Abstract

No other industry has such a degree of failure in its projects as the IT industry. Really: Designing databases is more of an art than a craft, and the same goes for developing software. In this research the main focus is to keep track of all the projects in software industry. The ongoing projects in the software industry follow the software development life cycle but due to lack of manageability and creeping projects and distributed teams across the globe it is very difficult to manage the team and their communication and to keep them focused on the central goal. The research work aims at implementing web services for project management software. As the number of projects are increasing day in and out project management using traditional method is becoming complicated and the resources that are required for managing the projects are shrinking so we need a project management system that is scalable and can manage multiple projects simultaneously and with good throughput and efficiency. The goal of Service Oriented Architecture for Collaborative Web Based Project Management Software is to produce a product that is delivered on time, within the allocated budget, and with the capabilities expected by the customer. Project management software is basically a properly managed project has a clear, communicated, and managed set of goals and objectives, whose progress is quantifiable and controlled and whose resources are used effectively to efficiently produce the desired product. When properly managed, a project usually has a communicated set of processes that cover the daily activities of the project, forming the project framework. As a result, every team member understands their roles and responsibilities and how they fit into the big picture, thus promoting the efficient use of resources. The research work on Project Management Software will be used to collect the information from the different levels of software development and
different peoples involved in the project and product development. This software will handle all the activities starting from the Inquiry from by the client to the Planning, completion and delivery of the product made by the company to the client. All the activities will be monitored and will be documented which can also be viewed by the company who has made the product for the client along with all its details of the product and with information that was required in building the product and also it can be viewed by the client on the client side as the client will be able to view all the details of his product and also will be able to interact with proof with the team members working on this product. The client will come to know the exact manpower employed and the time duration spend by each employ that is employed on his product development. So that there will not be any hiding of information from the company who is developing the product for the Client. The collaborative information, which will be gathered, will be visible to the client and the company who is developing the Product. Hither to the information on this topic is scanty thus it is decided to investigate this topic in more details so as to minimize the cost of the project/product developed and also to save the time required in the development of the project/product for any client. Lack of manageability and creeping projects scope are two of the worst problems plaguing IT organizations today. Not only can these problems be costly, they can be deadly to your ultimate business objectives [67]. To compete, your need to take out uncertainty with technologies that improve definition, purpose, and scope. The Project Management Software Solution will give you-and your team-greater real-time insight into project requirements, and the inevitable changes of the scope that cross the boundaries of the distributed teams. This visibility allows each member of the team to share in project expectations from the outset, creating an alignment of thinking that leads to higher productivity and managed
control over the development process. The PMS allows you to move into the future without abandoning the past it provides interoperability that is fundamental to the application lifecycle. Globalization for many companies today, around-the-clock, nonstop design and development sounds too good to be true. That’s precisely the point, because the reality is this: disparate groups, multiple agendas, missed opportunities, failed communications and project hand-offs that are far from seamless. So how do you keep multiple teams-distributed around the campus or around the globe-working in concert and focused on the end goal? First, you need an integrated environment from managing change and configuration requirements and a system that is designed to give you visibility into the development process-one that will help you maintain control of the application lifecycle. With Service Oriented Architecture for Collaborative Web based Project management Software, you can dramatically improve performance and the communication between your distributed and remote teams. You can heighten the visibility and control of your application development lifecycle-giving you better control over the entire development process, from the management stage through development and testing. This project started with goal to Manage various Phases of Software Development Life cycle that includes Requirement Analysis, Prototyping, Architecture & Design, Development, Testing, Documentation and Deployment. With Project Management Software in mind, the idea was to make software that would provide Management at the different Levels of software Development life cycle. The main concern is to develop a software that can manage all the phases of software development life cycle and also pass data from one phase to the other phase of the software development life cycle so that there is a interposes communication amongst the phases of the software development. Project management is the science (and art) of organizing the components of a project,
whether the project is development of a new product, the launch of a new service. A project is not something that’s part of normal business operations. It's typically created once, it's temporary, and it's specific. As one expert notes, "It has a beginning and an end." A project consumes resources (whether people, cash, materials, or time), and it has funding limits. Project management has been practiced for thousands of years dating back to the Egyptian epoch, but it was in the mid-1950 that organizations commenced applying formal project management tools and techniques to complex projects. During the 1960s and 1970s, PERT and CPM increased their popularity within the private and public sectors. The use of project management techniques in the 1980s was facilitated with the advent of the personal computer and associated low cost project management software. Hence, during this period, the manufacturing and software development sectors commenced to adopt and implement sophisticated project management practices as well. By the 1990s, project management theories, tools and techniques were widely received by different industries and organizations.

“The importance of Project Management” is an important topic because all organizations, whether small or large, at one time or other, are involved in implementing new undertakings. These undertakings may be diverse, such as, the development of a new product or service; the establishment of a new production line in a manufacturing enterprise; a public relations promotion campaign; or a major building programmed. Whilst the 1980's were about quality and the 1990's were all about globalization, the 2000's are about velocity. That is, to keep ahead of their competitors, organizations are continually faced with the development of complex products, services and processes with very short time-to-market windows combined with the need for cross-functional expertise. In this scenario, project management becomes a very important and powerful tool in the hands of organizations that
understand its use and have the competencies to apply it. Managing a project includes:

- Identifying requirements of the software projects
- Establishing clear and achievable objects in the software projects
- Balancing cost, time, scope of the software projects
- Adapting plan, specifications in the software projects

High quality product delivers the required product, service or result within scope, on time, within budget. The relationship between these factors is such that any one of them changes then other will also change. As in the traditional methods the project management software’s that the industries have are deployed on a central servers as the requirement for more and more projects increases. The project management software utilization and space also increases the infrastructure required to keep the data in the project management software also increases. So in this research I am implementing web services that are deployed on the remote servers which are cloud based and also implementing cloud services that will cater to the needs of every increasing requirements of the project management software [56]. All the modules of the software development life cycle are implemented as services so the various stakeholders require they can invoke the service and complete their work this will increase the efficiency of the project management software and improve the efficiency and accessibility of the project management software