**Assignment: Intermediate – Senior (Full-stack)**

You have just joined a new team of dedicated developers who have been tasked with running a system for gym management.

However, this is a free-flowing project, and everyone has been given an opportunity to come up with what technology they feel is better for execution. Your team lead has divided the work into separate technologies and has asked you true use Angular (latest), .Net core 5 and any DB (NoSQL or RDBMS) to provide a proof of concept within a week (7 days excluding weekends).

The system is designed to track users such as employees’, customers and new leads that have been inquiring about a gym membership the gym membership is free for the first month for new customers, gym subscription is 100 rand per month and a statement is recorded per successful payment. Only authorized users must have access to the system and each user must have a unique email address.

This project is a basic gym project which has 2 modules in it.

1. Admin end
2. User end

**Admin end**

Let’s start with the Admin end first. In this part, the admin has all the rights of the application's master, such as adding Users, Role, Subscription plan & assigning a subscription to a **customer** user.

**User End**

If you look at the User end, a user is a person who does the work of registering new members and collecting payments. The user has limited access, such as a user can register a new member and see payment details of the member along with renewal date.

The project has 2 parts.

1. NET Core for APIs
2. SQL Server for database parts

**Exhibit understanding in:**

Token for Authentication of APIS

ORM

Linq

Source control (git)

Code first migrations

Unit test

Logging framework & Caching mechanism (any would be awesome)