

Data Warehousing

Practical Task # 02 MDBS

Task 2C

1. Let's consider data evolution of a STELS company that sells digital devices. This company started in Aug 2003 and later in beginning of 2005, company have decided to build a Data warehouse for better decision-making using company's data. Considering this need, DW for STELS was made in 1st March 2005. STELS initially started production of only mobile phones and launched window 3G smartphones i.e., STELS 65D and STELS 65XD on 1st August 2005. For android users, on 1st February 2006 STELS have launched two news phones i.e., STELS GENUS and STELS H11.

At the end of 2009, with the increasing demand of STELS product in market, the product management sector of STELS have decided to start the production of digital device that can be used to browse internet, watch videos, organize content and much more. Therefore, lately at 1st October, 2010 STELS have launched STELS ZOOM Tab.

Further 4G started to live up to its hype after 2010. And STELS have made their android phone i.e., STELS GENUS and STELS H11, capable of 4G on 15th January 2012. At the end of 2012, STELS have started working on the feature of its tablets to grow its business market. So, on 1st August, 2012 STELS have introduced two new versions of tablet with additional features i.e. STELS Galaxy Tab and STELS ONE Tab.

Later on 1st March 2013, STELS have stopped production of STELS 65D and STELS 65XD and launched metal body smartphones dual camera on same date. New launched mobile phone were STELS U11 and STELS U11+.

Consider the above scenario of STELS (a) trace the evolution of data by drawing a classification hierarchy tree, (b) construct a validity matrix that make sure the correctness of all OLAP queries on STELS warehouse.

2. Suppose that a data warehouse consists of the four dimensions time, doctor, patient and laboratory and the two measures count and charge, where charge is the fee that a doctor charges a patient for a visit

Draw the lattice of cuboids (from apex to base cuboid) for the above data warehouse.