**Assignment Brief**

The institute of XYZ is a leading computer school which offers IT Education Island wide. Knowledge of the students registered in the institute are assessed through exams. The top management of the institute has decided to use an Online Examination Management System (OEMS) for this process. OEMS is a term to manage the exam system in terms of student registered for exam. Each and every student registered in the system for a particular course will get a username and password to login to the OEMS.

A student should face an exam for each module of the course he enrolls in, where a course is consisted of multiple modules. Each module exam is consisting of 15 multiple choice questions; each question has four choices with only one correct answer. Exam questions should be taken randomly from a pool of questions related to the module. A student has only three attempts for an exam and he should score more than 50% of the correct answers in each and every module exam to complete the course successfully. The system should also facilitate students to view their exam scores and the overall average score.

Admin will manage the OEMS and should have full access to the system where lecturer has a limited access to the system.

Following are the functionalities that should be performed by the lecturer.

1. Login to the OEMS
2. Manage Questions

* View a list of all questions
* Edit and Update Questions
* Delete the exiting questions

1. View Student grades

Following are the functionalities that should be performed by the admin users.

1. Login as Admin
2. Manage Lectures

* Register new lecturers
* Edit exiting lecturer details
* View profile of a lectures
* View a list of all lecturers

1. Manage Students

* Register new students
* Edit exiting student details
* View a list of all students
* Search Students
* View student grades

1. Manage Questions

* View a list of all questions
* Edit and Update Questions
* Delete the exiting questions
* Filter Questions

1. Manage Courses

* Add new courses
* Edit / delete existing courses
* Add or remove modules to the course
* Listing of all courses

1. Manage Subjects (modules)

* Add new modules
* Listing of all modules
* Filter modules

Assume that you are hired by the Institute of XYZ as the developer of the OEMS and design and implement a suitable solution for the above scenario using .Net framework. You are free to add more functionalities to the system while maintaining the mentioned functionality of the system.