



Planning of the process of development of software

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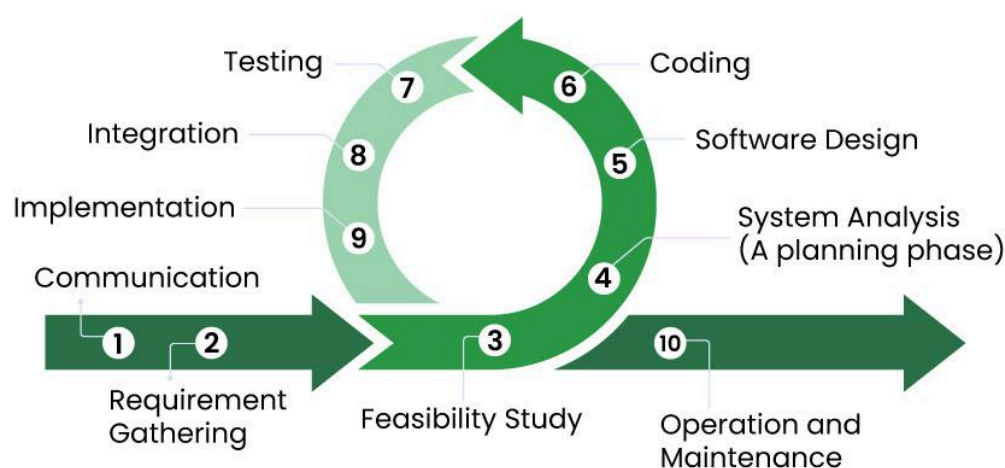
Introduction

The software development process is the approach to developing, and delivering software applications. This process might include improving design and product management by splitting the work into smaller steps or processes.

Software is a set of programs having specific functions that are designed to work according to human needs. The Software Development Process includes different steps in an organized way to form a software product. In this article, we are going to learn about Software Development Process, their needs, the purpose of the software development process, steps of the software development process, approaches of Software Development, and types of software development process.

10 Software Development Processes

The software development process is the sequence of activities that leads to the production of a software product. The steps of software development process are as follows:



1. Communication

The first and foremost step is where the user contacts the service provider i.e. software organization and initiates the request for a desired software product. The software organization talks with the customer about its requirement and then work according to its needs.

2. Requirement Gathering

In this step, the team of software developers holds discussions with various stakeholders from the problem domain and provides as much as information possible for the requirement of the software product. The requirements can be of different forms like user requirements, system requirements, functional requirements, etc.

3. Feasibility Study

After requirement gathering, with the help of many algorithms, the team analyzes if the software can be designed to fulfil all requirements of the user and also analyzes if the project is financially, practically and technologically feasible for the organization or not.

4. System Analysis(A planning phase)

Software developer decides on a roadmap for their plan and tries to bring up the best software model stable for the project. System analysis may also include understanding product limitations and identifying and addressing the impact of the project on the organization. The project analyzes the scope of the project and plans the resources accordingly.

5. Software Design

Software design whole knowledge of requirements and analyses are taken together to plan up design of software products. It takes input from the user and information gathered in the requirement-gathering phase. It gives output in the form of logical and physical design.

6. Coding

This step is also known as the programming phase. The implementation of software design starts in the form of writing code in suitable programming and developing error-free programs efficiently.

7. Testing

Software testing is done while coding by the testers' developing team members. Testing is done at various levels i.e. module testing, product testing, program testing and user-end testing.

8. Integration

After writing all the codes for the software such as frontend, backend, and databases, The software is integrated with libraries, databases and other programs.

9. Implementation

In this step, the software product is finally ready to be installed on the user's machine. Software is tested for profitability, integration, adaptability, etc.

10. Operation and Maintenance

This phase confirms the software operations in terms of more efficiency and fewer errors. If required, the users are trained or aided with the documentation on how to operate the software and how they keep the software operational. This software is maintained timely by updating the code according to the changes taking place in the user and environment or technology.

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