

Python Modual – 1

1. What is Software ?

Software is a set of Computer Programs & Associated Documentation and data. This is in contrast to hardware , from which the system is built and which actually performs the work .

Software not only makes your computer hardware perform important tasks , but can also help your business work more efficiently. The right software can even lead to new ways of working . it is therefore a crucial business asset and you should choose your software carefully so that it matches your business needs.

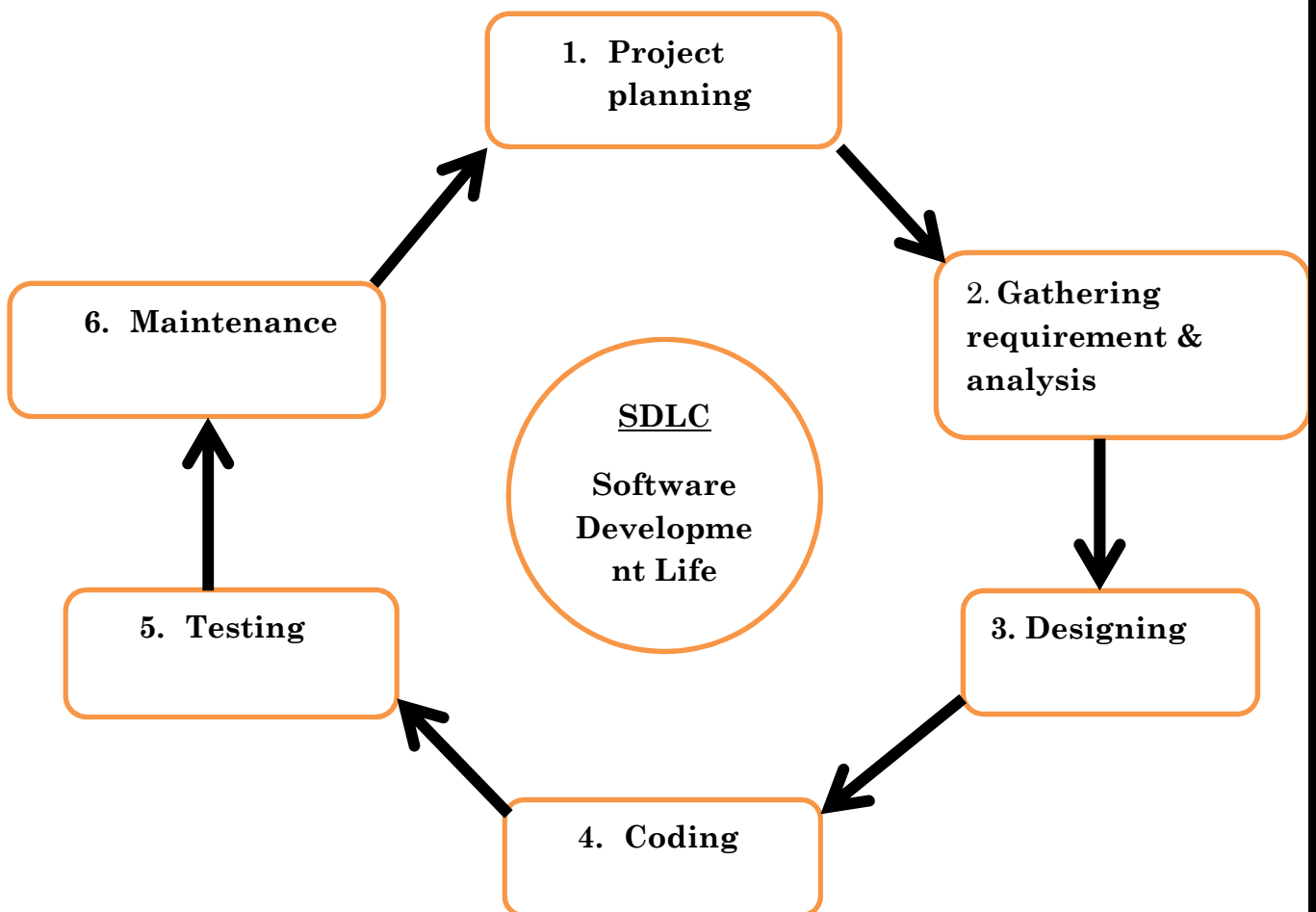
SDLC (software development life cycle) it is important part to build a any web application , software application , desktop application.

SDLC is a process followed for a software project, within a software organization. It is process used by the software industry to design, develop, and test high quality software.

Following 6 steps :

1. Project planning
2. Gathering requirement & analysis
3. Designing

- 4. Coding
- 5. Testing
- 6. Maintenance



2. What are the Types of Applications ?

Application are the software you're probably the most familiar with using.

They're the programmes designed to carry out specific tasks, such as listening to music , sending emails, word processing, or putting together a spreadsheet for work.

Software like system and utility software, which are all about the operation and performance of the computer itself.

There are 3 types of applications :

1. Native applications : these run using specific hardware, such as the camera on our laptop, and are written in the same programming language as the computer's operating system.
2. Web applications : these are typically accessed via a web browser, and they cannot access the computer's hardware. They can be written in several programming languages, such as HTML, JavaScript and CSS.
3. Hybrid applications : these are a mix of native and web applications, they can access device resources like a native application would.

3. What is Programming ?

computer programming is the process of performing particular computations, usually by designing and building executable computer programs.

The purpose of programming is to find a sequence of instructions that will automate the performance of a task on a computer.

Computer programmers create instructions for a computer to execute by writing and testing code that enables applications and software programs to operate successfully.

Below the most common programming languages :

1. C
2. CS
3. C#
4. C++
5. HTML
6. JAVA
7. JavaScript
8. SQL

4. What is Python ?

Python is an interpreted, object-oriented, high-level programming language with dynamic semantics.

Its high-level built in data structures, combined with dynamic typing and dynamic binding, make it very attractive for rapid application development.

Python supports modules and packages, which encourages program modularity and code reuse.

The python interpreter and the extensive standard library are available in source or binary form without charge for all major platforms, and can be freely distributed.

- Designed to be easy to learn and master
- Highly portable
- Extensible

Feature of Python :

- Clean syntax plus high-level data types
- Uses white-space to delimit blocks
- Variables do not need declaration

Productivity of Python :

- Reduced development time
- Improved program maintenance
- Less training