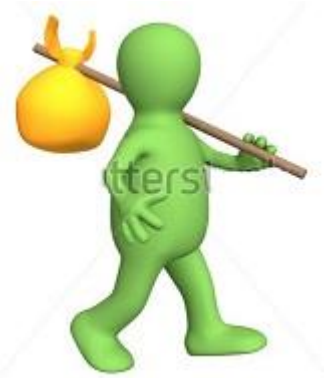
A Teddy Bear's Guide to Data Modelling by Example



Barry Williams
barryw@databaseanswers.org

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Chapter 1. Waking up with a Headache

The little Bear woke up with a headache on his 10th. Birthday.

He was surprised by his headache he because he was happy living with his Mummy and Daddy in London's Zoo in the beautiful Regent's Park.

But then he realised he was bored and wanted a change.

He started thinking about his friends.

He had lots of friends – some tall, some small, some who liked to spend all day in the water and some who liked to climb trees.

He thought about the fact that they had to be fed every day and wondered how much food they ate all together.

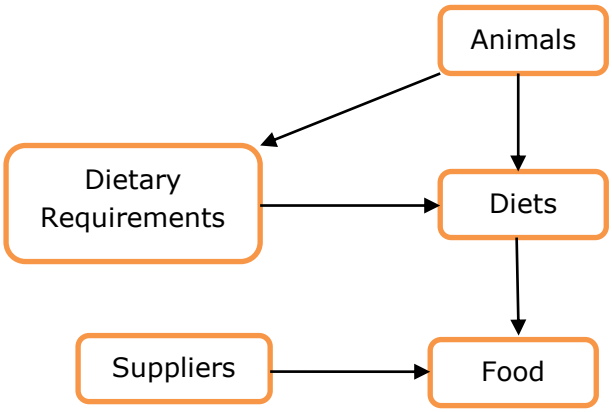
Then he realised that somebody had to supply all the food to the Zoo very day.

Then he started to think about how all these things were related (because he was a very smart little Teddy Bear).

In his mind it began to look something like this :-

1. There were lots of Animals in the Zoo
2. The Animals liked to eat every day.
3. They all had their own Dietary Requirements
4. Each Animal had their own Diet and ate different Things
5. Somebody supplies the Food that they Animals ate.

He could see a picture like this :-



He thought it would be useful to produce :-

- A list of Animals
- A list of Diets
- The total amount of Food the Zoo needed every day
- A list of Suppliers and how much each one supplied.

Chapter 2. Leaving the Zoo

He left the Zoo with his suitcase and mixed feelings.

Chapter 3. Meeting a Master Data Modeller

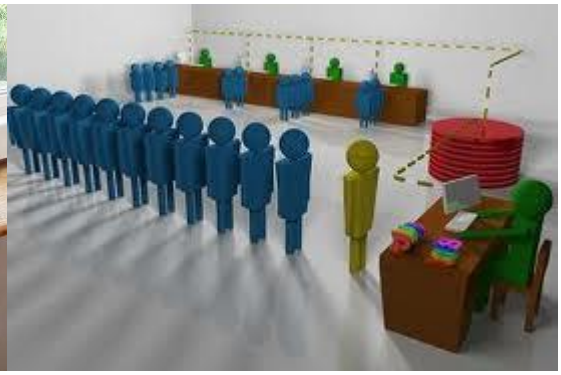
The Little Bear heard strange but nice music.
Around the corner, he saw somebody blowing into a bamboo and making music.
He said "That's nice music you are playing".
The man said "Thanks, I am rehearsing for my next part in the movies.
I am an actor. My name is Lars but people know me as Larry.
Tell me who you are".

The Little Bear said "I am a Travelling Teddy Bear on an adventure.
I left the Zoo this morning and I am walking down this road to see where it will lead me".

Chapter 4. Going to a Bank

The Little Bear went into a Bank without really knowing what it was.
He saw a lot of people waiting in a line, coming and going and talking to other people, with bits of paper being handed round and money changing hands.

The Teddy Bear looks at a Bank ...



He scribbled a drawing of what he was looking at and showed it to a gentlemen who seemed to be in charge.
The gentleman got very excited and asked him if he would like a job.

They told him he would be something called a 'Data Analyst'.
The Little Bear didn't really understand what they meant but he liked drawing his pictures so he said 'Yes'.

The Bank asks Teddy if he would like to be a mascot for the Bank.

They gave him a special uniform to wear and he felt very proud in his new role.

Chapter 5. Going to School

The Bank asked the Little Bear if he would like to visit a School and talk to the children about living in a Zoo.

