## DATABASE MANAGEMENT SYSTEMS (CS43002, LTP: 3-0-3, CRD: 5)

## **DBMS Lab Test 2 Question set (2021)**

Project No.	Channel No	Proposed by	Questions
1	5	Surya Teja	Consider a web application for a pharmacy store. There are 2 users of the app: Admin and customers  Admin manages the inventory. He can place an order to the supplier if the medicines in the inventory are depleted/expired. He can add new medicines. He also manages a list of delivery people. An order is automatically assigned to the person with the least number of current orders.  The customer can view the inventory and place orders. He should be able to see the contact details of the delivery people who are dealing with his/her orders. If the order exceeds the stock, the admin must be notified and the admin will place an order from the supplier.  (The medicine table must contain the supplier details, and the orders table must contain the delivery)
2	3	Biswajeet Sethi	JZK CLICKZ is a photography company. They do weddings, fashion, nature, interior and food photography. There are a number of photographers in each category along with support staff who work for JZK. Only the admin can see the details of support staff for each photographer. Only a registered user can avail the services from JZK. A user can view (category wise (fashion, nature etc.) or photographer wise) and buy the photographs. Each photograph must have information like the photographer's name, date, place and category details. You can book a photo shoot package with JZK by choosing your favourite photographer. If the photographer is already booked for the same day, you may have to go for your second choice. One may opt for multiple photographers too. If you want to sell your work (photos) to JZK then you may also upload your details along with the photographs with category information. If you are looking for employment, you may upload your CV along with

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			your 5 best photographs.
3	2	Shubhabrata Nath	Consider that we want to develop a web application that will have different functionalities. The database will store the details of courses in a college. The following information is given.  Courses can be of three types: live, recorded video and classroom. One course can belong to only one department. We also need to store data about the faculties and teaching assistants (TA). Faculties and TAs can be from the following departments: ECE, CSE, EE, ME, CE. Each course can have more than one faculty. Also, each course can have one to eight TAs. The college admin also needs to store the details of the recorded video courses. For this, the recording status of the course needs to be stored.  The college also stores the details of the courses taken by the students. We need to store the marks obtained in a course (out of 100) for this purpose. A student can enroll in courses from at most three departments in a semester. Also, a student needs to enroll for at least two courses from his/her department in a semester.
4	8	Omar Eqbal	Consider a Guest House Booking system, where a user will first register with details like name, email and other details and then check the availability of the rooms for specific dates. The rooms can be of different types and will have different charges based on the facilities available. The user should be able to see the description of the available rooms and the corresponding charges. He should also have the option to cancel the booking.  If there is no room available, the user can decide to add the booking to the waiting queue. If a booking is cancelled, then the booking from the waiting queue with the earliest starting date (within the duration of the cancelled booking) should be automatically confirmed. The user should be able to view the status of his upcoming bookings and cancel a pending or confirmed booking.  On successful booking, details like user, number of visitors, purpose of visit, duration of stay

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			need to be stored. The user should be able to view all his previous bookings.
5	6	Aditya Singh	Consider a Library Management system for a college library. The main objective of this system is to manage and organize library tasks. The system will have two components: user and admin.
			The registered users can request to issue books from the library, search and check availability of a book and also return books which could also have fines if the return is after the due date. Also the users cannot hold more than 5 books at a time.
			The admin can add and remove books from the system and also can update the details of an existing book. The admin can also search and view orders for a particular book.
6	7	Sarthak Chakraborty	Consider a Bicycle Rental Portal in our campus, where each student can rent a bicycle from others when he needs to travel to Nalanda, other halls, TechM etc.
			Students will register first using their Name, email, hall, username and password. They also have a rating attribute which will be populated once some students have transactions with him/her. On registering, they have the option to register their cycle into the portal so that others can rent. Cycles are registered with their structural details, usable condition(whether the tyres are deflated or not, whether the brakes are functional or not, etc.), current parking location, price and a rating. A student can register multiple cycles under his name, but each cycle must have a specific user. Similarly, each location can have multiple cycles, however, a cycle can be at only a single location.
			Whenever a student wants to rent a bicycle, he can apply to the portal with proper details(number of days, etc.). This information will be available to the owner who can then approve it, following which the ride will be approved. On the completion of the ride (either stipulated time has ended, or the user has ended the ride), owner will be able to rate the user, while the user will be able to rate the cycle, following which, the average of the ratings of the cycle and the user will be displayed in their profile.
			For the purpose of the test and video demonstration, insert a few users and cycles

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			beforehand (no need to create a separate admin functionality; however, create a form so that cycles can be entered), and show the complete pipeline of the transaction, starting from the booking to the rating of the user and cycle.
7	1	Eeshan Gupta	Design and develop an application to connect people who have the same hobbies and interests to the right people so they can collaborate and work together.  People can make posts describing the activity they're looking to collaborate upon, and the number of people they are looking for. Each post will have a category too. Other users can view those posts, and send a descriptive request to the host expressing their interest.  The host can then accept or deny the request. If accepted, the number of people in the activity increases by 1. If the limit is reached, the post is deleted.  There will be a moderator role as well, who needs to approve the post before it shows up on other users' feed.  Users can also look up their history of collaboration with other users.
8	4	Riya Samanta	You need to design and build an online freelancing service provider application. The database should contain several freelancers. The details important to a freelancer are his skills, ratings from past accomplishments, and reward per hour. Any new user can sign up or login either as a freelancer or a client. Clients have different roles. They hire freelancers for some ongoing/upcoming software projects. Clients should also have his detailed information along with the price he is willing to pay and own projects. You need to maintain a project table and keep track of which freelancer is assigned to which projects. A project should also have skill requirements for its completion. A project may have multiple freelancers assigned to it. But at a time any freelancer is allotted to only one project for simplicity. The project is assigned to any or more freelancers based on the skill requirements and freelancer availability. For simplicity, you may assume that among many potential freelancers, the one who bids

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			the lowest price is selected. The clients may give ratings to freelancers after project completion which will be reflected in the freelancer's details.
			Show if any freelancer or client is logged in then how the online hiring and final assignment is happening.