endpoint that takes the data, validates it and saves it to a data store (This is your choice, static class or blob storage is fine but bonus points if you can integrate Entity Framework and a db). The search endpoint should take a search request, based on the matching engine transform the data and send it to the correct API endpoint with matching schema.

Rules:

* When creating a patient, First Name must be a minimum of 5 characters and contain no numbers or symbols.
* When creating a patient, date of birth is required.
* When creating a search, if the patient id does not exist, should return message to user with user friendly error
* When creating a search, if the match engine does not exist, should return message to user with user friendly error

When sending to match engine 1 post to <https://ptsv2.com/t/czssr-1669197881>

You will find more info on how to send a call on the link above

* When sending to match engine 2 post to

<https://ptsv2.com/t/ez7y6-1669197966>

You will find more info on how to send a call on the link above

What we’re looking for:

* Clear understanding of SOLID principles, how to separate concerns etc
* Unit Testing or at least code that is unit testable
* Good error handling
* Use of design patterns (if applicable)

If you have any questions, then feel free to email me at [jesse.jongejan@wmda.info](mailto:jesse.jongejan@wmda.info)

Good luck