**Taina Tech Test**

1. I decided to structure the application in 2 projects. (The UI and the Business Logic (API) and Data Access). The UI was implemented in angularJS and BootStrap which are light weight client side tech (Keeping performance and good user experience in mind). The business logic which is a webAPI (Keeping scalability and performance in mind). Data access uses interface method calls so it is flexible enough for extension (Scalability and Robustness)
2. I have pushed as much of the validation unto the user input screens and I have also created a Log of any missed errors that could occur on the server side. The logs are created on a daily bases (distinct log for each day) and the “Call Stack” of any potential error is logged so as to make debugging easier.
3. I have some meaningful messages reported to the user and in some cases encourage the user to try again in reasonable time intervals. Also, this type of issues are properly logged so solutions can be thought of so as to ensure it does not repeat itself in future. Also, a thought of having the service on a distributed network so as to guarantee service at any time.
4. The application is flexible enough to be scaled and the tech chosen would allow for this. The structure is such that individual component of the application can be replaced with other application doing similar functionalities. (i.e. UI project can be replaced with another built with ReactJS as long as the WebAPI are consumed as expected OR some other database access time can be introduced as long as it implements the DataAccess Interface methods)
5. Implementation of client side caching and a queue system while processing the task asynchronously to help with traffic load on the site. The data access also implemented natively so as to remove any dependence on libraries or the extra budding on entity framework.
6. The user interface has some filtering and also plans for paging to cope with the huge number of data the application would handle. The forms are only allowed processing when/if all validations have been satisfied. Clear information the mandatory fields are also highlighted.