## DATABASE DESIGN

- 1. **Table Creation**: How did you implement the creation of a new table in your project? Can you explain the SQL command used and provide a code example?
- 2. **Columns and Data Types**: When creating a new table, what columns and data types did you specify? Could you share an example of a CREATE TABLE command?
- 3. **Primary Key Definition**: How did you define the primary key for your tables? Can you provide an example of how to set a primary key in your SQL command?
- 4. **Establishing Foreign Key Relationships**: How did you establish foreign key relationships between tables? Can you give an example of a foreign key constraint in your SQL command?
- 5. **Initial Data Insertion**: How did you implement the insertion of initial data in your project? Can you provide an example of an SQL command for this?
- 6. **Tables with Inserted Data**: Which tables did you insert data into, and could you provide examples of the inserted data?
- 7. **Entity-Relationship Diagram (ERD)**: Can you describe the data model (entity-relationship diagram, ERD) you created for your project?
- 8. **Database Design Overview**: Can you explain your database design? Describe the tables you created and their relationships to one another.
- 9. **Normalization Levels**: Can you discuss your database in terms of normalization? Which normal forms (1NF, 2NF, 3NF, etc.) did you apply, and why?
- 10. **Data Types and Integrity**: Can you explain the data types used in your database and the reasons for your choices? What methods did you employ to ensure data integrity?
- 11. **Index Types**: What types of indexes (primary key, unique key, foreign key, etc.) did you use in your database, and how do these indexes impact performance?
- 12. **Stored Procedures, Triggers, and Functions**: Did you utilize stored procedures, triggers, or functions in your database? If so, how and why did you use these structures?

## APPLICATION DEVELOPMENT

- 1. **Data Grouping Implementation**: How did you implement data grouping in your project? Could you describe the Home Page and provide an example of a LINQ query related to it?
- 2. **Database Connectivity**: How do you establish database connectivity? What challenges did you face while creating the EDMX model?
- 3. **Filtering and Sorting**: What filtering and sorting criteria did you apply when fetching data from the database? Can you explain the List Page and provide an example of a LINQ query used there?
- 4. **Data Insertion**: How did you implement data insertion in your project? Could you explain the Create Page and provide an example of a LINQ guery for this purpose?
- 5. **Data Updating**: How did you implement data updating within your project? Can you explain the Edit Page and give an example of a LINQ query that illustrates this?
- 6. **Data Deletion**: How did you implement data deletion in your project? Could you explain the Delete Page and provide an example of a LINQ query related to it?
- 7. **Join Operations**: How did you execute join operations in your project? Can you explain the related page and provide a LINQ query example with code?
- 8. **Integration of Operations**: How did you integrate these database operations into your application? Could you outline the workflow for each operation and include relevant code examples?
- 9. **Transaction Management Strategy**: What strategy did you use for transaction management in your application? What challenges did you encounter in this area?
- 10. **Challenges Faced**: What were the biggest challenges you encountered during the database operations in your application, and how did you overcome them?