

Information technology essay

[Business](#), [Management](#)



Question One: Fully describe all phases of SDLC (software Development Life Cycle)?

The Software Development Life Cycle has ten phases. The following is a description of the ten phases: -

- Phase 1: Initiation- In this phase of the life cycle, the sponsor of the software an opportunity, a gap or a need. Following this identification, a concept proposal is developed detailing the need for the development of the software and the problem it is intended to solve.

- Phase 2: System Concept Development-This phase involves a feasibility study, risk management plan, system boundary documents, boundary of the concept and cost benefit analysis. This phase informs the decision to move on to the other phases.

- Phase 3: Planning- This is the phase where a basis for the acquisition of the resources required in achieving the intended solution. More precisely, a project management plan is prepared in this phase.

- Phase 4: Requirements Analysis- In this phase, the development team analyzes the user needs and consequently develops user requirements. This aids in the development of a detailed and precise functional requirements document.

- Phase 5: Design- In this phase, the detailed functional requirements prepared in the previous phase is transformed into a systems design document. The essence of this is to focus on how best to deliver the intended functionality.

- Phase 6: Development-The product of the previous phase, the design, is transformed into a comprehensive information system. Comprehensiveness

entails the acquisition and installation of systems environment, preparation of test case procedures, creation and testing of databases, preparation of test files, coding, compilation and refining of programs, procurement activities and performing test readiness reviews.

- Phase 7: Integration and Test- This phase is important for the demonstration that the developed systems conform to those requirements stipulated in the functional requirements document prepared in phase 4.

- Phase 8: Implementation- During this phase, the problems that are identified in the integration and testing phase are resolved. Additionally, preparations for implementation are also done in this phase as well as implementation of the designed and tested system into a production environment.

- Phase 9: Operations and Maintenance- During this phase, the tasks that are required to operate and maintain the information systems inside the production environment are described. These actions include in-process and post-implementation reviews.

- Phase 10: Disposition-This phase describes the activities at the end of the system. More emphasis is placed on proper preparation of requisite data.

Question Two: Fully describe the first, second and third tier (n-tier) architecture

Firstly, n-tier architecture is a form of architecture in software development where the functions on data management, application processing and presentation are logically separated. This means that every layer in the architecture interacts exclusively with the layer directly below it and is responsible for a specific function.

- First tier/Presentation tier: this is the top-most level of a software application and is the user interface. The principal function of this tier is to translate tasks and results of the software into something comprehensible to the user.
- Second tier/Logic tier: is the second layer and is tasked with coordinating the application, process commands, performing calculations and making logical evaluations and decisions. In addition, this tier is also tasked with moving and processing data between the first and the third tier.
- Third tier/Data tier: it is in this tier that data is stored and retrieved from a file system or a database. From the third tier, the information retrieved is passed on to the second tier for evaluation and processing and eventually passed on to the first tier to be viewed by the user.

Question Three: Fully Describe RAD and JAD

JAD is an acronym for Joint Application Development. This is a technique for developing software that involves different stakeholders in the development process. These stakeholders include end-users of the product, management and information technology staff. The philosophy behind JAD is that the best way for a system analyst to get the gist of what clients require from a new system is to listen for the actual users of the system. However, JAD is rocked by a bottleneck in terms of a gap in communication where information technology experts do not understand issues in the business realm and businessmen do not understand subjects in the information technology realm. In order to bridge the gap, all the participants are given equal partnership in running the project.

RAD (Rapid Application Development) on the other hand is a technique

referred to for speeding up the overall time used in developing a system. In its four phases, end-users are involved in order to reduce the development time and thereby decrease the expense. The first of the four phases is the requirements planning phase where solutions to a business problem are identified. The second phase; user design phase is a non-technical design phase where end-users provide input on how the software system should be designed. In the third phase; the construction phase, the actual construction of the software system is done. The fourth and final phase of RAD is the cutover phase where the system is installed and the intended users are tested and trained.

Question Four: What is the virtual server? Investigate the major vendors that provide virtual server and compare their products?

A virtual server is a computer together with its many server programs located somewhere else that is used by many website owners in a way that each website owner administers it as if they had absolute control of the server. This means that the website owners can have their own internet protocol addresses and domain names. Additionally, they can address assignments, add e-mail accounts, and manage their passwords, statistics and logs without involving the internet service provider.

Some of the vendors of virtual servers include justhost. com, iPage and blue host among others. Justhost. com has a rating of 98%. Additionally, the vendor offers unlimited disk space and unlimited bandwidth, unlimited domains, unlimited MySQL databases. The product uses wordpress, Joomla and Drupal hosting packages. iPage and blue host are just like justhost. com

in terms of their features. However, while the three vendors promised increased uptime, justhost. com unlike the others offers money back guaranteed. It is probably for this reason that it was voted the top virtual server vendor.