

NAME :- KRUNAL RANK

ROLL No :- U18C0081

CLASS :- BTECH 4<sup>TH</sup> YEAR

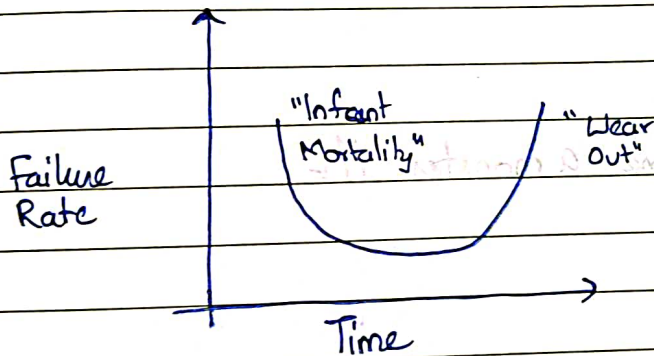
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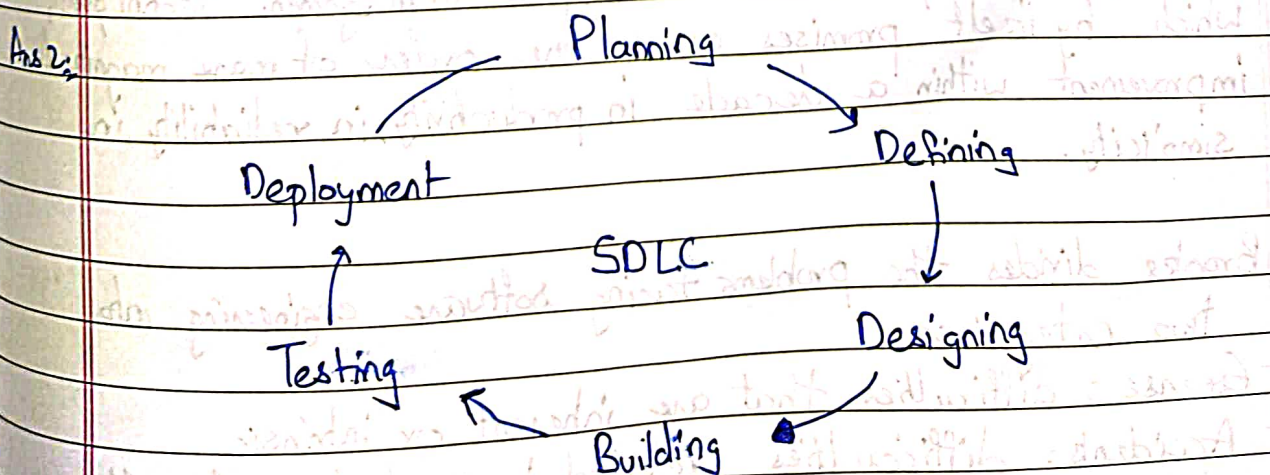
## Software Engineering Tutorial 1

Ans 1: Software Engineering is the application of a systematic, disciplined, quantifiable approach to the development, operation and maintenance of software, that is, application of engineering to software.

The fundamental difference between software engineering and hardware engineering is that unlike hardware, softwares don't ~~wear~~ wear out, but they do "deteriorate".



Failure rate as a function of time for hardware





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Ans 3: Umbrella activities are a set of activities or procedures that the software engineering team follows to maintain the progress, quality, change and risks of overall development tasks.

Some of the Umbrella activities:-

- Software Project Tracking and Control
- Formal technical reviews
- Software Quality Assurance
- Software Configuration Management
- Document Preparation and Production
- Re-usability Management
- Measurement and Metrics
- Risk Management

Ans 4: A project can become a monster if:-

- Missed schedules
- Blown budget
- Flawed projects

Using  
By the phrase "No Silver Bullet", it is conveyed that there is no single development, in technology or management technique, which by itself promises even one order of more magnitude improvement within a decade in productivity, in reliability, in simplicity.

Brooke divides the problems facing software engineering into two categories:-

- Essence: difficulties that are inherent or intrinsic
- Accidents: difficulties related to production of software.