**.NET Coding Exercise**

**For Sr. Software Engineer - 2021**

# Tech Stack

## Backend – ASP.NET MVC, Web API

## Frontend - React/Angular/Vue

## Database - PostgreSql/MySql/MsSql

# OVERVIEW

Thank you for taking the time to do our technical assignment!!

This is meant as a take home assignment for anyone who is wishing to join our tech team. This assignment is very critical for us in making a decision on whether to hire you or not!. It tells us about your coding style, code quality, proficiency and problem solving skills. So, get ready to give it your best!

In order to avoid confusion on how to run your code we would like you to submit your results by pushing the code to a separate repository in your personal GitHub account.

### **WHAT TO EXPECT**

* You can use your preferred text editor, or IDE. We want you to use the tools you're most comfortable with.
* At the end of the interview, please share your code with us. You can use a public repo on Github and share the link to [**prachet@kcoverseas.com**](mailto:prachet@kcoverseas.com)
* Break down the problem before starting to code or designing details.
* You're welcome to look up anything you need on Google, StackOverflow, etc but remember to not copy the code.
* Don’t mention KC, overseas keywords anywhere in code or repository.

# REQUIREMENTS

1. Create two tables in the database or create a single collection as follows:
   1. Universities
      1. id
      2. name
      3. description
      4. country
      5. minimum\_gpa
      6. minimum\_gre\_score
   2. Courses
      1. id
      2. university\_id
      3. name
      4. teacher\_name
2. Add sample data as follows:
   1. Add a minimum of 3 universities
   2. Add a minimum if 3 courses in each university
   3. In the courses you add, at least 2 of them should be Computer Science and Data Science
3. Develop a page titled Search Courses to search courses based on the following filters:
   1. GPA\*
   2. GRE Score\*
   3. Country\*
   4. Course Name

**Points to remember:**

1. The above marked fields are mandatory for the person to search
2. While searching, you have to return the courses where the GPA score is greater than or equal to the university minimum GPA score. Same will apply to GRE score as well.
3. Course Name search should support Fuzzy Matching.
4. Push the code, add instructions for running the code correctly and the Database dump in the GitHub repository
5. Important! Write test cases to test your code using jest/mocha/chai and add them to the Github Repo itself.

Thanks for your time, we look forward to hearing from you!