
 "Education for Knowledge, Science, and Culture"
- Shilshanamaharshi Dr. Bapuji Salunkhe
Shri Swami Vivekanand Shikshan Sanstha's
Vivekanand College, Kolhapur
(Autonomous)


KOLHAPUR (AUTONOMOUS)

Department of BCA

Continuous Internal Evaluation 2019-20

| Sr. No. | Evaluation Activity |
|---------|---------------------|
| 1 | Home assignment |
| 2 | Oral |
| 3 | Seminar |
| 4 | Open book test |



HOME ASSIGNMENTS



Assignment No : 1

Q.1 Define System and explain elements of a System.

→

Introduction :-

The term "system" is used in many different ways. Everyone is familiar with such expressions as "professor Rajneesh has an impossible grading system" or "Deepak has a system for betting on the horses." But for computer users, a system is a group of parts are integrated for the purpose of achieving some objectives. The term system is derived from the Greek word *Systema*.

Defination :-

"A system is an orderly grouping of interdependent components linked together according to a plan to achieve a specific objective". The word component may refer to physical parts, managerial steps or a subsystem in a multi-level structure.

Elements of System :



(1) Output and inputs :

Inputs are the information or elements that we enter the system for processing. Output is the outcome of processing. A major objective

of a system is to produce an output that has value to its user. Whatever the nature of the output, it must be in line with the expectations of the intended user. A system feeds on input to produce output.

(2) Processor :

The processor is the element of a system that involves the actual transformations of input into output. It is the operational component of a system. Processors may modify the input totally or partially, depending on the specifications of the output.

(3) Control :

The control element guides the system. It is the decision-making subsystem that controls the pattern of activities governing input, processing and output. In organization context, management as a decision making body controls the inflow, handling and outflow of activities that affect the welfare of the business. In a computer system, the operating system & accompanying software influence the behaviour of the system.

(4) Feedback :

Control in a dynamic system is achieved by feedback. Feedback measures output against a standard procedure that includes communication.



and Control. After the output is compared against performance standards, changes can be made in the input or processing and consequently the output. Feedback can be positive or negative. Positive feedback reinforces the performance of the system. Negative feedback provides some information for action that will help us to improve the quality of the output.

[5] Environment

The environment is the area where the organization operates. It is the source of external elements for a system. It often determines how a system must function. An environment may consist of vendors, competitors etc.

[6] Boundaries and Interface

Boundaries are the limits that identify a system's components, processes and interrelationships when it interfaces with another system. A system should be defined by its boundaries.

Q.2 Explain Types of system in detail.

There are mainly three types of system.

1. physical or Abstract
2. Open or closed
3. Man Made Information System



[1] Physical or Abstract system

Physical system are tangible entities

that may be static or dynamic in operation. For example:- the physical part of the computer center are the offices, desks and chairs that facilitate operation of the computer. They can be seen and counted, they are static. In contrast a programmed computer is a dynamic system. Data, programs, output are example for dynamic system.

Abstract systems are conceptual or non-physical entities. ex:- formulae of relationships among sets of variables.

[2] Open or closed system

This classification of system is based on their degree of independence.

An open system has many interfaces with its environment. It permits interaction across its boundary. It receives inputs from and delivers outputs to the outside. ex:- An open system is an information system because it must adapt to the changing demands of the user.

A closed system is isolated from environmental influences. A completely closed system is one which is self-contained, that it does not interact with its environment. But in reality no system can keep itself isolated from its environment for long time.



13) stable systems

In stable systems, there are well defined relationships between the various components but if these relationships have external disturbances then they are capable of returning to their desired state. The stability is measured in terms of certain elements remaining within previously set limits.

For example, in an inventory control system, the reorder level of particular items is based on demand forecasts and past experience. We can call an inventory control system as negative feedback mechanism wherein we record the things when they are deviating from limits. When the system has several such feedback loops whereby, if one loop is out of control another is activated to restore control, it is known as an ultra-stable system.

Assignment - 2

PAGE NO. _____

DATE ____/____/____

Q 1 Define system analyst & explain the qualities & role of system analyst.

⇒ Definition of system analyst:

A systems analyst is an IT professional who works on a high level in an organization to ensure that system, infrastructures and computer system are functioning as effectively and efficiently as possible. System analysts carry the responsibility of researching problems, finding solutions, recommending courses of actions and co-ordinating with stakeholders in order to meet specified requirement.

A system analyst is the person who selects and configures computer system for an organization or business.

1. Qualities of System Analyst

1] Understanding

Computer systems analysts need the ability to identify problems and assess their solution. They need to sense the impact of the system on people at work and understand any problem that they may be having.

2] Teaching and selling ideas

Computer systems analysts need to develop the skills required for educating other people who use computer systems. They should be able to sell their ideas to promote innovations needed for solving problems with the use of computers.



3] Creativity

For a Computer System analyst to be Creative, the users can easily develop their ideas and improve user systems to match user requirements.

4] Problem Solving skills

Computer systems analysts to be Creative, the users can easily develop their ideas and improve user systems to match user requirements. Computer systems analysts should be able to identify complex problems and explore related information so as to implement solutions.

