# **DATABASE PROJECT IDEAS**

**These projects are just to give you an idea. You are encouraged to come up with your own idea.**

**ONLINE RAILWAY SYSTEM DATABASE**

A railway system, which needs to model the following:

1. Stations
2. Tracks, connecting stations. You can assume for simplicity that only one track exists between any two stations. All the tracks put together to form a graph.
3. Trains, with an ID and a name
4. Train schedules recording what time a train passes through each station on its route.

You can assume for simplicity that each train reaches its destination on the same day and that every train runs every day. Also for simplicity, assume that for each train, for each station on its route, you store

* Time in,
* Timeout (same as time in if it does not stop)
* A sequence number so the stations in the route of a train can be ordered by sequence number.
* Passenger booking consisting of train, date, from-station, to station, coach, seat and passenger name.

**ONLINE RESTAURANT MANAGEMENT DATABASE**

The restaurant maintains the catalog for the list of food and beverage items that it provides.  
Apart from providing food facility at their own premises, the restaurant takes orders online through their site. Orders on the phone are also entertained.

To deliver the orders, we have delivery boys. Each delivery boy is assigned to the specific area code. The delivery boy cannot deliver outside the area which is not assigned to the delivery boy (for every delivery boy there can be single area assigned to that delivery boy).

The customer record is maintained so that premium customer can be awarded discounts.

# **REAL ESTATE MANAGEMENT SYSTEM**

A Real Estate system will consist of roles: Sales agent, Admin and Buyers. Products will be enlisted by respective sales agent like plots/houses/building apartments etc with pictures and complete description. A complete real estate management application is required. Buyers can view/book a product for two days until purchased confirmed by sales agents. The administrators of the Real estate would be able to monitor the performance of their salesman as well as the products which were sold during a specific period of time. The essential components of the REMS are buyer registration and Sales agents management/profiling and accounts view by admin etc.

## **ONLINE TICKET BOOKING SYSTEM**

The WWW web is becoming a preferred way for consumers to buy tickets for different attractions, movies, and sightseeing tours. It saves them from standing in the lines for hours. You have to develop an online ticket booking system that allows the consumer to reserve ticket for different attractions around the city (like museum, zoo, etc.) or for movies that are being displayed in different cinemas. There should be different view for consumers and admins. The consumer should be able to browse different attractions and book tickets. While the administrator should be allowed to add/delete/update attractions (or movies) and set ticket limits and generate reports. It’s your duty to judge what additional functionality should be provided to consumers and administrators.

**ONLINE NATIONAL ZOO MANAGEMENT SYSTEM**

For animal lovers develop an online Zoo management system to maintain information regarding the animals (food, birth, death, and other updates), staff responsible to take care of animals and the zoo budget. The system should provide a platform to maintain standardized animal records, allow for easy online access and examination of real-time data.

**ONLINE MOVIE DATABASE**

A clone of imdb where users can read information about movies. Users can give rating to movings from 0 to 10. An average rating of users for each movie is also displayed. Users can also comment about movies. Admins can upload data of new movies.

**Flex (Neon)**