



Sri Sivasubramaniya Nadar College of Engineering, Kalavakkam
(An Autonomous Institution, Affiliated to Anna University, Chennai)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Date: 11-03-2023

Course Code	UCS2411	Course Name	Database Lab					
Course Type	Lab	Course Category	Professional Core (PC)	L	T	P	E	C
				0	0	3	0	1.5
Regulation	2021		Academic Year & Batch		2022 - 23 & 2021 - 25			
Degree and Branch			B.E. Computer Science & Engineering					
Semester			IV					
Assignment No.	1		Assigned Date	14-03-2023	Due Date	21-03-2023		
Name of the Faculty			Dr. N. Sujaudeen & Dr. P. Mirunalini					

Tamil Nadu Tourism Development Corp., promotes the tourism activities at Muttukadu lake. In view of this, it wants to automate the reservation made by the tourists for boat riding. Create the table(s) for the following:

- The Boats has its ID, the name of the boat, the type, maximum capacity (number of seats), price-per-seat and colour.
- The Sailors has their ID, the name of the sailor, the Rating and Date-of-Birth.
- The Tourists records the tourist_no, name of the tourist, address, Date-of-Birth and phone.
- The Reservation gives the details about the date at which the particular boat and the sailor reserved by the tourist. Also, the number of persons for sailing, date-of-reserve, date-of-sail.

The policies assumed in the reservation are:

- # One person can book the ticket on behalf of their group, interested in sailing.
- # They can book one sailor per boat per ride.

Create the database with the following specifications:

1. Identify the primary key(s) and foreign key(s) from the schema.
2. The type of boat can be LUX for Luxurious, CAR for Caravan, CRU for Cruiser.
3. Ensure that boat id begins with B, similarly sailor id with S, and tourist_id with T.
4. The rating for a sailor could be A, B or C.
5. The phone number of the tourists should differ from each other.
6. Advance booking can be done ahead of 12 days.
7. Once the boat and sailor are booked, the same (boat & sailor) cannot be reserved by another tourist on the same sail date.

The following changes have been identified due to increasing business. As a database designer you must accommodate these changes in your design.

8. It is identified that the number of children have to be mentioned while booking the boat by the tourists.
9. The width of a tourist name is not adequate for most of the tourists.
10. The date-of-birth of a tourist can be addressed later / removed from the schema.
11. Reservation cannot be done without the reserve date.
12. The rating for sailor – D has to be added.
13. A sailor may resign his job later or a boat may get damaged. Hence on removing the details of the sailor / boat, ensure that all the corresponding details are also deleted.

Note:

Populate each relation with relevant row(s) and prepare test cases to demonstrate that the requirements are satisfied.

What you have to submit:

1. Schema Diagram with constraints
2. Demo script file