5] Active Learning

Computer systems analysts have to understand the implications of new information needed for solving problems and making decision both in the present and future job conditions.

3.2 Roles of System Analyst

1] Requirement

The basic step for any system analyst is to understand the requirement of the users. This is achieved by various fact finding techniques like interviewing, observation, questionnaire etc. The information should be collected in such a way that it will be useful to develop such a system which can provide additional features to the users apart from the desired.

2] change Agent

The analyst must be viewed as an agent of change. A Candidate system is designed to introduced change and reorientation. In the role of change agent, the systems analyst may select various style to introduce change to the user organization.

3] Motivator

A system must be well design and acceptable to the user. system acceptance is achieved through user participation in its development, effective user training and proper motivation to use the system.

4] Solving Problems

The analyst must provide alternate solutions to the management and should do study of the system to avoid future problems.

Q.2 what is feasibility study and explain its types?

⇒ Feasibility study

As the name implies, a feasibility analysis is used to determine the viability of an idea, such as ensuring a project is legally and technically feasible as well as economically justifiable. It tells us whether a project is worth the investment in some cases, a project may not be doable. There can be many reasons for this, including requiring too many resources,

which not only prevents those resources from performing other tasks but also may cost more than an organization would earn back by taking on project that isn't profitable.

Types of Feasibility Study

A feasibility analysis evaluates the project's potential for success. therefore perceived objectivity is an essential factor in the credibility of the study for potential investors and lending institutions.

1] Technical Feasibility

This assessment focuses on the technical resources available to the organization. It helps organizations determine whether the technical resources meet capacity and whether the technical team is capable of converting the ideas into working systems.

2] Economic Feasibility

This assessment typically involves a cost/benefits analysis of the project, helping organizations determine the viability, cost and benefits associated with a project before financial resources are allocated.

3] Legal Feasibility

This assessment investigates whether any aspect of the proposed project conflicts with legal requirements like zoning laws, data protection acts or social media laws. Let's say an

organization wants to construct a new office building in a specific location.

4] Operational Feasibility

This assessment involves undertaking a study to analyze and determine whether and how well the organization's needs can be met by completing the project. Operational feasibility studies also examine how a project plan satisfies the requirements identified in the requirement analysis phase of system development.

5] Scheduling Feasibility

This assessment is the most important for project success after all, a project will fail if not completed on time. In scheduling feasibility, an organization estimates how much time the project will take to complete.

Q. 3 Describe the fact finding techniques in detail.

⇒ Fact finding technique

Fact finding techniques are a process of collection of data and information based on techniques that contain a sampling of existing document, research, observation, questionnaires, interviews, prototyping and joint requirement planning. System analyst uses suitable fact finding techniques to develop and implement the current existing system. Collecting required

Facts are very important to apply tools in system development life cycle because tools cannot be used efficiently and effectively without proper extracting from facts.

1] A sampling of existing documentation, forms and databases

The best way to analyze the existing system is to collect facts from existing documentation rather than from human sources. There are various kind of documents to collect fact from existing documents. These include emails, Customer Complaints, suggestion box notes and reports that document the problem area problem performance reviews, samples of completed manual forms and reports and samples of completed computerized forms and reports various types of flowcharts and diagram, program documentation & user training manuals.

2] Research and site visits

Research and site visit, second technique is the process of examining the problems which had previously solved by other sources that can be either human or documents.

3] Questionnaires

Questionnaires are also one of the useful fact-finding techniques to collect information from a large number of users. Users fill up the questions which are given by the system analyst and then give the answers back to the



DATE: . . .

system analyst.

4] Interviews

A interview is the most commonly used technique to collect information from the face to face interviews. The purpose of the interview is to find, verify, clarify fact, motivats end users involved, identify requirement and gather ideas and opinions.

5] Prototyping

Another fact-finding technique is known as prototyping which collects the requirement facts of the system. Prototyping is sampling a small working model and it is more related to the predesign of the information system.

6] Joint requirements planning

JRP is the structured group work meeting to identify, analyze problems and define the requirement of the system. JRP is becoming increasingly common in system planning and systems analysis to obtain group consensus on problems, objectives and requirement.



Assignment No. 3

Q1. What is software engineering? Explain the characteristics of software.

Answer:-

Software engineering is a branch of Computer science which includes the development and building of computer systems software and applications software. Computer system software is composed of programs that includes computing utilities and operations systems.

The outcome of software engineering is efficient and reliable software product. The application of a systematic, disciplined, quantifiable approach to the development, operation and maintenance of software i.e. the application of engineering to software.

