7 Stages of Software Development Cycle

by QArea Expert on October 18, 2018

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The period between the newly-developed project and the operational one is called a software development lifecycle, or SDLC for short. SDLC consists of a series of steps, or phases, that design a model for the custom software development and its lifecycle management and brings it to the product release.

Generally, software development cycle presupposes 7 following steps:

- **Planning**
- **Feasibility analysis**
- **Product design**
- **Coding**
- **Implementation and Integration**
- **Software Testing**
- **Installation and Maintenance**

The development of app, website, or software is a complex process, and a wrong step in any s of software development will cause the inevitable outcomes both for the quality of product an entire business. It involves hard work, dedication, and expertise in software development. Soft development process is lengthy and needs step-by-step techniques following.

So let us engage in detailed consideration of every stage of software development process to once and for all understand this important IT fundamental.

1. Planning

It is the phase of brainstorming when specialists gather requirements and analyze all the aspects of a future software product. The developers should understand the clients' requirements, namely, what exactly they want and what issues can occur in the development process. This stage involves communication between stakeholders, project team, and users.

2. Feasibility analysis

At this step, the project team defines the entire project in details and checks the project's feasibility. The team divides the workflow into small tasks, so that developers, testers, designers, and project managers can evaluate their tasks. They define whether it's feasible in terms such of cost, time, functioning, reliability etc.

3. Software Design

The software design is the major aspect of software development services cycle. Design should be creative and clear. It involves overall product design along with data structure and database design. Software designing uses many different strategies.

We care about the graphic interface of each product we work with. This is why QArea is recognized as a top Software Development Company on DesignRush.

4. Programming

This is the critical phase of SDLC. A lot of brains work for coding and deliver the desired software. Usually, a company assigns a team of programmers for a particular project. The tasks are subdivided into sub-phases called Task Allocation, so every coder has their own task.

Read more about coding: https://qarea.com/blog/how-write-awesome-code-every-day

5. Implementation and Integration

Normally software contains a great number of programs, which require careful implementation and step-by-step integration of the software product. During this software stage, the project team checks whether the software product runs on various systems. In case of bugs, testers fix them.

6. Software Testing

After completing of coding, the software is sent to the testing department. The work of testers plays the crucial role for the quality of software and its performance. Quality Analysts test software using various test cases. Before the launch, a product needs verification which includes software testing and debugging done by testers. When testing department ensured that software is error-free, it goes to the next stage.

7. Installation and Maintenance

Finally, the software is handed over to the clients to be installed on their devices. After the installation, if the client needs any modification, the product is to come under the maintenance process.

The featured stages of software development procedure are followed by the majority of IT companies in order to provide high-quality services in the development of all sorts of software. SDLC can be shaped depending on the project requirements. Agile methodologies and Scrum offer the bigger amount of flexibility and cross-functional teams. Feel free to contact us for more details!

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