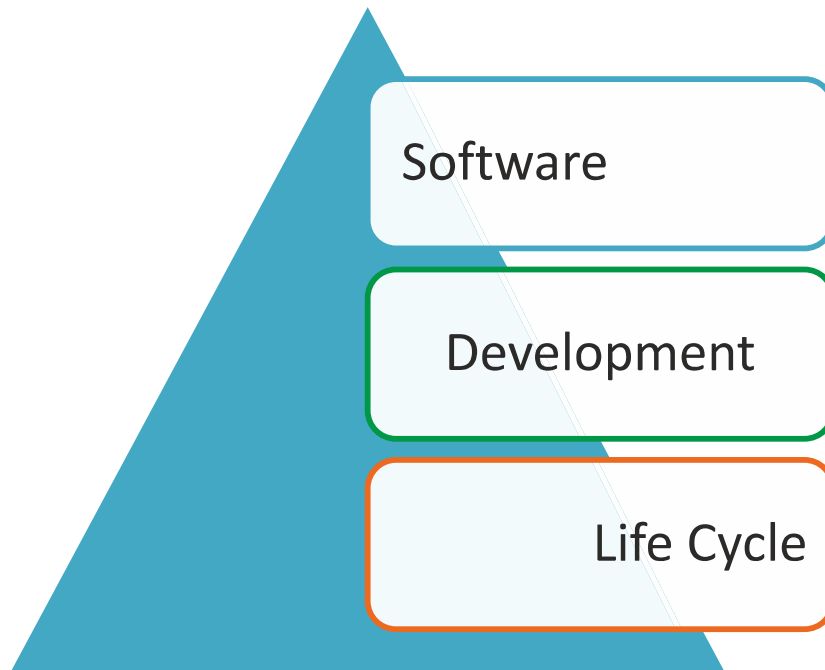


Chapter 6

SOFTWARE DEVELOPMENT LIFE CYCLE

SDLC



Software -

Software is *set* of *instructions* that *tell* computer *what to do*.

Remember that computer only understand binary language **0's** and **1's**. It is practically impossible for humans to communicate with computers in binary language.

Thus users need a language like *python, C, Java* to communicate with computers. These languages has its own defined *syntax* (think it as grammar), *logic* and *rules* which computer converts into binary and communicate back.

Finally to summarize, set of instructions developed in any known programming language to communicate with computers is SOFTWARE

Development -

development - “the process of developing or being developed.”

Software are not manufactured, they are developed. This means it has a process through which the software developer converts a requirement on paper into software.

Life Cycle -

In Biology, the life cycle is the period of time from birth to death. The meaning of the life cycle in software development doesn't differ much. It embraces

All the stages of product existence, from an intention to create a new software solution to an end of using it.

The Software Development Life Cycle (SDLC) is a terminology used to explain how software is delivered to a customer in a series of steps.

History of the SDLC

“software developers” have *existed* since the first computers.

There must have been some Practices and methods which they followed for developing software. These **processes** have *evolved* over the decades.

Those methods have adapted to the state of the art in computer hardware, development tools, and modern thinking about the organizational management of software development teams.

With this progress, new methods of software development have grown out of private and public software development efforts around the world.

These methods vary widely in approach, yet they share a common goal: **to develop software** as *cheaply, efficiently*, and *effectively* as possible.

What is SDLC

- Simple **software development life cycle definition**: it is a period, which starts with making a decision that a new software product is necessary and ends when the product is no longer used.
- Software is a complex product that is developed and delivered through a series of steps.
- One way or another, software, like all products, starts as an idea.

The idea then becomes a document. Whether a document, diagram, or working software, the *artifact* created in one step becomes the *input* to the next step. Eventually, the software is delivered to the customer.

The sequence of steps (or process) used by these methods is commonly referred to as the *Software Development Lifecycle (SDLC)*.

Motu – Patlu Conversation



Motu – Are **Patlu** bhai, I have a wonderful business idea.

Patlu – **Motu** bhai, Are wah. What is your idea.

Motu – I want to create software where people can share books with each other.

Patlu – Ok, this is a good idea **Motu** bhai. Have you thought through the business model, requirements etc.

Motu – **Patlu** bhai, this is the problem. I just have an idea but do not know the next step.

Patlu – No worries **Motu** bhai, lets talk to **iCodeT Private Limited** and understand the Software development process.