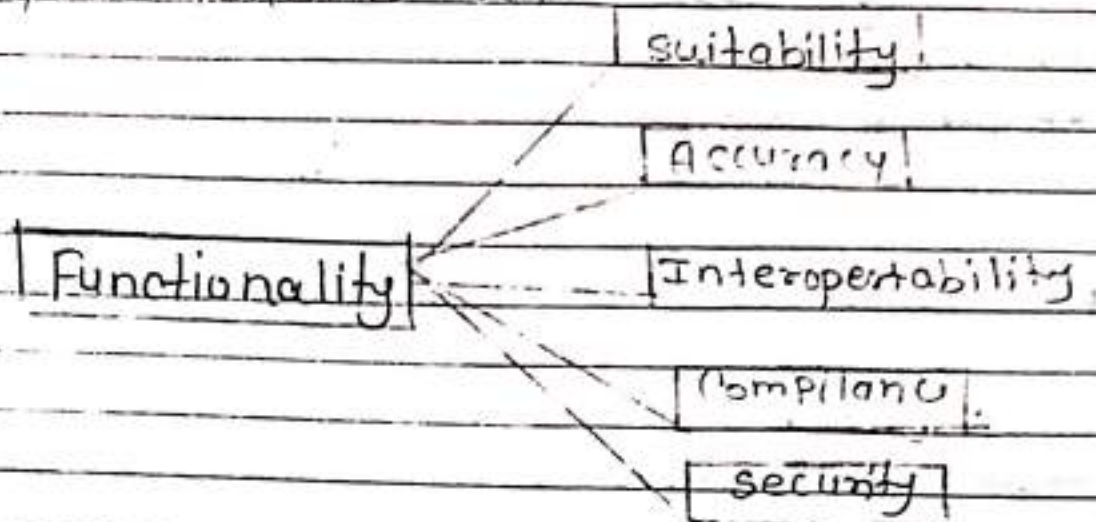
Characteristics of Software Engineering

- (1) Functionality
- (2) Efficiency
- (3) Reliability
- (4) Usability
- (5) Maintainability
- (6) portability



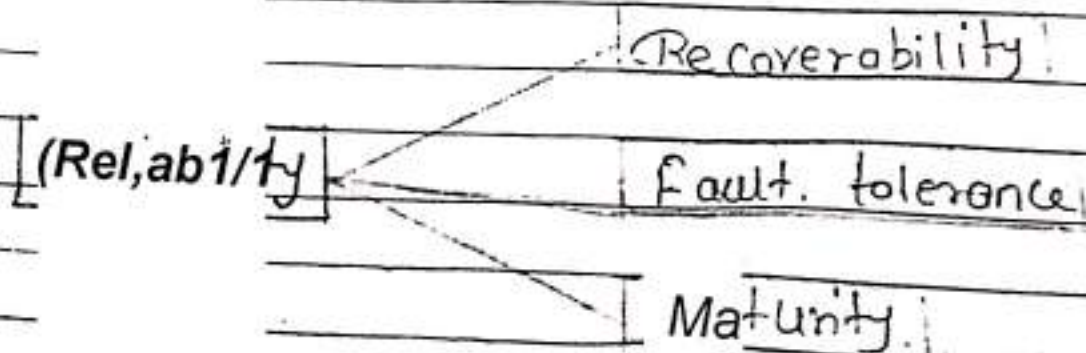
Functionality 1.1

Functionality is the ability of the system to do the work for which it was intended. It refers to the degree of performance of the software against its required intended purpose. Required functions are:



(2) Reliability

Reliability is a set of attributes that can bear on a capability of software to maintain its level of performance under the given conditions for a stated period of time. Required functions are:



[3] Efficiency :

It refers to the ability of the Software to use system resources in the most effective and efficient manner.

The software should make effective use of storage space and executive Command as per desired timing requirement.

Required Functions are :

In time

Efficiency

In Resource

[4] Usability :

It refers to the extent to which the software can be used with ease. The amount of effort or time required to learn how to use the software.

Required Functions are

Understanding

Usability

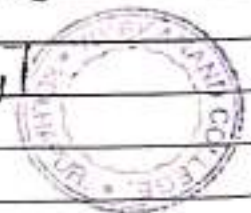
Learnability

Operability

[5] Maintainability

It refers to the ease with which the modifications can be made in a software system to extend its functionality improve its performance or correct errors.

Required Functions are :



Maintainability

Testability

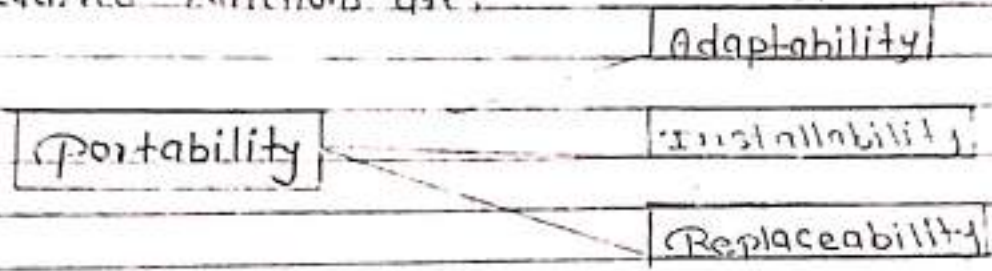
Reliability

Changeability

Ageability

(c) Portability :

A set of attribute that bear on the ability of software to be transferred from one environment to another, without or minimum change. Required functions are:



Q2 Describe McCall's quality factors in brief.

McCall's Quality Model :

McCall's quality model was introduced in 1977. This model is incorporated with many attributes termed as software factor which influence a software.

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(i) Product operation factors -

(iii) product transition factors :-

portability, Reusability, Interoperability

(ii) product Operation Factors :

It includes five software quality factors which are related with the requirements that directly affect the operation of the software such as operational performance, convenience, ease of usage and ifs.

