**UNISHA TAMANG**

**SECTION B**

**I. Define what is a Context Diagram.**

Context diagram is a diagram that defines the boundary between the system,and it’s environment,showing the entities that interact with it.

**2. Describe one type of attribute and provide an example.**

Multi-valued attribute:

An attribute composed of multiple components, each with an independent existence is called Composite attribute. For example: Address attribute of student Entity type consists of many sub attributes such as Street, City, Zip code, State and Country etc.

**3. Information system development requests come from variety of sources. Explain**

**three sources of project request.**

Requests for information system development come from a variety of sources, including the following:

**I. Senior Executives' Request**

Senior executives, such as presidents and vice presidents, often have a better understanding of the company than department heads. Because senior executives are in charge of the entire organization, they naturally have a broader range of responsibilities. System project ideas submitted by them are given more weight and often have a broader scope.

**ii. Analyst's Request**

System analysts identify and analyze specific areas in which projects can be developed. In this situation, they draft a proposal with the assistance of the management.

**iii. Request from an Unknown Group**

Events outside of the company might also have an impact on project requests. Government contractors, for example, are required to use government-specified cost accounting systems having government-specified characteristics In general, new demands from external organizations have resulted in project requests, either for new systems or upgrades to current ones. Project requests coming from this source are also important.

**4.**

**5. Distinguish between range of response and open-ended interview questions**

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| **Range of response** | **Open-ended interview** |
| Range of response questions or Close-ended questions are that require the respondent to evaluate something by offering restricted answers to a specified response on a numeric scale. | Open-ended questions are free-form survey questions that allow respondents to respond in open text style, allowing them to answer with their full knowledge, feeling, and understanding. This indicates that the answer to this question is not confined to a single alternative. |
| It's easier to tabulate the responses and analyze the results when you use this method.  On a scale of one to ten, questions might include. | When you want to comprehend a bigger process or elicit the interviewee's thoughts, attitudes, or suggestions, this is a good tool to use. |

**SEC B**

**1. System development methodology refers to the framework that is used to structure,plan and control the process of developing an information system.**

**a) Explain one type of methodology called as prototyping.**

A prototype methodology is a software development method that involves building, testing, and modifying a prototype until it is acceptable. The prototype serves as the foundation for the final product. The phases of this model are as follows:

* Prerequisite assembling and analyzing
* Design
* Development
* User Evaluation
* model Refinement
* Product Deployment and Maintenance

**b) List three strengths and weaknesses of prototyping methodology.**

Following are the strengths and weaknesses of prototyping methodology:

**Strengths**

* Users have an active role in the development process. As a result, issues may be identified early in the software development process.
* Missing functionality can be recognized, reducing the likelihood of failure. Prototyping is often seen as a risk-reduction strategy.
* The prototype assists in developing a better understanding of the customer's needs.

**Weaknesses**

* Customers may be unwilling to participate in the iteration cycle for a long period of time.
* Because customer needs are always changing, there is a lack of information.
* It is quite difficult for software developers to handle all of the client-requested updates.

**c) System Development Life cycle(SDLC) consists of several phases that mark the progress of the systems analysis and design effort. Briefly describe the two phases of SDLC mentioned below:**

TheTwo phases of SDLC are described below:

**Design**

The preliminary design, sometimes known as a quick design, is the second step. A basic system design is created at this stage. It is not, however, a complete design. It offers a high-level overview of the system to the user. The quick design assists in the prototype's development.

**Analysis**

The initial step in the development of a prototype model is the requirement analysis phase. At this stage, the system's needs are thoroughly described. System users are polled throughout the process to establish what they expect from the system.

**d) Project manager is an individual with a diverse set of skills who is responsible for managing the information system project process when the project is accepted. There are several skills acquired in order to become a good project manager. List three of them.**

following are some skills to be a good project manager:

**Leadership**

It is critical to have solid leadership skills while heading a team or project. You may help drive a project ahead and produce a positive conclusion by successfully coaching, mentoring, and encouraging your coworkers. Strong leaders also foster a productive work environment by communicating often with their teams and assisting their employees in developing important project management skills.

**Risk Management**

Risk management, which entails identifying and planning for potential hazards, is an essential skill for project managers. The most productive project managers are capable of identifying risks from the start of a project and developing appropriate mitigation procedures in the event that the risk does, in fact, surface.

**Critical thinking and problem solving**

While critical thinking is a ability that many professionals may benefit from mastering, it is especially valuable in project management. Rather to being reactive, the finest project managers are proactive, use critical thinking abilities to guide tasks that are difficult or unclear. Project managers are able to handle complicated challenges for businesses while delivering solutions on time and within budget by keeping objective, examining facts, and evaluating choices without judgment.

**4.**

**a. Distinguish between project initiation and project planning.**

**Project initiation:**

The project initiation phase includes all of the tasks that must be completed before a project is approved and planning may begin. The goal is to outline your project at a high level and then connect it to the business case you aim to answer. At this stage, the opportunity or cause for the project is identified, and a project is formed to maximize on that opportunity.

**Project planning:**

Project planning is the process of determining how to complete a project within a specific timeline, generally with defined stages and resources. The project planning phase's purpose is to establish business needs. Determine price, a timetable, a list of delivery and delivery dates.

**b.** **List TWO activities performed during project initiation.**

Two activities performed during project initiation are as follows:

* Determine Project Stakeholders and Their Impact.
* Create a project charter.

**c. All projects are feasible given unlimited resources and infinite time. Most of the projects developed within tight budgetary and time constraints. Briefly describe the two types of feasibility listed below**:

**Operational feasibility**

Operational feasibility is a measure of how successfully a proposed system solves issues and capitalizes on possibilities discovered during scope definition, as well as how well it meets the criteria determined during the requirements analysis phase of system development. The operational viability of a project is determined by the available human resources and decides whether or not the system will be usable once the project has been created and executed.

**Schedule feasibility**

Schedule feasibility is defined as the possibility of a project being completed within its projected time restrictions by a specified due date. The practicality of the schedule can decide whether or not the timetable offers appropriate time to execute the project.

**d. Differentiate between tangible and intangible benefits with example for each.**

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| Tangible benefits | Intangible benefits |
| Tangible benefits are those that can be identified in monetary terms. | Intangible benefits cannot be clearly evaluated in economic terms, yet they have a major corporate influence. |
| The tangible benefits of a procedure are unlikely to change. | Intangible benefits might increase or decrease over time. |
| Cash flow, cash reduction, and labor hours are some examples. | For example, brand popularity, customer loyalty, goodwill, and so on. |