

RDB Mini Project: Check List and Team Member Contribution Form

Team Number: Team 1 Project Name: OurSpace								
	Criteria	W E I G H T	DESCRIPTION	EXCELLENT (10 PTS) ALL	SATISFACTORY (7 PTS) MOST	BORDERLINE (4 PTS) SOME	INSUFFICIENT (1 PT) NONE	SCORE * WEIGHT
INTERESTING Project Idea								
1.	Project Idea: <i>Project Topic, Description & Requirements</i>	10%	The project idea shows the following: <ul style="list-style-type: none"> <input type="checkbox"/> interesting, challenging, creative and reflecting a real-world scenario. <input type="checkbox"/> The project description is clearly identified. <input type="checkbox"/> Application, data requirements, data constraints and business rules are clearly defined, realistic and well-research. <input type="checkbox"/> Important usage scenarios and queries are properly defined: <ul style="list-style-type: none"> <input type="checkbox"/> Important insert, update, delete operations and transactions (minimum 10 operations each); <input type="checkbox"/> Identifying important data inquiries and reports (minimum 20 inquiries or reports); 					
DB DESIGN and DEVELOPMENT								
2.	Conceptual and Logical Design: <i>Appropriateness and accuracy of Design</i>	35%	The conceptual design (ER model) has the following: <ul style="list-style-type: none"> <input type="checkbox"/> 100% accuracy <input type="checkbox"/> Capture all data requirements explained in the proposal <input type="checkbox"/> Easy to understand with a nice diagram layout <input type="checkbox"/> Follow proper naming convention for the entity names, attribute names, relationship names. 					

			<p>The logical design (relational schema, data dictionary and SQL scripts for table creation and queries) has the following:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Schema and Data dictionary is accurate (corresponding to the conceptual design) <input type="checkbox"/> Properly define data types for all attributes (with careful domain analysis) <input type="checkbox"/> Properly define the PKs for all tables <input type="checkbox"/> Properly define the FKs for all tables <input type="checkbox"/> Properly define all integrity constraints, and business rules, as defined in the Project Proposal <p>The design is tested with practical, sample data.</p>					
3.	Implementation & Demonstration (Individually evaluated)	35%	<ul style="list-style-type: none"> <input type="checkbox"/> The implemented operations, transactions and queries completely fulfils the project requirements (set at the proposal stage), is practical and useful in a real-world scenario. <input type="checkbox"/> The implementation is well demonstrated. It is interesting and effective in conveying ideas. <input type="checkbox"/> Selected usage scenarios and queries are correctly written in SQL statements and are tested. 					
PRESENTATION								
4.	Presentation & Communication (Individually evaluated) <i>The oral presentation does not exceed the time allotment. It is tight, focused, and clearly explains the project.</i>	20%	<ul style="list-style-type: none"> <input type="checkbox"/> Oral presentation keeps to the time limit and is focused. <input type="checkbox"/> Main ideas are expressed clearly and convincingly. <input type="checkbox"/> Q&A session is well managed and questions can be properly addressed. 					

Work Distribution and Contribution

Task	Kaung Nyo Lwin	Cassandra Chang	Aymen Zubair Qureshi	Truong Vuong
1. Project Proposal: <i>Project Topic, Description & Requirements</i>	Project Description Data Operations Inquiries Report	Project Description Business Rules Inquiries Report	Project Description Business Importance Inquiries Report	Project Overview Business Rules Query Development Report
2. Conceptual and Logical Design	Designed the tables to identify the attributes, relationships, and data constraints. Created the ER diagram as well as the Conceptual diagram.	Brainstormed the conceptual design and the necessary columns in various tables, Wrote queries for creating Stored Procedures for 3 transactions (feedback, room rate update, user update) and 5 Reports (Feedback, Customer Booking, Space Owner Earnings, Inactive Spaces, Cancelled Bookings).	Helped create tables ensuring efficient data organization. Contributed by writing queries for retrieving space feedback, recent listings, most booked spaces, and booking status updates. Also developed transaction procedures for booking modifications and new space listings.	Identified table attributes and foreign key relationships. Created tables and inserted mock data to simulate real-world scenarios for testing queries and reports. Updated table structures as needed to ensure consistency by modifying data types, constraints, and indexes for optimization.
3. Final Presentation	Uploaded the screenshots of Queries and conceptual diagram. Implemented all proposed transactions and reports.	Uploaded the screenshots of report queries and transactions. Implemented operations for a few of the update queries for data operation. Reviewing others' work and sharing ideas.	Documented the functions and uploaded screenshots of the queries and transactions performed in our created database.	Uploaded the screenshots of transactions, queries & reports. Exporting the final Database.

