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Assignment: 1

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1. what is information system? List down its types.

Information system is the study of complementary networks and the combination of software, hardware and telecommunication networks that are used to create and distribute useful data in an organization.

The types of Information system are listed below:

- Database management system
- ➤ Office information system
- > Transaction processing system
- knowledge management system
- Decision support system
- > Executive support system

2. Define Application software.

An Application software is user specific and defined as a computer program designed to perform a specific task which is not related to the computer's operation and capable of dealing with user input as well as complex tasks.

3. Define System Development methodology. Write about any one system development methodology.

System development methodology is the methodology for software development process and systematically organizing the best ways to improve development system process efficiently. It is assumed that the use of a system methodology will be specific for any kinds of projects based on different technical, organizational projects and team considerations.

Although, there are various types of system methodology, I have explained the Incremental model below:

Incremental Model

The incremental model is the software development process model that divides requirements into different separate modules during the software development cycle. Each module in this cycle ,

goes through the processes of requirements, design, implementation, and testing. Every release of this module adds its functionality to the preceding iteration and the procedure continues until the entire system is completed.

Furthermore, Incremental model can also be distinguished with the help of advantages and disadvantages.

Advantages of Incremental model are:

- > Errors can be easily recognized in this model.
- Easier to test and debug.
- ➤ More flexible.

Disadvantages of incremental model are:

- ➤ Needs very clear definition before starting the division of whole system.
- ➤ Problems may occur due to integration between iteration.
- ➤ The requirement of a good planning designing is needed.
- 4. who are the stakeholders groups in Information system?

Following are the stakeholders groups in Information system:

- Project managers
- > System user
- System builders
- > System Analyst
- System owners
- System Designers

5. Differentiate between system analyst, business analyst and programmer analyst?

System Analyst Business Analyst Programmer Analyst A system analyst is an IT Business analyst is a person Programmer analyst is a person who professional who works on a designs, develop and implements who guides business in high level organization to improving computer programs and modify ensure the systems, processes, products, services and software specifications throughout infrastructures and computer software through data analysis. the production life cycle. systems.

6. What are the steps in SDLC? Explain each step.

The system development life cycle (SDLC) is essentially a project management model for the development of the system in an organization. SDLC defines the different stages that are needed for the progress of the system analysis project from its initial idea or conception all the way to deployment and maintenance. The different steps of the system development life cycle are briefly explained below:

- I. planning stage: Firstly, lets begin with the planning stage, this stage is exactly like, the phase in which developers need to make planning for the entire upcoming projects. Most importantly, the planning stage sets the project schedule, which can be a key importance for a commercial product that can be sent to market by a certain time.
- ii. Analysis stage: In the analysis stage, all the specific details which is required for a new system as well as determining the first ideas for prototypes because Developers may define any prototype system requirements evaluate alternatives to existing prototypes Perform research and analysis to determine the needs of end-users.
- Iii. Design stage: In this stage, Developers first outline the details for the overall application, within specific aspects, such as its User interfaces System interfaces, Network and network requirements Databases. After completion of implementing plans developers know what they need to do throughout every stage of the cycle moving forward and prepare a design document to be referenced throughout the next phases of the SDLC.
- iv. Implementation stage: In this stage, Coding, documentation, training processes, and support

capabilities are all completed during the implementation phase.

- V. Maintenance: furthermore, the introduction of a new version or release of software, as well as the accompanying upgrades to documentation, training, and support.
- 7. List any five principals of system development.

Following are the five principals of system development:

- Determine the stages and activities.
- Throughout the development process, keep track of everything.
- Create guidelines.
- Maintain control over the process and projects.
- ➤ Justify the purchase of systems as a capital investment.

8. Define:

- I. Outsourcing: A contract in which one company contracts another company to carry out a scheduled or ongoing activity, or to provide services and make products.
- ii. Data Dictionary: The Data Dictionary is a collection of names, definitions, and properties regarding the data components that are used or captured in the database.
- iii. Prototype: A prototype is an early sample or develop advanced to test a concept or method.
- v. ERP v SCM: ERP (enterprise resource planning) is a software application for businesses use to manage day-to-day operations such as accounting, procurement, project management, risk management and internal control, and supply chain activities. whereas,

SCM refers to the process administration of the flow of goods and services which includes all processes that develop raw materials into final goods and services.

v.CRM(customer relationship management):CRM stands for customer relationship management. CRM is the method through which a company or organization keeps record of their interactions with customers, usually by utilizing data analysis to study a large amount of data.

9. Briefly Describe Technical feasibility.

Technical Feasibility focuses on the on the organization's technological resources.

Technical feasibility helps the company in identifying whether technical resources are

appropriate for the task at hand and whether the technical team is capable of turning concepts into operational systems. It also includes a review of the proposed system's hardware, software, and other technical requirements.

10. Differentiate between tangible and intangible benefits with an example for each.

Tangible benefits Intangible benefits

Tangible benefits can be easily measured Intangible benefits cannot be measured easily.

Increase flexibility Decrease flexibility

Increase activity speed Decrease speed of activity

11. Describe five Characteristics that a good system analyst should have during requirement determination.

The five characteristics of the system analyst are enlisted below:

- > System analyst should be able to communicate both verbally and non verbally.
- > System analyst should be ready to collaborate well with others.
- > System analyst should be able to listen carefully and respond appropriately to what others say.
- > System analyst should be good with technology. Even though the analyst is not expected to be a specialist in programming, a general knowledge of concepts and terms is necessary.
- > System analyst should have the knowledge of the data processing principles.