These factors help in providing a better user experience.

(i) Correctness :-

The extent to which a software meets its requirements specification, the completeness of the output information, which can be affected by information incomplete data. The availability of the information. The standards for coding and documenting the software system.

(ii) Reliability :-

The extent to which a software performs



determine the maximum allowed utilization of the Software System and can also pull the entire system or to one or more of its separate functions.

(3) Efficiency :

The amount of hardware resources used to do the software needs to perform a function. It includes processing, storage and data communication. Capability. It also deals with the time between recharging of the systems portable units.

(4) Integrity :

The extent to which the Software control an unauthorized person from the accessing data of Software. It mainly deals with System Security and also distinguish betⁿ group of people to be given read as well as write permit.

(5) Usability :

The extent of effort required to learn, operate and understand the functions of the software. It deals with staff resources needed to train a new employee and to operate the software system.

(ii) Product revision quality factors.

It includes three software quality factors which are required for testing and maintenance of the software. They provide ease of maintenance Flexibility & testing efforts to support the software to be functional according to the needs.



requirements and user interface failures.

(7) Maintainability:

The effort required for software developers to detect and correct an error during maintenance phase. The maintenance personnel identify the reasons for software failures, correct the failures, and to verify the success of the correction.

(8) Flexibility:

The effort required to detect and correct an error during maintenance phase. The maintenance personnel include the adapting the current software to additional circumstances and custom without changing the software.

(9) Testability

The effort required to verify a software to ensure that it meets the specified requirements. It includes predefined intermediate result, log files, and automatic diagnostics performed by the software system.

(iii) Product Transition Software Quality:

It includes three software quality factors that allow the software to adapt to the change of environment in new platform or technology from the previous.

process. The entire software development process includes 6 stages system development life cycle model which includes planning and development of software.

SDLC Phases :-

Planning :- obtain approval for project, initiate, assess, feasibility plan, schedule.

Analysis :- Understand business needs and processing needs.

Design :- Define solution system based on requirement and analysis decisions.

Implementation :- Construct, test, train users, install new system.

Maintenance :- Keep system healthy and improve.



[1] Feasibility Study or planning :-

(i) Define problem and scope of existing system.

(ii) Overview the new system and determine its objectives.

(iii) During this phase, the integration and testing of System are also conducted.

(iv) A Feasibility Report for the entire project is created towards the end of this phase.

[2] Analysis and Specification :-

(i) Gather, analyze and validate the information. Define the requirements and prototypes for the new system.

(ii) Evaluate the alternatives and partition the requirement.

(iii) Examine the information of End-user and enhance system goal.

(iv) A Software Information Specification (SIS) document, which specifies the software, hardware, which functional and network requirements of the system is prepared at the end of this phase.

[3] System Design

(i) Includes text design of application, network, database, user interface and system interface.

(ii) Transform the SIS document into logical

diagram

diagram



- set of specification that can be implemented in a programming language.
- (ii) Create a contingency, training, maintenance and operation plan.
 - (iv) Finally, prepare a design document which will be used during next phase.

[4] Implementation :-

- (i) Implement the design into source code through coding. Combine all modules together into training environment that detect errors & defects.
- (ii) A test report which contains errors is prepared through test plan that include test related tasks such as test case generation, testing, criteria, and resource allocation for testing.
- (iii) Integrate the information system into its environment and install new systems.

[5] Maintenance / Support :-

- (i) Include all activities such as phone support or physical onsite support for users that is required once the

system is installed.

- (F) Implement the changes that software might undergo over a period of time, or implement any new requirements.



(iii) It also includes handling the residual errors and resolve any issues that may next exit in the System over the testing phase.

SDLC is used by analysts to develop an information system. SDLC includes the following activities:

- requirements
- design
- implementation
- testing
- deployment
- operations
- maintenance

Q15 Write down the difference between waterfall model and spiral model

| Waterfall Model | Spiral Model |
|--|---|
| 1. Waterfall model works in sequential method. | spiral model works in evolutionary method |
| 2. In waterfall model errors or risks are identified & rectified after the completion of stages. | In spiral model errors or risks are identified and rectified earlier. |
| 3. Waterfall model is adopted by <u>cc,rb,raer-</u> | Spiral model is adopted by <u>de-w,afe-a-t-</u> |



1. Waterfall model is applicable for small project.

Spiral model is adopted by developers used for large project.

2. In waterfall model requirements and early stage planning is necessary.

While spiral model requirement and early stage planning is necessary if required.

3. Flexibility to change in waterfall model is difficult.

Flexibility to change in spiral model is not difficult.

4. There is high amount risk in waterfall model.

There is low amount risk in spiral model.

5. Waterfall model is comparatively inexpensive.

Spiral model cost is very expensive.

6. Can only be generated in the end.

Each iteration produces a working model.

7. The requirements are freeze.

The requirements are not freeze.



