

Please Note: All the projects mentioned below should meet the industry coding standards with appropriate comments, alignments etc. There should also be validations and verifications wherever necessary. The developer can add as many more features as necessary to the project after getting it approved by the product owner. Appropriate error messages should be included.

## Online Practice Assessments Portal

This is an online website that provides practice MCQ questions for various technical topics like Java, Spring Boot, C# etc. This system allows the user to take one free practice test for a subject before he or she has to pay for any further test paper. The user has the option to buy a bundle of 100 questions for a subject covering all topics in that subject.

The payment should be online through a wallet facility provided by the portal for the user account or through any other online payment portal. An invoice should be generated for every purchase and emailed to the user.

This portal has 2 users – Admin and User. The user has to register with the portal before he can access the tests. Each test contains a set of 10 questions that the user can attempt. A report is generated after every attempt with the user selected answer and the correct answer.

Once a test bundle has been purchased, the user can attempt the questions any number of times.

The admin has complete access to the portal and can add, update or delete any of the questions. He/she also has access to the user information and purchase information of the users.

The user can search for a test by subject and by topic inside the subject. For ex: if the user selects Java, he can select Exception Handling as the topic. He will now receive a test with 10 questions from Exception Handling.

The questions are randomly selected from the database for that particular subject and topic. No question should be repeated in the same test.

The user should be able to provide feedback for the tests he has attempted.

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## Used Car Sales and Inventory Management System

This is an online car and car parts store which lists various used cars along with their features. It also consists of car parts and accessories. The project allows users to buy a car and any car parts online. It allows users to check various car stats including car engine, milage, tank capacity and other factors. Online payment

facility is available for car parts. Test drive facility is available in case a user wants to buy a car.

The user can search for a car based on his/her specifications. They can also block/book a car. To be able to book a car or to book a test drive or to buy car parts, the user should register with the system. The user can also search for car parts and add them to his cart. The user must login to be able to add items to his cart.

The salesman assigned to a buyer for the test drive or the car purchase will have a unique code which will be added to the invoice at the time of invoice generation.

Any booking can be cancelled or rescheduled by the buyer till 2 hrs. before the scheduled appointment.

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### Mentorship Education Program Project:

This is an online portal for registering for a mentorship program as a mentor or as a student. This website lists the courses conducted as well as project mentorship. This website also lists the trainers who will work as mentors and their availability schedule.

A guest can browse the options available but will not be able to see the trainer details. They should register with the portal to be able to request for a mentor and/or join a course. Once they request mentorship, they are assigned a trainer/mentor within 2 hrs.

Mentorship is a paid service based on the mentorship duration.

A trainer should also be registered with the portal to be able to teach a course or become a mentor.

The student should be able to see his/her previous activities. He/she should be able to view and edit their profile.

Trainers should be able to view their schedule and details of students assigned to them. They should also be able to view and edit their profiles.

The student has an option to pay in installments or as a single payment based on the training course or mentorship duration. Once registered for a course or requested for mentorship, the student cannot cancel. A trainer can opt out of a mentorship program or a course only thrice. The fourth cancellation will incur a penalty for the trainer. Cancellations by the trainer should also be tracked by the system.

All payment transactions are tracked are online only.

The portal should have an admin who has full access to the entire system.

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## E-Commerce portal for Used Furniture

This portal is for a startup that is acquiring used furniture from users at a price, refurbishing them and selling them off at a margin. The website must display second-hand furniture that is currently being sold.

Users must be able to sign up on the portal and set up their profile. Users must be able to search for their required products and checkout to the payment page. Once payment is successful, the expected time of product arrival must be communicated to the user via email as well as displayed on the order page.

Users must also be able to sell used furniture to the company. Users must be able to upload pictures of the items they intend to sell. Based on the images, company employees must be able to decide whether to buy or not. The page to sell furniture to the company should be different from the page the company uses to sell furniture.

The portal must track where refurbished and not yet refurbished furniture are stored and details of the employee who approved a furniture purchase or sale.

Order details and payment transactions must be tracked by the portal.

The portal will have an admin with full access to the portal.

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