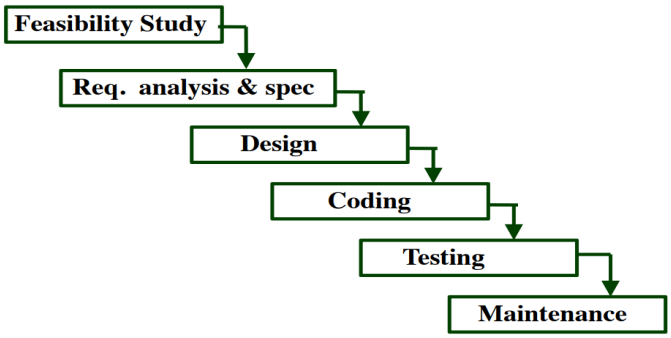
Summary

Wednesday, February 1, 2023 12:45 PM

Classical Waterfall Model



Guidelines and methodology of organization is known as SOFTWARE DEVELOPMEN METHODOLOGY .
Organizations expects fresh engineer to master organizations software development me

ISSUES WITH CLASSICAL WATERFALL SYSTEM

Assumed that the defects cannot occur during the development phase. Whereas in p be introduced at any stage.
They are than later discovered during the coding and testing phase once they unnot phase.

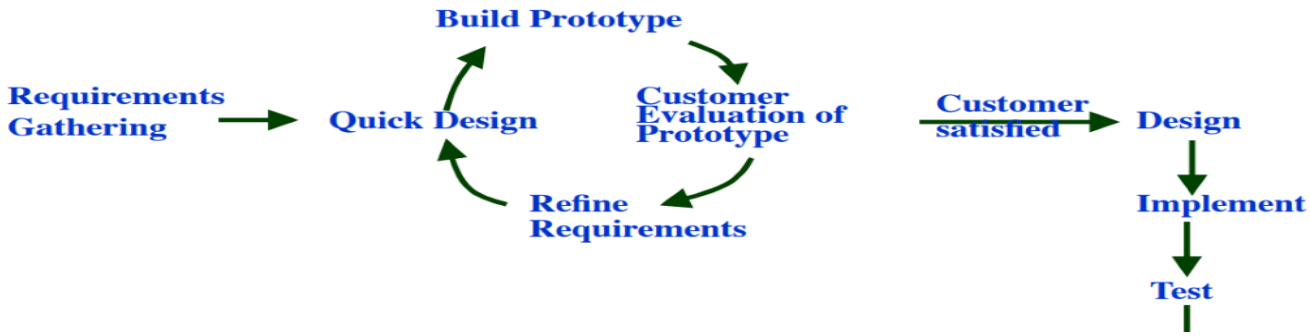
PROTOTYPING MODEL

Before starting actual development, a working prototype of the system should first be
A prototype is a toy implementation of a system:
limited functional capabilities, low reliability, inefficient performance.
It includes following phases

EVOLUTIONARY MODEL

- Evolutionary model (aka successive versions or incremental model):
- The system is broken down into several modules which can be incrementally implemented and delivered.
- First develop the core modules of the system. The initial product skeleton is refined i increasing levels of capability by adding new functionalities in successive versions.

ADVANTAGES OF EVOLUTIONARY MODULE



Maintain

1. Users get a chance to experiment with a partially developed system much before th working version is released
2. Helps finding exact user requirements much before fully working system is developed
3. Core modules get tested thoroughly reduces chances of errors in final product

DISADVANTAGES OF EVOLUTIONARY MODULE

4. Often, difficult to subdivide problems into functional units, which can be incrementally implemented and delivered.
5. evolutionary model is useful for very large problems, where it is easier to find module incremental implementation.

EVOLUTIONARY MODEL WITH ITERATION (Iterative Incremental Model)

Many organizations use a combination of iterative and incremental development as a release may include new functionality existing functionality from the current release m also have been modified

- Training can start on an earlier release customer feedback taken into account
- Markets can be created for functionality that has never been offered
- Frequent releases allow developers to fix unanticipated problems quickly.

SPIRAL MODEL

- Each loop of the spiral represents a phase of the software process
- The innermost loop might be concerned with system feasibility.
- The next loop with system requirements definition.
- The next one with system design, and so on.

1. OBJECTIVE SETTING (FIRST QUADRANT) Identify objectives of the phase and Examine the risks associated with these objectives (any adverse circumstance that m hamper successful completion of a software project).Find alternate solutions possibl

2. RISK ASSESSMENT AND REDUCTION (SECOND QUADRANT) For each identifie project risk a detailed analysis is carried out. Steps are taken to reduce the risk. For example, if there is a risk that the requirements are inappropriate: a prototype system be developed.

3. Development and Validation (Third quadrant) develop and validate the next level of th product

4. Review and Planning (Fourth quadrant):review the results achieved so far with the customer and plan the next iteration around the spiral.

AZILE

With each iteration around the spiralprogressively more complete version of the soft
gets built.