SE ⇒ Assignment - 1   Emmanuel Gudinho   9609

TE Comps B

Q1.]

→ 1.) As the technology changes the user requirements and evident on which software is working also changes. So every organization is based on the software used by the organization.

2.) Implementing and managing large size of software, programmer requires a specific method and manage the task so that the size of the software don't harm the software quality.

3.) Software engineering provides methodology for implementing complex integration complex software system with high quality.

4.) Extending the previous software to add new functionality requires more cost in terms of time to develop and efforts taken by the people.

5.) Software engineering provides a way in which the system can be able to scale as needed to future.

Q2.]

→ 1.) Software processes are the activities for designing implementing and testing for a software system.

2.) A software process model is an abstract representation of the development process.

     a.) Perspective process model:

        i) The name 'perspective' is given since the model set of activities, action, task and change control mechanism for every project.

ii) Whatever process model is chosen by the organization but it should encompass the following framework:

ⓐ Communication

ⓑ Planning

ⓒ Modelling

ⓓ Construction

ⓔ Deployment.

b.) Agile Process Model:

i) It includes the concept of development along with a set of guidelines necessary for the development process.

ii) The development guidelines emphasis on analysis and design activities and continous communication between developers and customers.

c.) Iterative model:

i) Iterative model is similar to agile but with more structured and defined process.

ii) Each iteration may include a subset of the software functionality.

CMM models: 1.) Developed by software engineering institute.

2.) It defines a process or technology used to establish a software development process.

CNN provides total 5 levels:

1.) Initial

2.) Repeatable

3.) Defined

4.) Managed

5.) Optimizing.

Q.]

Perspective Process	Evolutionary Process
1.) To binary address and structure	1.) Do not establish the maximize speed of evolution.
2.) Define a distinct set of activities, actions, tasks milestone.	2.) Evolutionary process modes lacks flexibility and high quality.
3.) More popular	3.) Less popular.
4.) Provides complete and full development system.	4.) Time does not allow full and complete system to be developed.
5.) eg. Waterfall model, Incremental model	5.) Prototyping, special.

Q.]

→ ① Waterfall model : a.) Requirements are well defined.
   b.) Projects with a clear and stable scope.
   c.) Developing a microwave oven with fixed set

② Agile model : a.) Requirements are likely to evolve and change during process.
   b.) Require flexibility and rapid iterations.

③ Spiral Model : a.) High level of risk assessment and management
   b.) Continous refinement, early prototypes.
   c.) eg: Complex medical device.

④ Incremental model : a) Divide into smaller managable parts.
                      b) delivered saparatily

⑤ CMM - a) Improving and optimizing the development process with an integration.

⑥ RAD - a) Video protolype to demonstrate gamplay mechanism.

d.]
→ Waterfall : 1.) Development Speed.
              2.) Waterfall is lireal and sequential methodology.
              3.) It is less adaptable to change.
              4.) Customer feedback at the end of the product.

Agile : 1.) Development Speed.
        2.) It allows quicker delivery of walking features matrices.