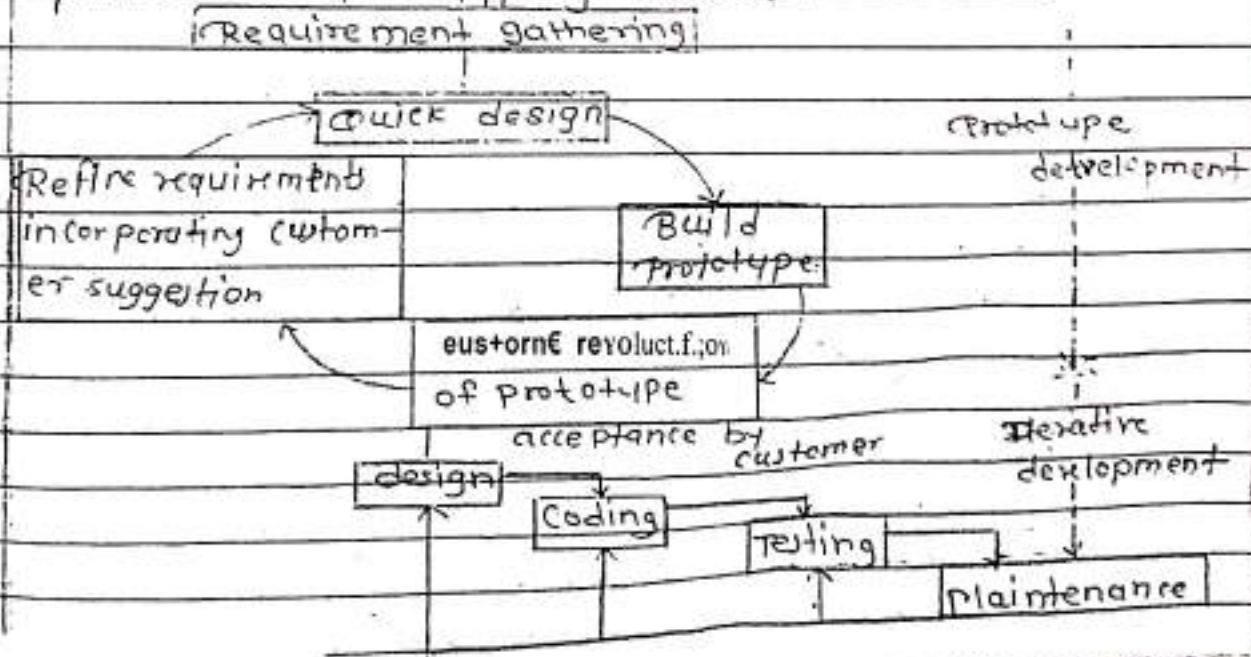
Q.5 Explain the prototyping model and RAD model in brief.

Prototyping Model :-

The prototyping model is one of model of a System development life cycle (SDLC), the most popularly used software. This model is used when the customers do not know the exact requirements.

The prototyping is used to allow the user evaluate developer proposals and try them out before implementation. Once the customer figure out the problem. The prototype is further refined to eliminate them. The process continues until the user approves the prototype and finds the working model to be satisfactory.

* Phases of prototyping Model :



The prototype development of software is shown in figure. The software is developed through two major activities - one is prototype construction and another is iterative waterfall based software development.

(i) Prototype Development :-

Prototype development starts with an initial requirements gathering phase. A quick design is carried out and a prototype is built. The developed prototype is submitted to the customer for evaluation based on the customer feedback, the requirements are refined and the prototype is suitably modified. This cycle of obtaining customer feedback and modifying the prototype continues till the customer approves the prototype.

(ii) Iterative Development :-

Once the customer approves the prototype, the actual software is developed using the iterative waterfall approach. The SRS document is usually needed to be developed since the SRS document is invaluable for carrying out tractability analysis, verification and test case design during later phases.

The code for the prototype is usually thrown away. However, the experience gathered from developing the helps a great deal in developing actual software. By constructing the prototype and submitting it for user evaluation many customer requirements get properly defined.

and technical issues get resolved by experimenting with the prototype.

There are four types of model or reversible:

(A) Rapid Throwaway Prototyping :-

This technique offers a useful method of explaining ideas and getting customer feedback for each of them. In this method, a developed prototype need not necessarily be a part of the ultimately accepted prototype. Customer feedback helps in preventing unnecessary design faults and hence, the final prototype developed is of better quality.

(B) Evolutionary Prototyping :-

In this method, the prototype developed initially is incrementally refined on the basis of customer feedback till it finally gets accepted. In comparison of above model, it offers a better approach which saves time as well as effort. This is because developing a prototype from scratch for every iteration of the process can sometimes be very frustrating for the developer.

(C) Incremental Prototyping :-

In this method, the final product is decomposed into different small prototypes and developed individually. Eventually, the different prototypes are merged into a single product. This method is helpful to reduce the feedback time between the user and the application development team. It is very efficient approach which reduces complexity.



of the development process.

(D) Extreme Prototyping is

used for web development.

Sequential independent

This method is mainly consists of three phases.

(i) First phase

It is using existing static pages in the HTML format.

(ii) Second phase

It is using bcli

Screen was made with

(iii) Third phase

This is the final phase where all services are implemented and associated with the final prototype.

Application -

The prototyping model should be used when the requirements of the product are not clearly understood or are unstable. It can also be used if requirements are changing quickly.

