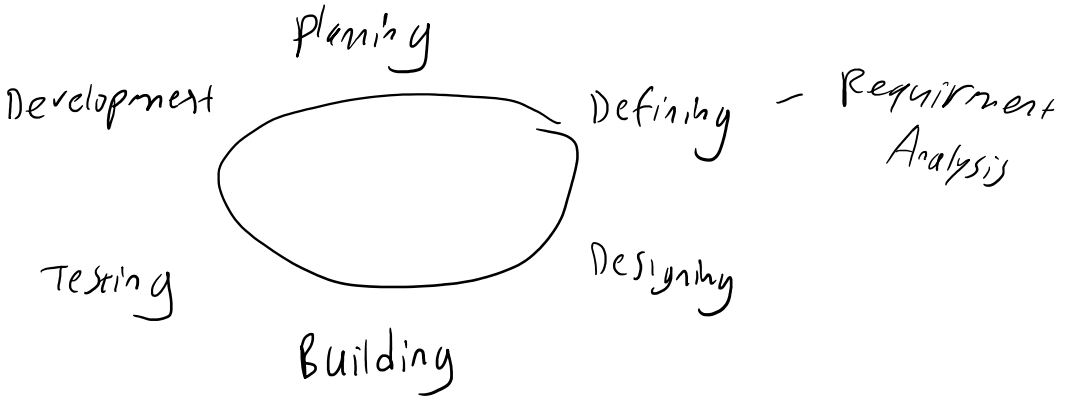
10/16/17

Monday, October 16, 2017 11:04 AM

SDLC - Software Development life Cycle
System

Process - steps to accomplish a project

Method - approach to accomplish a project (focus on the steps of a process



Spiral
Iterative (v.s refinement)

feasibility study

Pilot Study

non-functional Requirment

functional Requirment

domain Requirment

HW: DOJ system lc
10 step version
3 part hw.

1.short description of each step.
2.Which part of royce's 5 is it under
3.10th step: why is it named dispose(get rid of) if it's a cycle

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6 sigma - Motorola — GE

6σ
↑ ↑ std deviation
six

There's Belts (called) Certification (martial approach) Borrowed from project management 50 years prior

everything's acronyms.

DMAIC vs DMADV (Quality) / Improve / Control

DMADV - Define / measure / analyze / Design / verify

optimize

Identifying defects

First time

Improving as we go along.
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DFSS - Design for Six Sigma.

Celebrate

5S

(1) Sort - Determine whats essential vs non essential!

(2) Straighten up/set -

everything has to be certain way, no sloppy.

(3) Scrub - clean your own mess up.

be your own janitor. physically clean

(4) Standurize - standardize across your workspace.

every office is the same

(5) Sustain - put into place, anyone's schedule.

everythings planned. no surprise

Ishikawa Fishbone

5m's - measurements

Materials - data, code, Software

methods - functions, Algorithms.

Machines - PC / hardware

Manpower - people

Environment - electricity

Probability - predict future

$$\frac{\text{number of ways for a specific event}}{\text{number of ways for all possible events}}$$

Statistics - Understand past

μ - Avg

$\bar{X}$ - mean

(1) Avg deviation from mean

(2) Avg ~~absolute~~ bad no Calculus on it, no derivative.

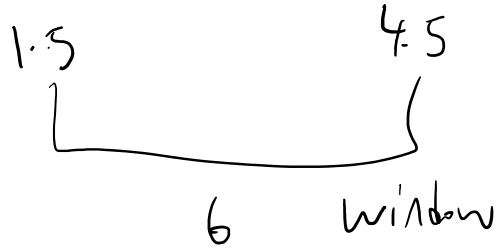
(3) Avg squared deviation - Variance

(4) Sqrt (variance) = Std deviation

$-3\sigma / +3\sigma$ ✗

$-6\sigma / +6\sigma$ ✗

$\pm 1.5 / \pm 4.5$



dpmo - defect per million operation.

Allow 3.74/1e6 dpmo.