

SPRING 2017
DATABASE ADMINISTRATION PROJECT
THE GREAT HOTEL CHAIN

Let me introduce myself. I am Lawrence Van Stroud the founder of the Great Hotel chain of luxurious hotels. I cater to the rich and powerful. My hotels are located in the most beautiful and expensive locations on earth. Once space travel becomes common place, I will establish a new Great Hotel on the moon or Mars or perhaps both. I started out with just one small hotel, which to be truthful was horrible but I built up my chain of hotels into an empire that includes 500 hotels. It is now so big that I am forced to develop a database system that will allow my managers to run this business effectively. These people are the ones who run the business. I, just collect the profits. Let me introduce you. This is Laura Wilson who is in charge of non-business reservations worldwide. This is Ajit Kumar who is in charge of corporate reservations. This is Wei Kong Lung who is in charge of store rentals. This is Max Preiss who is in charge of Housekeeping and Maintenance. These last two people are Peter Donatelli who is in charge of finance and Anton Levinovitch is in charge of security.

These people are all highly qualified and can help you gather the information you need.

Good Luck!

Laura Wilson

Hi. I am Laura Wilson and my area of responsibility is non-business reservations. Now, I can reserve suites for customers. Our hotels do not have “rooms”; rather we have 2, 3 or 4 room suites. Each suite comes with one or more bedrooms, a sitting room, 2 or more bathrooms and at least one office. Each suite can be equipped with many different extras. Of course, we charge more money for a suite that is better equipped. Probably no two suites are exactly the same nor are the prices ever the same. Some hotels give discounts at certain times of the year. We do not!! We are a luxury hotel. We don’t want people who cannot afford our rates. Our smallest room that is the least expensive is \$750 per day and we only have one of them! In each hotel, we employ an interior decorator who creates a

different look and feel for each suite. We do this so each guest feels that his suite is unique! Now, we need you to remember which items each suite contains because each suite is different. Firstly, each suite has a different number of bedrooms, bathrooms, offices and sitting rooms. Some suites have saunas, steam rooms, one swimming pool, bars, safes, fax machines, PCs and MACs, refrigerators, VCRs, DVDs, TVs, projection TVs, phones, cable TV, Jacuzzi, exercise equipment, exercise room and balcony. Yes, I know its hard to believe but some of our suites are so large that we have swimming pools inside of them and these pools are 20 feet by 60 feet. Of course, they come with a 24-hour lifeguard! Our customers sometimes have idiosyncrasies. For example, they don't like to be on the first floor or they don't like to be on the top floor or they don't like floor 13. Even if we number the floors and skip 13 (we go from 12 to 14), they still feel that 14 is really 13! So, we must know exactly where each suite is in terms of floor, wing of the building and view. If the windows face east, west, north or south. That matters to some customers. The customer may be particular in terms of the view in regards to ocean view or mountain view. When we build these hotels, we make sure that every suite has a nice view to something and it is never the parking lot or another room. For the prices that our guests pay, we must give them a superior view!

Even something as simple as a phone can be complex. Some guests conduct business while they are vacationing with us. They may need 2, 3 4 or many phone lines. Of course, each phone line is direct and does not go through the hotel operator. Since each suite has a variable number of phone lines, we must be careful to record the right phone line with the correct suite. However, if Jones wants 5 lines in his suite from April 6 to April 10, those lines are attached to his suite for those days. When Jones leaves and Smith checks in and he only needs 3 lines, 2 lines are detached from that suite. We give our customers unlimited local and long distance. Our normal phone charge is high enough to cover all calls.

Another issue is level of service. The normal service that comes with each suite is a maid whose responsibility is the entire floor. Remember our suites are large so we do not have many suites to a floor, so a maid can still provide excellent service. The maid stays on

duty from 8am to 4pm. The next level of service is the daily personal maid. In this arrangement, a personal maid is assigned to a specific suite for a normal 8-hour day. The highest service level is the 24/7 maid where a personal maid is assigned to a specific suite for 24 hours a day and seven days a week. Of course, we charge extra for each level of service above the normal level. Level 1 is included in the suite price while level 2 is an additional \$200 per day while level 3 is an additional \$500 a day.