This model can be successfully used for developing user interface, high technology software, intensive technology, and systems with complex algorithms and interfaces.

Water Fall Model is



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but idealistic. Earlier this model was very popular, but nowadays it is not used. But it is very important because all other software development life cycle models are based on the classical waterfall model.

Classical waterfall model divides the life cycle into a set of phases. This model considers that one phase can be started after completion of previous phase. It is a sequential flow. Here the phases do not overlap with each other. The different sequential phases of classical waterfall model are shown in below figure.

Feasibility study

↓
Requirements analysis and specification

↓
Design

↓
Coding and unit testing

↓
Integration and system testing

↓
Maintenance



[1] Feasibility Study :-

The main goal of this phase is to determine whether it would be financially and

Technically feasible to do
 The Feasibility Study involves understanding
 the problems and determine the new
 phases of the project. The phases of the
 study are: Requirements, Analysis, Design, Implementation, and Maintenance.

(2) Requirement gathering and analysis, the process of gathering and analyzing the requirements of the system. This phase consists of two different activities:

(i) Requirement gathering and analysis:
 Firstly all the requirements regarding the software are gathered from the customer and then analyzed. The goal of the analysis part is also to remove incompleteness (an incomplete requirement is one in which some parts of the actual requirement have been omitted) and inconsistencies (inconsistent requirement is one in which some part of the requirement contradicts with some other part).

(ii) Requirement specification.
 The analyzed requirements are documented into a formal document.



team and customers. Any future dispute between customers and the developers can be settled by examining the SRS document.

(3) Design :

The aim of the design phase is to transform the requirement specified in the SRS document into a structure that is suitable for implementation in some programming language.

(4) Coding and Unit Testing :

The coding phase involves translating the design into a program. This is followed by unit testing phase to check whether each module is working properly or not.

(5) Integration and System testing :

Integration of different modules are undertaken soon after they have been coded and unit tested. Integration of various modules is carried out incrementally over a no of steps. During each integration step, previously planned modules are added to the partially integrated system and the resultant system is tested. Finally after all modules have been successfully integrated and tested, the full working system is obtained and system testing is carried out on this.



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(date)

System testing consists three different kind of testing activities.

Alpha testing: Alpha testing is the system testing performed by the development team.

Beta testing

is the system testing

performed by a set of users.

Acceptance testing: After the software has been delivered, the customer performed the acceptance testing to determine whether to accept delivered software or to reject it.

(c) Maintenance:

It is most important phase of SDLC. The effort spent on maintenance is the ~~50%~~ 50% of total effort spent to develop full software. There are basically three type of maintenance:-

Corrective Maintenance: This type of maintenance is carried out to correct errors that were not discovered during the product development phase.

Perfective Maintenance: This type of maintenance is carried out to enhance the functionalities of the system based on the customer request.

Adaptive Maintenance:- It is usually required for porting the software to work in a new environment such as work on a new computer platform or with new operating system.

"ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षण प्रसार"
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Shri Swami Vivekanand Shikshan Sanstha's
VIVEKANAND COLLEGE (AUTONOMOUS), KOLHAPUR

NOTICE

Date: 17/10/2019

DEPARTMENT OF B.C.A.

All the students of B.C.A I, II are hereby informed that, their **Oral Examination** is scheduled as per the following time table in **Room No.29**. Students must remain present in their **allocated time slot only**.

| Date | Class | Time | Roll Number |
|------------|--------|----------------------|----------------|
| 22/10/2019 | BCA I | 7.30 am to 8.30 am | 9901 to 9920 |
| | | 8.30 am to 9.30 am | 9921 to 9940 |
| | | 9.30 am to 10.30 am | 9941 to 9960 |
| | | 10.30 am to 11.30 am | 9961 to 9983 |
| 23/10/2019 | BCA II | 7.30 am to 8.30 am | 10001 to 10020 |
| | | 8.30 am to 9.30 am | 10021 to 10040 |
| | | 9.30 am to 10.30 am | 10041 to 10060 |
| | | 10.30 am to 11.30 am | 10061 to 10073 |

Note:

- 1) Dress code is Compulsory.
- 2) Students should come with lecture note book and Assignment book.




(Mr. S.S. Kale)
Co-ordinator
Department of B.C.A.
Vivekanand College, Kolhapur

SEMINAR

SYSTEM ANALYSIS AND DESIGN PPT

PRESENT BY ABHISHEK JAYANT VARNE

ROLL NUMBER:- 10081

SUBJECT :- SYSTEM ANALYST AND ITS ROLES



-GUIDED BY MEGHA PATIL MAM

CONTENT:-

- Definition of system analyst
- Qualities of system analystic
- Roles of system analyst



DEFINATION OF SYSTEM ANALYST:-

1. It is a process of collecting and interpreting facts , identifying the problems and decomposition of the system into its compact
2. System analysis is a conducted for the purpose of studying a system or its parts in order to identify its objectives
3. It is a problem solving techniques that all the componants of the system works efficiently to accomplish their purpose



QUALITIES OF SYSTEM ANALYSTIC :-

- a) Must Have Business Knowledge
- b) Technical Skills
- c) Good Communicator
- d) Problem Solving Skills



ROLES OF SYSTEM ANALYST :-

- I. Acts as a middleman and an architect
- II. Agent of change
- III. Investigator And Manipulator
- IV. Motivators And Sales Person



THANK YOU!!!



