Adaptive Software engineering

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1) Software Engineering is a branch of computer science that involves systematic application of engineering approaches to the development, operation, and maintanence of software. it includes a set of methodologies, tools, and techniques for developing high quality software systems that are reliable, efficient, maintainable, and within budget.

Goals:

- Deliver quality software on time & within budget
- Manage complexity through proper planning and design
- Ensure software is maintainable, scalable, and meets user needs

2) Software Myths are misconceptions or false beliefs about software development. These myths can affect the productivity and quality of software engineering process.

1. Management Myths:

1. we have a book of standards & procedures

2. if we're behind schedule, we can add more programmers to speed up development.

3. once we write the program & get it to work, the job is done.

b. Customer Myths:

1. A general statement of objectives is enough to start programming

2. Software requirements change only during development.

3) a) Spiral model is a risk driven process model developed by Barry Boehm. it combines iterative development with systematic aspects of the waterfall model.

phases:

1. Determine objectives
2. Risk Analysis
3. Development and validation
4. planning

b) unified process is an iterative and incremental software development process framework, typically implemented as Rational unified process (RUP)

phases

1. Inception
2. Elaboration
3. Construction