The next concern for our clientele is security. They are wealthy or rich or both. So we provide security on each floor. If this is insufficient, level 2 security is per suite for an extra fee. A guest may also request an entire floor or an entire wing. However, we will not accommodate the entire hotel. Here level 2 security is an additional \$750 per day while taking an entire floor or wing will cost what all the suites on the floor or wing will cost. Quite an undertaking!

Worldwide, we get about 20,000 requests for reservations a week. Some of them are cancelled. I would say about 4,500 cancellations per week. We also get additional 10,000 requests per week asking about suite availability or about the extras in the suite. With our customers hardly anyone asks about the cost. Money is no object here.

As opposed to most hotels, when we accept a reservation, we actually set aside a specific suite for that customer.

Occasionally we change the contents of suites. We might add or remove TVs, VCRs, fax machines, etc. Obviously, we cannot remove swimming pools or balconies. Rarely do we add or remove suites to a hotel and we never seem to add or delete hotels. Changing a suite occurs about 60,000 times a year. Adding or removing a suite happens maybe 20 times a year. Once a month, we print out a report showing each suite and its contents.

Oh yes, one more thing to tell you. Sometimes, we only have large suites left but we have customers who want a small suite. Some of our suites can be changed from 1 large suite to 2 or 3 or smaller suites. We give the smaller suites suite numbers. Suppose suite 2305

is a large suite and it's turned into 3 smaller suites named 23051, 23052 and 23053. We must remember that 2305 is the master suite and 23051, 23052 and 23053 were the “children” suites. We can rent them out separately. On average, we have about 200 master suites, which can be turned into 450 children suites if necessary.

Now, I think it is time for you to meet Peter Donatelli who is in charge of finances. Good Luck.

PETER DONATELLI

Normally, I wouldn't talk to someone like you! I never waste time with anyone who is worth less than twenty million dollars. Even twenty million dollars today is nothing. However, I understand that your database system will save us a lot of money, so I agreed to discuss our finances. Although we would prefer for our customers to pay their bills immediately, we have to be careful not to offend them. After all we are dealing with the richest people on earth! However, we can't be fools either. About 20% of our customers pay their bills when they check out. The others will get a bill in the mail immediately. About another 30% pay up during the next 3 weeks when they get the bill. After 4 weeks we send out a second bill. Another 40% pay up when they get the second bill. We continue to send bills out every 4 weeks. After a year, we hand the matter over to a collection agency. We must keep track of how long we are waiting for payments. If a customer owes us more than \$5000 over a six-month period, we will not accept a reservation from such a customer. We reject customers about 2,000 times a month. However, for each customer when we make a reservation we must check if they are in that category of not paying us promptly. Normally, we get payments about 15,000 times a week. Customers usually do not pay their entire balance but rather a piece of it.

The really nice thing is how we charge customers. For each “extra” in the suite, we charge more money. For example, a basic one-bedroom suite is \$750 per night. A two bedroom suite jumps in price to \$1,000 per night. If we add a Jacuzzi, it's \$50 per night more. A balcony is \$100 per night more. An ocean view is \$500 per night more. The personal maid is \$200 per day more. Each phone line is \$35 per night plus the long

distance charges are extra. Since a customer can customize their suite, we may have to add or remove items from a suite. Therefore, the price of a suite will be determined for each customer and is not a fixed price. It is determined at the time of taking the reservation after the reservation clerk has gotten all the necessary information.

That's all the time I can spend with you. Here is Wei Kong Lung who is in charge of store rentals. Good Luck.