For each data operation/query, specify its type regarding the syntactic dimension and semantic dimension as well as the members who implement it.

Data Operation/Query	Query Type : Syntactic Dimension	Query Type : Semantic Dimension	Implementer
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	I/U/D?	BR/JOIN/GROUP?	OTP?	BP/BT/CA/PA/REC	
1. New owners and customers can register their profile before listing their spaces or booking the spaces.	I		OTP		Kaung Nyo Lwin
2. Customers can book listed spaces	I/U		OTP		Kaung Nyo Lwin
3. Customers can pay the charges for the booked spaces.	I/U		OTP		Kaung Nyo Lwin
4. Retrieve the most spending customers based on their rental activities		JOIN/GROUP		CA	Kaung Nyo Lwin
5. Generate a revenue report based on monthly detailed rental transactions.		JOIN/GROUP		BP	Kaung Nyo Lwin
6. Generate a report to see the most busy days of the weeks		JOIN/GROUP		BT/BP	Kaung Nyo Lwin
7. Generate a report that shows number of bookings, spending amount, total fee and number of listed spaces by defined price ranges		JOIN/GROUP		BT/BP	Kaung Nyo Lwin
8. Retrieve a list of available spaces based on the user's information such as location, history of booking, and preferred price range		JOIN/GROUP		REC	Kaung Nyo Lwin
9. Updating an old /Inserting new feedback	I/U			BT	Cassandra Chang
10. Updating the rental rates of the rentable spaces	U			BT	Cassandra Chang
11. Updating the user details	U			BT/ CA	Cassandra Chang

12. Finding the report of spaces with the highest ratings, grouped by location or facility type.		BR/GROUP		BP	Cassandra Chang
13. Fetch all bookings made by a specific customer, including space details, booking dates, facilities used, and total charges.		BR/JOIN	OPT	BP/CA	Cassandra Chang
14. Generate a report for a specific space owner, showing earnings grouped by their spaces.		BR/JOIN/ GROUP	OPT	BP/PA	Cassandra Chang
15. Retrieve a list of spaces of a Space Owner that are not available.		BR/JOIN	OPT	PA	Cassandra Chang
16. Generate a report showing all canceled bookings, including the reason for cancellation and associated customer details.		BR/JOIN	OPT	CA	Cassandra Chang
17. Fetch reviews and ratings for spaces owned by a specific owner.		JOIN/BR	OPT	CA	Aymen Zubair Qureshi
18. Update or cancel a customer's booking	U/D	JOIN	OPT	BP	Aymen Zubair Qureshi
19.Retrieve recently added spaces to the platform.		BR/JOIN	OPT	REC	Aymen Zubair Qureshi
20.Retrieve spaces booked the most frequently.		BR/GROUP	OPT	BP	Aymen Zubair Qureshi
21.Retrieve popular booking times based on trends.		BR/GROUP	OPT	BT	Aymen Zubair Qureshi
22. Modify booking date, start time, and end time for a customer's existing reservation.	U/D	JOIN	OPT	BP	Aymen Zubair Qureshi

23. Insert a new space listing into the system with all relevant details for customers to view	I	JOIN	OPT	REC	Aymen Zubair Qureshi
24. Retrieve feedback from customers for a specific owner's space.		BR/JOIN	OPT	CA	Aymen Zubair Qureshi
25. Update the status of a space for maintenance	U		OPT		Truong Vuong
26. Permanently remove a space	D		OPT		Truong Vuong
27. Updating a discount for a space	U		OPT		Truong Vuong
28. Retrieve customers with the highest total spending		JOIN/GROUP		CA	Truong Vuong
29. Retrieve spaces with the highest utilization rate		JOIN/GROUP		BP	Truong Vuong
30. Retrieve customer feedback sentiment analysis by space		JOIN/GROUP		CA	Truong Vuong
31. Retrieve seasonal booking trends and revenue distribution.		GROUP		BT	Truong Vuong
32. Retrieve space availability vs. demand analysis		JOIN/GROUP		BP/REC	Truong Vuong

Remark:

Types of SQL Statement: Syntactic Dimension

- (I) Insert, (U) Update, (D) Delete
- Retrieval
 - (BR) Basic Retrieval
 - (JOIN) Join Query / Nested or Subquery
 - (GROUP) Aggregate Query

Types of SQL Statement: Semantics Dimension

- (OPT) Basic Operation/Transaction Support
- Data Intelligence and Customer Insight Support
 - (BP) Business Performance Analysis
 - (BT) Basic Trend Analysis
 - (CA) Customer Analysis

- (PA) Product Analysis
- (REC) Suggestion or Recommendation of Products / Services to Users using history data