## Project Workshop Background Information

### Travel Experts Travel Agency profile:

The travel agency is located in Calgary and currently employs 16 travel agents,

1 manager and an Owner. The agency has determined that an easy-to-operate system for storing information on customers, suppliers, sales and commissions is necessary. They would like to use their sales and customer information to identify marketing opportunities. In addition, although suppliers calculate commissions, the travel agency does not have an easy way of identifying whether commissions are outstanding or properly calculated. There are few travel industry related software packages available, and none of them meet the needs of the travel agency.

As a result, the agency has set up a budget of $500,000 for the development of a database/reporting system. Although the Calgary office is funding the project, other Canadian agencies might be interested in purchasing the system once it is developed.

The agency has some general ideas on what they want from the system:

1. Load all existing data into the database.
2. Ability to use a form to enter new data into the database.
3. Set of scripts/programs, which can be easily modified to produce monthly reports.
4. Easy-to-use graphical interface.
5. Possible link to a future website.

The agents are willing to learn some simple SQL commands, but they would prefer ready-made scripts or an easy-to-use graphical interface. Travel Experts’ management understands that there may not be sufficient funds in the budget to develop all of the components of the system at this time. However, they want the database designed so that the components could be added in later.

As this is a new way of collecting information and producing reports, there are no processes at the Agency that could be used to model the system. However, each of the agents has contributed some information that they currently collect to the project.

### Project task:

A database prototype, designed and developed using Oracle will be generated and tested. The prototype will be used to assist students in the preparation of a proposal to the Travel Agency outlining the suggested database design and reports. The proposal will include an appropriate schedule, budget, personnel and future enhancements for the project.

***You will be required to supply the front-end, GUI interface for the database, so you should ensure that your database design will allow for such future development or web-integration.***

### Data:

The Agency has supplied us with an Excel workbook containing sample customer and sales information as well as supplier details. A separate document contains information on the codes used in the sales data. The agency has also given us a sample itinerary/invoice that is typically provided to the customer after a trip has been booked and paid for.

### Hardware:

Each travel agent has a Pentium III or IV running Windows 7 and each machine is equipped with a network card. The machines are part of a peer-to-peer network, allowing them to share two HP laser printers that are attached to the machines of the senior agents. The agents are connected to the Internet through a high-speed connection.

### Travel Agents:

The travel agents are reasonably computer literate as many of the booking systems are computer-based. Most are familiar with software packages such as Word and Excel. Without exception, the travel agents are excited about the project and they are eager to participate.

There are 4 senior agents, one of whom is also the Commission Specialist. In addition, there are 6 intermediate agents and 6 junior agents. Also there is a Travel Agency Manager. The Owner makes all budgetary decisions.

### Customers:

The Agency’s customers includes both corporate and leisure travel clients. Their downtown location is well situated to capture the corporate travel market.

The following customer information is generally available, although not all of the information is in electronic form.

* Name, address
* Phone numbers for home and business (if available)
* Reward travel program information, eg. airline frequent flyer number
* Credit card information for our corporate clients

The Agency is willing to consider collecting additional information that might be helpful for marketing purposes.

### Suppliers:

# Source:

The supplier information comes from an industry-maintained electronic publication and it is not necessarily in an appropriate format. A user is able to export portions of the data from the publication into an Excel spreadsheet. The supplier information is updated every 6 months.

# Description:

Our suppliers are located throughout the world but most have a representative in North America.

Suppliers may be affiliated with a number of organizations. The affiliation codes provided in the spreadsheet do not have to be translated. It is however, important that such codes be available in case of problems with a supplier.

Our suppliers fit into the following product categories:

|  |  |
| --- | --- |
| Product category | **Product ID range** |
| Airline Consolidators | 100-149 |
| Airlines | 150-199 |
| Attractions | 200-249 |
| Car rentals | 250-299 |
| Cruise lines | 300-349 |
| Hotel reps & chains in Canada | 350-399 |
| Motor Coach Tour Operators | 400-449 |
| Railroads | 450-499 |
| Tour Operators/Wholesales | 500-549 |
| Travel insurance | 550-599 |
| Yacht & Boat Charters | 600-649 |

* Each unique supplier has a Supplier ID.
* Each product category for a supplier is assigned to a unique range of numbers such as 100 –149, 150-199.
* Each unique product code that is the first in the series has address and contact information.
* If a supplier represents other products, then the product code is incremented by 1 within the product category range.
* The Representative column contains a reference to the supplier name. The Supplier ID for that product matches the company listed as the representative.
* If the supplier has a single contact or location, a Region ID of 1 is assigned. If there are two or more contacts or locations for the same supplier, then a Region ID of 2,3 etc is assigned.