WEI KONG LUNG

Hi. Would you like to open a store in one of the hotels? I have prime locations available. No, too bad. Even the rich have cut back in this recession. Anyway, let me tell you about the stores at the Great Hotel chain. Each hotel has a number of stores available. Each store location is a different number of square feet. We charge by the square foot. Currently, I charge somewhere between \$40 and \$100 per square foot depending on the hotel the store is in. Although all our hotels are first-rate, some are more expensive than others are so we charge more per square foot in those hotels. I must keep track of the prices by year and hotel for a square foot of store space. I need to remember past prices too. All prices change January 1. Oh, there is one more aspect to the store rentals. Some customers sign a lease that gives them a specific end date. For example, a three year lease signed on March 22, 2002 would expire on March 21, 2005. I give 5% off each year of the lease. No lease, no discount. One year lease, 5% off. Two year lease, 10% off and so on. The longer the lease the less we charge. Some storeowners don't sign a lease and are month to month. Which means that they can leave giving one month's notice or we can get rid of them giving one-month notice. If we want, we can also change the monthly rent on these storeowners. In all cases, we must keep track of the monthly rents.

Now, I also have a secret code I use for stores. Is the store desirable? By this I mean, would a store attract new customers. For example, if I have a beauty parlor that everyone has heard of then it will attract additional customers. And if these new customers are rich

and they spend a lot of money that is good for us. So I measure each store and assign them a “desirability” value. A zero to five where five is the best and zero is the worst.

What’s that? Oh, good question? Why am I interested if new customers come in and spend more money in the stores? Because I get a percentage of all revenue. Whatever a customer spends in a store, I get a piece of it. Pretty nice deal! How much do I get? It depends on the desirability factor. The more desirable, the lower the percentage. A desirability rating (DR) of 5 has a revenue percentage of 4%, a DR of 4 uses 5%, a DR of 3 uses 7%, a DR of 2 uses 10%, a DR of 1 uses 14% and a DR of 0 uses 20%. If this chases out the less desirable stores, so much the better. I also need to keep track of the monthly revenues from each store and the amount of money I get from those revenues. If a store is ranked low in desirability but produces large revenue, I will give them a discount so that they pay a lower percentage. For example, if a coffee house opens and I consider it a DR of zero, I would charge 20%. However, if it produces such large revenue, then I may change its DR to 2 and in the future may give it higher DR ratings. I must keep the revenue number for each store each month for 3 years. I must also keep track of its DR because it can change monthly. We want to keep track of the past as well as the present. So if a travel agent customer rents one store for one year and next year a different store, we must keep track of that. Also, when the DR changes or the charge changes we want to consider that a new arrangement and we should keep that information.

Each hotel has on the average twenty stores. I must collect rent from each store each month and I must get revenue numbers from each store. After a store tells me what their revenue was for the month, I send a bill to that store for our portion. Sometimes, I don't get paid. I wait a couple of weeks and I send another bill. Every two weeks, I send a bill until I get paid. I can always turn the heat and the lights off. They get the message then! Each month the portion of revenue from a store may change since the amount of revenue changes and the percentage can change also. I change the percentage monthly on about 20% of the stores. It drives them crazy because they never know how much we'll charge them.

It's now time to hand you over to

AJIT KUMAR

Hi, I'm Ajit Kumar and I handle corporate reservations. If a company wants to hold a conference in a hotel and use several conference rooms. Each conference room has a unique number assigned to it in addition to a name. So, for example, the "Red River" conference room is actually CF345 in one of our hotels. Both the name and number of conference rooms in each hotel are unique. We must know the size of each conference room, the number of windows, if the windows open or are they permanently locked? In a conference room, either they all open or they are all locked. We need to know the number of Internet connections using cable in the room as well as how many phone lines exist. It will help to make a reservation if we know this information.

When a company makes a reservation for a conference room, they will discuss their requirements with a reservation clerk and also state for which days and which time the room is required. This will allow for the best selection to be made. We must know how the customer plans to pay for the conference room. A 20% deposit must be paid in advance at the time of a reservation. The deposit is forfeited if the customer cancels. For ease of use, each reservation gets a unique reservation number.

Many times when a customer reserves one or more conference rooms, he also wants to reserve several guest suites. He doesn't want to speak with someone else, so we will handle it. I have about 10 conference rooms per hotel. I get about 500 inquiries about conference room reservations per hotel per month. Of these, about 70% turn into real reservations. Of the requests that become reservations, 20% of them want to reserve hotel suites immediately. On average, they reserve about 100 suites. If we don't have 100 suites available, they simply go somewhere else. We must keep track of the payments for the conference rooms. To make my life simpler, I must set up a charge for each

conference room. Each conference room has a different size, configuration, and equipment so a different amount can be charged.