The Bear liked that idea

Chapter 6. Becoming a Practitioner

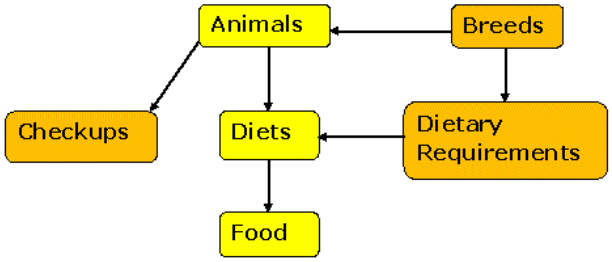
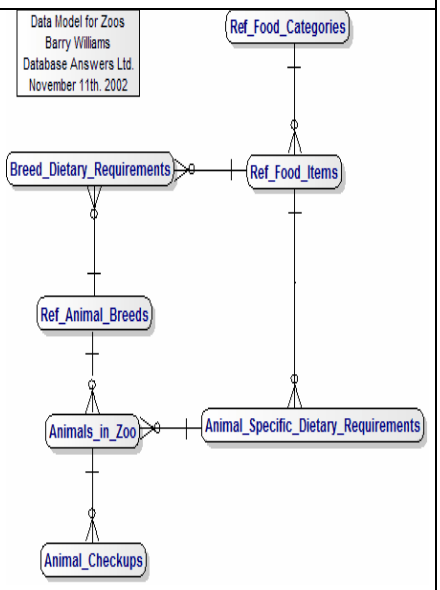
Chapter 7. Aspiring to be a Master

7.3 Different Modelling Styles

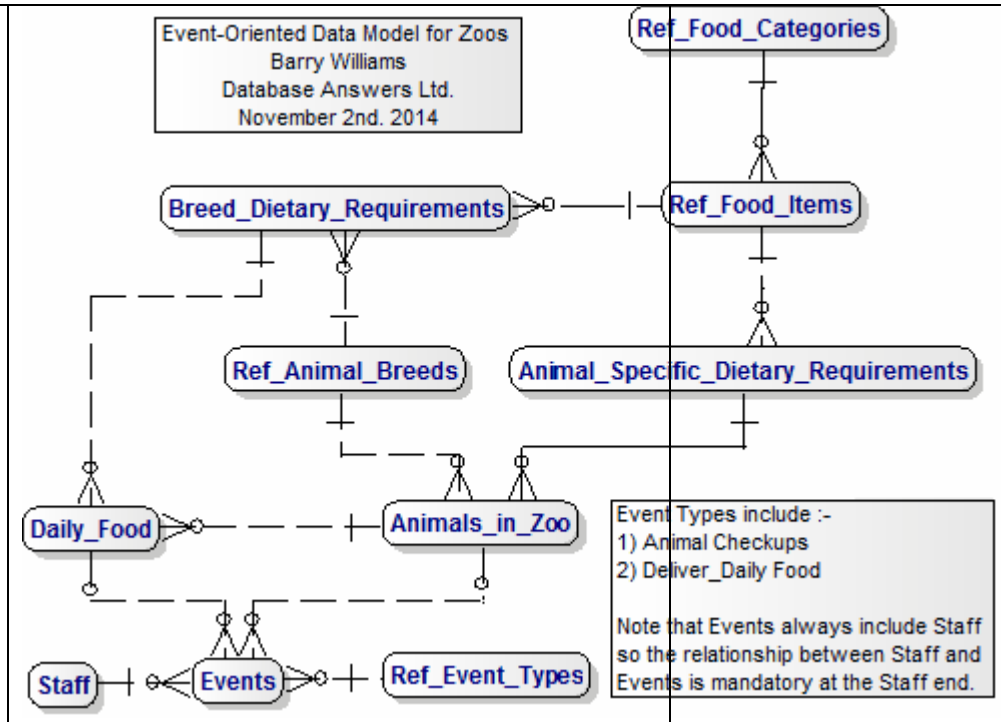
- The Master told the Little B**ear that there were four styles of Data Models :-**
  - Conceptual
  - Event-Oriented
  - One-to-Many / Master-Detail
  - Subject Areas

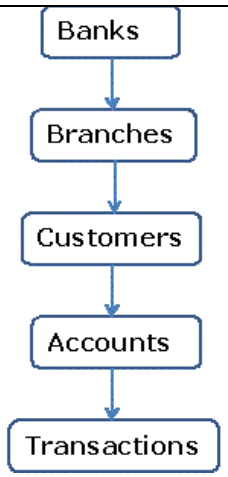
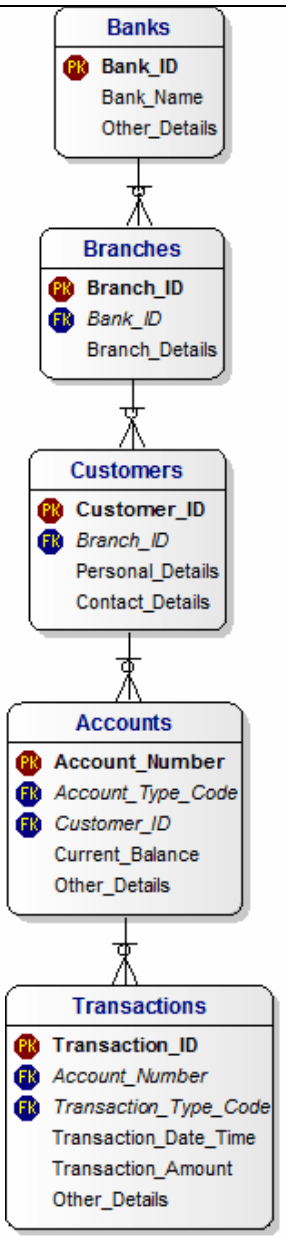
Then he told the Bear to try to find examples for Banks, Schools and Zoos, starting with these pages on the Database Answers Web Site :-

