SDLC

Software Development Life Cycle (SDLC) is a process used by the software industry to design, develop and test high quality softwares. The SDLC aims to produce a high-quality software that meets or exceeds customer expectations, reaches completion within times and cost estimates.

Roles:

**Role of Business Analyst in SDLC:**

The Business Analyst is the bridge between the client and the technical team of software developers who are working on the project. The Business Analyst has discussion with the client of the project, makes a through analysis of the system, defines the requirements, writes documents, explain the project to technical team and coordinate with them through out the project development.

The business analyst will provide different services during the SDLC: – Assisting with the business case – Making high-level feasibility studies – Gathering of the requirements – Designing and/or reviewing test cases – Processing change requests – Tracing the requirements during implementation – Manage project scope – Acceptance, installation, and deployment

Business Analysis: after consultations with the client the development company will put together a detailed Business Processes and Requirements Specification (including functional and non-functional requirements), Use Case Specifications, as well as refine the initial cost estimation.

**Software Development Project Management:**

Software development companies hire project managers to oversee the life cycle of software development and ensure all work is completed on time, on budget and to specification.  
Project managers have a wide ranging role – they must manage, plan and be responsible for a wide range of people and projects.  
Project managers are appointed for the purpose of ensuring deliverables are excellent as possible

A project Managers’ role in a nutshell is being completely responsible for the successful planning executions, monitoring, control and closure of a project. This title is used in all most all industries. At a higher level, the role of a project manager is quite easy to describe.

The selection of an effective software development methodology is crucial to a successful software development project. A well chosen methodology implemented by a good project manager can deliver a high quality end product on budget and on time.

Responsibilities of the Project Manager

1. Determine objectives, schedule and resource budgets
2. Design a software project management plan (SPMP)
3. Create and sustain focused and motivated teams
4. Determine the team‘s work procedures, reporting systems and communication infrastructure.
5. Accomplish project objective within time and budget
6. Monitor performance against the plan
7. Resolve technical conflicts and interpersonal conflicts
8. Control changes in the project
9. Report on project activities to upper management
10. Keep the client informed and committed
11. Contribute to the team members performance approval

Software development project management is a tricky business and can be fraught with failure is the project manager is not experience or capable enough to successfully manage the project. The process of software development project management involves the following steps:

1. Understanding requirements: A software development project manager must fully and completely understand the requirements of the project whether they come from inside the business or a client. It is his or her job to ensure the delivered project meets the clients needs and expectations by doing a proper requirements analysis. 2. Risk analysis Risk analysis is an important step that should be completed before the project is started. A project manager should evaluate all risks involved with the project including technological issues, resources or even politics. He or she should try to avoid risk as much as possible.
2. Design: A project manager has to be in tune with the developers. He has to work with the developers at the development stage ensure work is completion on time and on budget. While working with the developers the developer must understand that the project manager often knows best and work closely with them to deliver the best they can. Developers should also, in turn, suggest best practices and ideas that will ensure good quality software.
3. Measuring and tracking progress: It is necessary to report and document progress throughout the software development process. A number people could be working on the project in parts, to know time frames and who is doing what and when it is completed, it is necessary to measure your teams progress and keep a track until the software is delivered. 5. Delivering Last but not the least, delivering the software in perfect functionality is golden. Once delivered and tested, the software should run error free otherwise client is going to raise questions on time and effort taken to develop the software. Long standing business relationships are built on quality, not quantity.
4. Software developer: A software developer is a person concerned with facets of the software development process. Their work includes researching, designing, developing, and testing software. A software developer may take part in design, computer programming, or software project management. They may contribute to the overview of the project on the application level rather than component-level or individual programming tasks. Software developers are often still guided by lead programmers but the description also encompasses freelance software developers.

**Responsibilities of the Team Leader**

1. Run the weekly project meeting
2. Post the agenda before the meeting
3. Define and keep track of action items assigned to team members (who, what, when)
4. Measure progress (Enforce milestones)
5. Deliver work packages for the tasks to the project manager
6. Present team status to project manager

Technical team responsibilities:

1. Perform assigned tasks within time and budget
2. Acquire technical skills and knowledge needed to perform the work
3. Identify situations and problems that might affect your team members‘s tasks Keep your team members informed of your progress and problems you encounter

**Responsibilities of a Tester**

The roles and responsibilities of a tester often vary from organization to organization. In general, a testers main purpose is to design, develop, and conduct system tests and supports acceptance testing. The roles and responsibilities of a tester include the core activities associated with the test effort. This usually involves identifying the most appropriate implementation approach specific tests, performing test preparations, executing the tests, logging outcomes, and administering the defect tracking system.

More detailed aspects of the roles and responsibilities of a tester is included in the following:

1. Analyzing client requirements
2. Understand the software application being tested
3. Prepare test strategy
4. Participating in test plan preparation
5. Preparing test scenarios
6. Preparing test cases (used for module, integration, and system testing
7. Preparing test data (used for test cases)
8. Preparing test environment
9. Analyzing test cases (those prepared by others)
10. Write necessary test scripts
11. Executing the test cases
12. Defect tracking
13. Perform necessary retesting
14. Providing defect information (for developers)
15. Preparing report summaries
16. Preparing lesson learnt documents
17. Conducting review meetings within the team

Website vs Web Portal

