1. **Case Study 1:**

Here is a case study of a web based application for Glitzy. This site provides general information regarding cosmetics and jewelry to the users. It also allows users to purchase and search for required items. The site maintains supplier details along with the products supplied by them.

1. **Case Study 2:**

Alpha Luxury Cars is one of the leading luxury car service providers in California. They provide luxury cars such as BMW, Mercedes-Benz, Ferrari, and so on, on rent. Currently, the customers who wish to rent a car, have to either call the company or visit their outlet and register their request. They are also facing the issue of managing the customers. The company does not have an online system to take customer requests and process them. To provide the flexibility to the customer and to improve their management, the company has decided to develop an website.

1. **Case Study 3:**

Enlighten Homes is a real estate company established in the year 2000, headquartered at New Arizona, USA. Over the years the company has expanded its business across different states in USA as well as globally. During its expansion process the company has recruited many agents to facilitate the process of buying and selling of property. The company in its campaign to promote its business further has thought of building a Web site. The Web site will facilitate the buying and selling of property online across the globe. The company will charge a commission rate for the property bought and sold. Also, the Web site users who wish to list there properties for sale have to subscribe for advertisement package offered by the company. The advertisement package will specify how the property will be listed. To facilitate business, company has decided to develop an website.

1. **Case Study 4:**

**Book On Air Pvt. Ltd.** is an airline ticket-booking firm in **Chicago, Illinois.** The company books tickets for its customers for various airlines. However, to maintain the records of the number of tickets booked, customer details, flight details, payment details, and so on, the company uses the traditional file system. With growing business needs, it has become difficult to maintain such huge data.

Therefore, the management has decided to develop a database to store the company transactions related data. You as a database developer have been assigned the task to provide a solution.

1. **Case Study 5:**

St. Paul’s Training Institute is a training institute located in Los Angeles, USA. The institute provides training in various courses in different fields such as science, mathematics, and so on. Recently, the institute started using a primitive database system in which it stores the student and staff details. In the current database, there is only one table to store the student details and another to store the staff details.

However, the users are finding it very difficult to trace student and staff records since all the details are in the same table.

You as a database developer have to accomplish the following tasks:

* 1. Create separate tables to store student details, marks details, employee details, salary details, and course details.
  2. Create required columns in each table to store the relevant details.
  3. Use appropriate data types for the columns to store the different types of data such as name, phone, email, salary, fees, and so on as per requirement.
  4. Apply appropriate check constraints on the type of data to be stored in the respective columns.
  5. Set the primary and foreign key constraints on appropriate columns to relate the relevant tables.
  6. Insert new records in each table and verify that all the check constraints are working properly.
  7. Update and delete records in the table to ensure primary and foreign key constraints are working properly.
  8. Identify columns that may hold null value and apply constraints accordingly.
  9. Creating appropriate views, triggers, functions, procedures, and so on for the database.

1. ***Case Study 6:***

*In Northwind is a specialty foods distributor. It buys specialty foods from suppliers worldwide and resells them to customers worldwide. It is particularly interested in analyzing its sales and shipping activities and decisions so it can improve its customer order process. To do this it has decided to build a business intelligence data warehouse (BIDW).*

