Databases and Information systems week 7?8?

Database life cycle

DBLC is very similar to the SDLC. However, the DBLC contains 5 phases:

Phase 1 – Planning

This is where the collection of the necessary information occurs and the perp of a theoretical framework which works of the requirements specified. Budget and a timeline for the development and implementation is other developed and given.

Phase 2 – Analysis

This is where critical evaluation of the database development which was done in the previous phase. This is where a team of developers will assess the plan made in the previous phase but the main points such as the budget, time and platform to be used. Forecasted results will also be made with the previous plan to find any issues or potential loopholes.

Phase 3 – Design/Development

A database program is designed or developed in this third stage of database lifecycle. It is in this stage that all the logical design parameters of database operations are finalized, and the program development is carried out under a specified time period. Upon the completion of this design stage, a complete database software package is made available, with all the technical limitations and loopholes addressed in the previous two stages. Furthermore, this finalized version of the database program is usually checked for its operational effectiveness

Phase 4 – Implementation

developed program is implemented over the given set of data values. In the implementation stage, the developed database program starts working as user-controlled software, aimed to manage a pre-existing pool of data for the desired tasks.

Phase 5 – Maintenance

Maintenance is usually a prolonged stage, representing the entire period, which is allocated for testing, managing, troubleshooting and maintaining the features of developed database program. This stage normally begins right after the implementation of a database program and lasts until any considerable problem occurs with the database, requiring it to be re-designed or re-planned for another cycle of implementation.

1. Identify Entities

2. Find Relationships

3. Draw Rough ERD

4. Fill in Cardinality

5. Define Primary Keys

6. Draw Key-Based ERD

7. Identify Attributes

8. Map Attributes

9. Draw fully attributed ERD

10. Check Results