I must also keep records of payments for conference rooms including date paid, amount, how it was paid (credit card, check) and reservation number and customer number.

Unfortunately, many customers pay their bills over installments. So, we rarely get all the money at one time.

Let me take you to our maintenance supervisor, Max Preiss.

MAX PREISS

Hi, I'm Max. I'm in charge of the maids, plumbers, electricians, carpenters and other workers. First, I must keep track of basic information about these employees such as: name, employee ID, DOB, date started in company, yearly salary, and social security number. Then, I must keep track of their job title and job function and their last rating.

On a daily basis, I must keep track of which suites have been cleaned by which maids. This is good for two reasons. First, if something is done improperly, we will know who is responsible. Secondly, when a customer checks into the hotel, the clerk at the front desk can look into the computer and see if the suite has been cleaned. If it has, then the customer can check in. If not, then the customer must wait. This type of checking occurs about 300 times a day per hotel. Now, when a maid is finished with a suite, she must use her PC to update the database that the suite has been cleaned.

Now, for the other part of my duties. If a customer reports or a maid reports that a suite needs maintenance such as plumbing, electricity, carpentry or furniture, the hotel administrators put a hold on that suite. A trouble report must be created that includes the time and date of the report, which reported it, what the problem is and the people assigned to the trouble. The repairperson must login and report the time and date that the problem was fixed and a description of what had to be done. Only then is the hold

removed from that suite. Once a month, we issue a report that analyzes the most frequent troubles, the average time to repair and which repair people get called the most. Troubles are reported about 50 times a day per hotel.

I believe you've met everyone except Anton who is in charge of security. Let me tell you a secret. Anton used to be in the KGB in Russia. He is very effective and ruthless. He takes his job seriously. We had other database designers here in the past who said a wrong word to Anton. Anton got very angry and those database designers simply disappeared. Never seen again! So, be very, very careful.

Anton Levinovitch

My job is security so I suspect everyone of something. I do not trust my workers or the customers of the hotel I, also, do not trust you! In fact, the only person I trust is me and sometimes I'm not sure about me! Anyway, my job is to protect the hotel, the customers and the employees in that order. DO YOU UNDERSTAND? Good! Now, there are three groups that are suspicious and must be watched very carefully. The customers, the employees and the outsiders. What was that? Who are the outsiders? You must be a donkey brain. The outsiders are anyone who is not an employee or a customer. You are an outsider and I am watching you very carefully.

Anyway, I have listening devices and cameras all over the hotel. So, if someone said suite 5409 has a disturbance, I can immediately switch to the right camera and listening device and find out what is going on. It would be nice if everything went through the computer but it doesn't. I use the computer to figure out the camera number and listening device number in that suite and then I leave the computer to access those devices. I do this 40 times a day, every day in each hotel. I am not allowed to put monitoring equipment in every room but I am allowed to put it in some rooms. So I constantly change which rooms have the devices. I change the devices in suites about 60 times a day, every day in each hotel.

I also have 50 guards per hotel. Twenty-five are uniformed guards and twenty-five are undercover. For example, a plumber may actually be an undercover security man. Or a maid may be an undercover security woman. I must keep the basic information about each security person such as name, employee Id, social security number, DOB, salary, and date started. I also need to know which assignment each security person is on. Also, if they are undercover which person they are impersonating. For example, if Maria is an undercover agent and she is pretending to be a maid, we will have a phony record for her as a maid and a real record for her as a security agent. However, when we look her up as an agent, we will know that she is pretending to be a maid. But if we look her up as a maid, we won't know she is a security agent. We do this to maintain SECURITY. I usually need to access each uniformed security guard's record about 3 times a week for each guard to read information. The undercover guards, I need to access about 10 times a week for each undercover person to read information. For the undercover guards half of the accesses are to the phony records and half to the real records first and then to the phony records.

That's all I'm going to tell you. Good Luck and remember I'll be watching you!!!!!!