"ज्ञान, विज्ञान आणि सुरंस्कार यांसाठी शिक्षण प्रसार"

शिक्षणगर्हर्षी . डॉ . थापूजी राळुंगे

Shri Swami Vivekanand Shikshan Sanstha's

VIVEKANAND COLLEGE (AUTONOMOUS), KOLHAPUR

NOTICE

Date: 13/09/2019

DEPARTMENT OF B.C.A.

All the students of B.C.A-II are hereby informed that, their **Open Book Test** of System Analysis and design is scheduled on 16th Sept. 2019 in **Room No.29**. Students must remain present for this test.

Note:

- 1) Dress code is Compulsory.
- 2) Students should come with lecture note book and Assignment book.




(Mr. S.S. Kale)
Co-ordinator
Department of B.C.A.
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System Analysis and Design

Unit Test-I

Date-8/01/2020

Time- 30 min.

solve any 10 Questions out of 15

* Indicates required question

1. Email *

2. Name of Students *

3. Class *

4. 1. Documentation is prepared

1 point

Mark only one oval.

- A. at every stage
- B. at system design
- C. at system analysis
- D. at system development



5. 2. Which of the following is not true of the conversion phase of the development life cycle? 1 point

Mark only one oval.

- A. documentation should be emphasized
- B. steps must be taken to phase out the old system
- C. the user and systems personnel must work closely together
- D. the non machine components of the system should be considered

6. 3. Which of the following is not a characteristic of good test data 1 point

Mark only one oval.

- A. should be comprehensive
- B. every statement should be executed
- C. users do not participate at this preliminary stage
- D. All of the above

7. 4. Which of the following appropriately explains the desirable characteristic of good system design? 1 point

Mark only one oval.

Option 1

- A. Conversion
- B. Long discussions
- C. Modular approach
- D. Proper documentation



11/28/23, 5:07 AM

8. 5. During the system study, the executive vice-president and the other managers exercise their responsibility of

1 point

Mark only one oval.

- A. planning
- B. organizing
- C. directing
- D. controlling

9. 6. Problem analysis is done during

1 point

Mark only one oval.

- A. before system test
- B. system design phase
- C. systems analysis phase
- D. All of the above

10. 7. To run the old system and the new system at the same time for a specified period, the system implementation approach used is

1 point

Mark only one oval.

Option 1

- A. pilot
- B. direct
- C. phased
- D. parallel



11. 8. On the feasibility committee, department representatives serve as: 1 point

Mark only one oval.

- A. liaison to their departments
 B. ready sources of information
 C. direct users of the new system
 D. All of the above

12. 9. A _____ is an outline of a process that keeps develop successful information systems. 1 point

Mark only one oval.

- A. CASE tool
 B. Success Factors
 C. Phased Conversion
 D. System Development Life Cycle

13. 10. An appraisal, of a system's performance after it has been installed, is called system 1 point

Mark only one oval.

- A. review
 B. planning
 C. maintenance
 D. batch Processing



14. 11. In top down analysis and design

1 point

Mark only one oval.

- A. each succeeding phase is as detailed as the phase before it.
- B. each succeeding phase is less detailed than the phase before it
- C. each succeeding phase is more detailed than the phase before it
- D. all of the above

15. 12. System prototyping helps the designer in

1 point

Mark only one oval.

- A. communicating to the user, quickly, how the system, when developed, will look like and get a feedback.
- B. giving a demo of the software, to the system manager to whom he reports
- C. making the programmers understand how the system will function.
- D. None of these

16. 13. Mistakes made in the requirements analysis stage show up in

1 point

Mark only one oval.

- A. System testing
- B. System design
- C. System development
- D. System implementation

17. 14. A system analyst designs a new system by

1 point

Mark only one oval.

- A. propose alternatives to the current system
- B. developing the system as a large, single unit
- C. adopting a developed system to the present environment
- D. identifying sub systems and the interfaces between sub systems



18. 15. Which of the following is not considered as a tool at the system design phase? 1 point

Mark only one oval.

- A. piechart
- B. decision table
- C. systems flowchart
- D. data-flow diagram

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SAD test -I

SAD TEST -I
Date-29/12/2020
Marks -30

Time-40 min

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2. Name of student

3. Class

4. 1. System study involves

1 point

Mark only one oval.

- A. study of an existing system
- B. documenting the existing system.
- C. identifying current deficiencies and establishing new goals
- D. All of the above
- E. None of the above



5. 2. In Prototyping

1 point

Mark only one oval.

- A. BASIC is used
- B. COBOL is used
- C. 4GLs are used
- D. system is documented
- E. None of the aboveOption 1

6. 3. Which of the following is not a factor in the failure of the systems developments projects?

1 point

Mark only one oval.

- A. size of the company
- B. inadequate user involvement
- C. failure of systems integration
- D. continuation of a project that should have been cancelled
- E. None of the above

7. 4. Documentation is prepared

1 point

Mark only one oval.