A portion of a typical entry is shown below:

In this example, Encore cruises (supplier id 1005) sells both Encore cruises and Cunard Line cruises. It is the direct supplier for Encore cruises and the representative for Cunard Line cruises.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Supplier ID | Product ID | Region ID | Product | Contact | Supplier Name | Representative | Address, phone etc. |
| 1005 | 300 | 1 | CRUISE LINES | Aideen Hennessy | ENCORE CRUISES |  | 160 Bloor St E |
| 1005 | 301 | 1 | CRUISE LINES |  | CUNARD LINE | ENCORE CRUISES |  |
| 1005 | 302 | 1 | CRUISE LINES |  | WINDSTAR CRUISES | ENCORE CRUISES |  |
| 1005 | 303 | 1 | CRUISE LINES |  | CELEBRITY CRUISES | ENCORE CRUISES |  |
| 1005 | 304 | 1 | CRUISE LINES |  | SEABOURN CRUISE LINE | ENCORE CRUISES |  |
| 1005 | 305 | 1 | CRUISE LINES |  | ORIENT LINES | ENCORE CRUISES |  |
| 1005 | 306 | 1 | CRUISE LINES |  | SILVERSEA CRUISES | ENCORE CRUISES |  |
| 1005 | 307 | 1 | CRUISE LINES |  | STAR CLIPPERS | ENCORE CRUISES |  |
| 1005 | 308 | 1 | CRUISE LINES |  | ROYAL CARIBBEAN INTERNATIONAL | ENCORE CRUISES |  |
| 1005 | 309 | 1 | CRUISE LINES |  | ROYAL OLYMPIC CRUISES | ENCORE CRUISES |  |
| 1005 | 310 | 1 | CRUISE LINES |  | HOLLAND AMERICA LINE | ENCORE CRUISES |  |
| 1005 | 311 | 1 | CRUISE LINES |  | RADISSON SEVEN SEAS CRUISES | ENCORE CRUISES |  |
| 1019 | 350 | 1 | HOTEL REPS & CHAINS IN CAN. | Nancy Jones | BRIDGESTREET ACCOMODATION |  | 640 Howe St |
| 1019 | 350 | 2 | HOTEL REPS & CHAINS IN CAN. | Robert Metivier | BRIDGESTREET ACCOMODATION |  | 1000 Yonge St |
| 1023 | 100 | 1 | AIRLINE CONSOLIDATORS | Jorge Grinman | EURO WORLD TRAVEL & TOURS |  | 114-7th Ave SW |
| 1027 | 300 | 1 | CRUISE LINES | Maria Conte | EUROCRUISES INC. |  | 33 Little W 12th St |
| 1027 | 301 | 1 | CRUISE LINES |  | DELPHIN CRUISES | EUROCRUISES INC. |  |
| 1027 | 302 | 1 | CRUISE LINES |  | VIKING RIVER CRUISES | EUROCRUISES INC. |  |
| 1027 | 303 | 1 | CRUISE LINES |  | KRISTINA CRUISES | EUROCRUISES INC. |  |
| 1027 | 304 | 1 | CRUISE LINES |  | FRED. OLSEN CRUISE LINES | EUROCRUISES INC. |  |

### Sales:

A sample invoice showing a typical sale for the Agency has been attached. A description of the elements follows:

***Invoice/Itinerary number:***

* An invoice is usually a single complete trip or itinerary paid for by one individual.
* Multiple people may travel under the same itinerary.
* Multiple products may be part of a single itinerary/invoice

***Booking/confirmation number:***

* Each supplier provides a booking/confirmation number for the purchase of their product.

***Description:***

* A brief description of an invoice component that varies depending on the type of product.

***Taxes and GST:***

* Products are associated with differing amounts of taxes and GST.
* Taxes and other charges are provided to the agents by the suppliers. Examples of taxes/charges include the following:
  + fuel surcharge, airport improvement fees for airfare
  + provincial, state or country taxes for hotel rooms
  + port charges for cruises
* GST is difficult to calculate because it only applies to the portion of air/cruise travel that occurs in Canada. Suppliers quote the GST total to the agents.

***Payments:***

* Each invoice/itinerary may be associated with one or more payments.
* Payments take the form of deposits, full payments or final payments.

### Commissions:

Each supplier has a different commission rate. The supplier calculates the commission based on the total pre-tax sale price, ie the base price. Commissions may be a percentage or flat rate and many are capped. A commission cheque is sent to the travel agency, usually **within 60 days** **after the end date of the transaction**. For example, if a customer is booked into a hotel from January 10 – 17, the date used for the commission is January 17. Some suppliers routinely send out their commission cheques for all transactions completed in the previous month, rather than at the end of each transaction.

### Booking fees and other charges:

The Agency applies a booking fee of $25 per person to most corporate clients. Each travel agent uses their discretion when deciding whether to apply the fee to their leisure travelers. Generally, if a booking required a great deal of research, planning etc, a fee is applied. However, almost all agents agree that if an expensive trip is booked which results in a substantial commission, the fee is waived.

### Hints:

* You are **allowed to edit** the spreadsheets to include additional columns.
* You **do not have to** use all information contained in the spreadsheets.
* You **can separate a single spreadsheet into many smaller spreadsheets** using whatever criteria you desire. Alternatively, you can merge several spreadsheets into a larger one.
* SQL and PL/SQL can be used to manipulate the data into the form that you require. Consider creating temporary tables which will allow you to select various columns, apply calculations etc. in order to facilitate data loading.