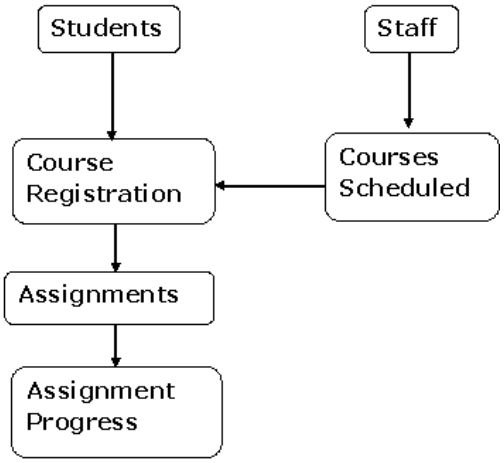
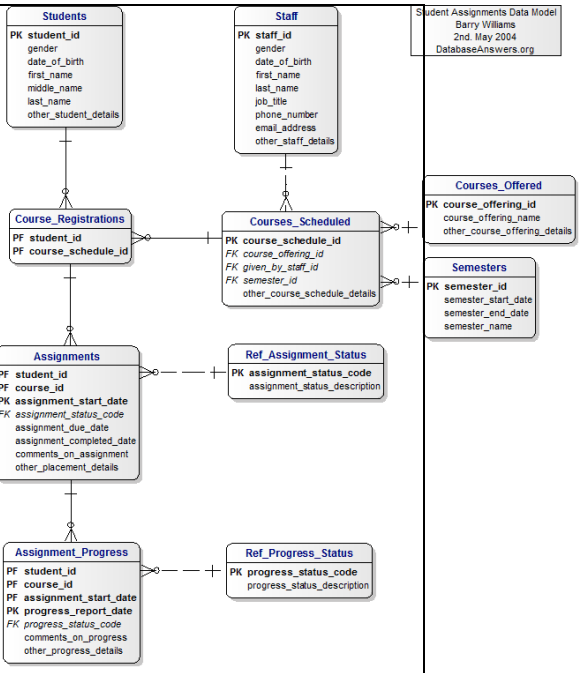
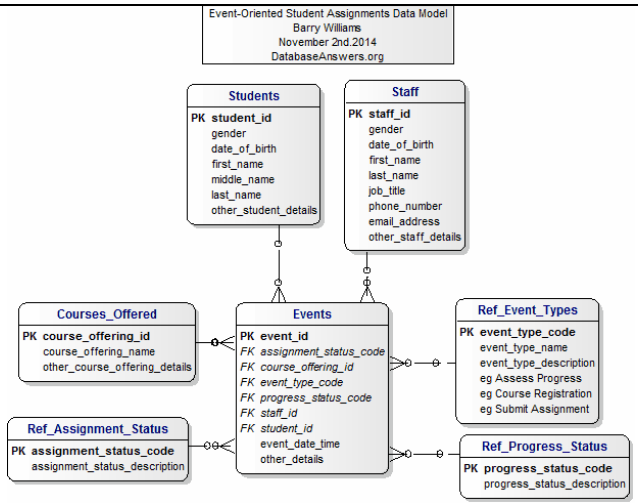
- Banks - http://www.databaseanswers.org/data_models/retail_banking_in_the_clouds/index.htm
- Schools - http://www.databaseanswers.org/data_models/student_assignments/index.htm
- Zoos - http://www.databaseanswers.org/data_models/zoos/index.htm

Style	Conceptual Models	ERD
Zoos		

Zoos - Event-Oriented



Banks	 Banks Branches Customers Accounts Transactions	 Banks PK Bank_ID Bank_Name Other_Details Branches PK Branch_ID FK Bank_ID Branch_Details Customers PK Customer_ID FK Branch_ID Personal_Details Contact_Details Accounts PK Account_Number FK Account_Type_Code FK Customer_ID Current_Balance Other_Details Transactions PK Transaction_ID FK Account_Number FK Transaction_Type_Code Transaction_Date_Time Transaction_Amount Other_Details

School Assignments		
School – Event-Oriented		

Add Event-Oriented Models

Chapter 8. Promotion at Last

Then came the day when Larry the Master told the Little Bear that he was ready to take the final test to become a Master in Data Modelling.

The Bear asked how he could prepare and the Master said simply that he should just walk around all day thinking like a Data Modeller.

Finally came the Test and the Master gave the Little Bear a train ticket and asked him to create a Data Model from it.

So the Bear decided to design an Invisible Model.

The Master said he was very happy with the Little Bear's Invisible Model and was pleased to promote him to the title of 'Master of Data Modelling' and he was entitled to wear a Black Hat and Red Scarf, just like Larry , the original Master.

Diets