- A. at every stage
- B. at system design
- C. at system analysis
- D. at system development
- E. None of the above



8. 5. In phase 1 of the system development life cycle, which of the following aspects are usually analyzed? 1 point

Mark only one oval.

- A. outputs
- B. input (transactions)
- C. controls
- D. All of the above
- E. None of the above

9. 6. During the maintenance phase 1 point

Mark only one oval.

- A. System requirements are established
- B. System analysis is carried out
- C. Programs are tested
- D. All of the above
- E. None of the above

10. 7. To run the old system and the new system at the same time for a specified period, the system implementation approach used is 1 point

Mark only one oval.

- A. pilot
- B. phased
- C. parallel
- D. direct
- E. None of the above



11. 8. Problem analysis is done during

1 point

Mark only one oval.

- A. system design phase
- B. systems analysis phase
- C. before system test
- D. All of the above
- E. None of the above

12. 9. Top-down programming is

1 point

Mark only one oval.

- A. a group of related fields
- B. a map of the programmer's view of the data
- C. an approach in which the top module is first tested then program modules are added from the highest level to the lowest level
- D. a series or group of components that perform one or more operations of a more complex system
- E. None of the above

13. 10. A _____ is an outline of a process that keeps develop successful information systems

1 point

Mark only one oval.

- A. System Development Life Cycle
- B. CASE tool
- C. Phased Conversion
- D. Success Factors
- E. Move of the above



14. 11. is an important factor of management information system.

1 point

Mark only one oval.

- A) System
- B) Data
- C) Process
- D) All

15. 12. can be defined as data that has been processed into a form that is meaningful to the recipient and is of real or perceive value in current or prospective decisions.

1 point

Mark only one oval.

- A) System
- B) Information
- C) Technology
- D) Service

16. 13. After the design phase the document prepared is known as.....

1 point

Mark only one oval.

- A) system specification
- B) performance specification
- C) design specification
- D) None of these



17. 14. can be defined as most recent and perhaps the most comprehensive technique for solving computer problems. 1 point

Mark only one oval.

- A) System Analysis
 B) System Data
 C) System Procedure
 D) System Record

18. 15. SDLC stands for 1 point

Mark only one oval.

- A) System Development Life Cycle
 B) Structure Design Life Cycle
 C) System Design Life Cycle
 D) Structure development Life Cycle

19. 16. Which of the following is / are the Characteristics of information? 1 point

Mark only one oval.

- A) Accuracy and Relevance
 B) Form of information and Timeliness
 C) Completeness and Purpose
 D) All A, B & C



20. 17. The characteristics of well designed system are a) Practical b) 1 point
Effective c) Secure d) Reliable e) Flexible
f) Economical

Mark only one oval.

- A) a, b, c and d
- B) a, c, d and e
- C) a, b, c, d and e
- D) a, b, c, d, e and f

21. 18. Actual programming of software code is done during the _____ step in the SDLC. 1 point

Mark only one oval.

- A. Maintenance and Evaluation
- B. Design
- C. Analysis
- D. Development and Documentation

22. 19. The approach used in top-down analysis and design is 1 point

Mark only one oval.

- A. to identify the top level functions by combining many smaller components into a single entity
- B. to prepare flow charts after programming has been completed
- C. to identify a top level function and then create a hierarchy of lower-level modules and components.
- D. All of the above



23. 20. Enhancements, upgrades, and bug fixes are done during the _____ step in the SDLC. 1 point

Mark only one oval.

- A. Maintenance and Evaluation
- B. Problem/Opportunity Identification
- C. Design
- D. Development and Documentation

24. 21. A _____ is an outline of a process that keeps develop successful information systems 1 point

Mark only one oval.

- A. System Development Life Cycle
- B. CASE tool
- C. Phased Conversion
- D. Success Factors

25. 22. Which of the following is not a characteristic of good test data 1 point

Mark only one oval.

- A. users do not participate at this preliminary stage
- B. should be comprehensive
- C. every statement should be executed
- D. All of the above



26. 23. In the system concepts, term Integration

Mark only one oval.

- A. implies structure and order
- B. refers to the manner in which each component functions with other components of the system.
- C. means that parts of the computer system depend on one another.
- D. refers to the holism of system

27. 24. is a group of interested components working together towards a common goal by accepting inputs and producing outputs in an organized transformation process.

1 point

Mark only one oval.

- A) System
- B) Network
- C) Team
- D) System Unit

28. 25. A model that is the demo implementation of the system.

1 point

Mark only one oval.

- a) waterfall
- b) prototype
- c) incremental
- d) agile



29. 26. A stage in which individual components are integrated and ensured that they are error-free to meet customer requirements. 1 point

Mark only one oval.

- a) Coding
- b) Testing
- c) Design
- d) Implementation

30. 27. _____ is a step in which design is translated into machine-readable form. 1 point

Mark only one oval.

- a) Design
- b) Conversion
- c) Debugging
- d) Coding

31. 28. What do you call a technical person who is capable of understanding the basic requirements? 1 point

Mark only one oval.

- a) team leader
- b) analyst
- c) engineer
- d) stakeholder



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