

PERSONAL DATABASE LEARNING SUMMARY

Database learning, during which time I really have got lot; not only about database itself, but also about time management and many thing else. I'd like to appreciate some of my personal progress and thinking with my classmates.

- About database learning

In the first week, we didn't begin our actual database lecture as we usually had in other class. Professor showed us a quite fantastic ted speech to guide us on the way of database learning. What is data? How to manage data? These are the questions that leave me the most important impression and thinking in the following days, which I think, is of vital importance in my database learning. In this class Professor Koo also introduced some database tools for us, including dropbox, evernote and wordpress. In the next class DBMS and relational model were the main topics. For a relational model, data is stored in table, which is actually a set of relations. We can define some attributes to describe the data. We use relation and tuple to replace concept of table and row, as we usually do. At last, we gained basic knowledge of SQL query language.

After the National Day, in the next few weeks, we have a totally new learning pattern: present the lecture ourselves. It's seems a challenge for us at first, but since we start to do, we find it really worth and interesting thing. The first lecture is about SQL. In the lecture group 7 told us what is SQL and how to use SQL query language by the software MySQL. At last, they also told us some relational algebra to help us gain a deeper understanding of SQL. In the second lecture, group 10 offered a wonder class about E-R model. In this class I learned about disadvantages of relational model and found that E-R model is easier to understand because it introduces entity, which is a concrete object rather than abstract concept. This is very useful for data modeling process and directly after class, after more than one hour of heated discussion, we finally succeeded developing the E-R model of our plug-in. In the database design lecture that followed, I learned about an important conception: normalization. It is really important to do normalization when redundancy exists in large data tables. However, this increases operations between tables and it in turn decrease the query efficiency. Thus we must know how to do normalization and when it is needed to do normalization. Lecture of week 7 was about application design. It gave us important help in real application design process. Of the whole design process requirement analysis and construction feedback are the two processes that we are quite likely to neglect but it's really important.

Half term's database learning enables me to have a basic picture of database and grasped some important concepts, tools and methodologies.

- About team project

In this class, Professor Koo asks us to develop a plugin of wordpress or something else. Our group finally decided to develop a plug-in that helps us to better organize group activities, which is something like a group activity manager. To achieve this goal we must learn many other things other than database. It's a process of trying, paining but also quite interesting. Learning programming language like php seemed difficult at first. But as we tried continuously, we gradually got on the way. The design process enabled us to apply what we have learned about database to plugin design process, during which we also learned a lot about time management. In the class Professor Koo introduced us many interesting tools such as X-Mind, evernote, S-curve and so on. It turns out to be useful tools in the design process.

We develop our plugin together for hours and hours. When we become tired, we telling some jokes; when we are hungry, we go to the canteen together. We work together, eat together and play together. I really treasure the time spent with my dear fellows. Now mid-term has passed and our plug-in has completed basic function design, but there still needs improvement.

Source: <http://toyhouse.cc/profiles/blogs/personal-database-learning-summary>