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# Collaborative Development and Project Management Using GIT, Kanban and Social Networking Service

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**ABSTRACT:** Git is a renowned VCS (Version Control System), capable of tracking, pulling and merging new changes in coding aspects, Kanban board helps in visualizing the workflow of project, use of video communication service enables team members to have real-time social networking service helps in discussions, facilitating communication and enhancing collaboration among team members. The mentioned these tools individually have proven a rock-solid solution, but when all these integrated and put in a common workplace makes a project management a great leap.

**KEYWORDS:** VCS, GIT, AGILE, KANBAN, DEVOPS, SDLC

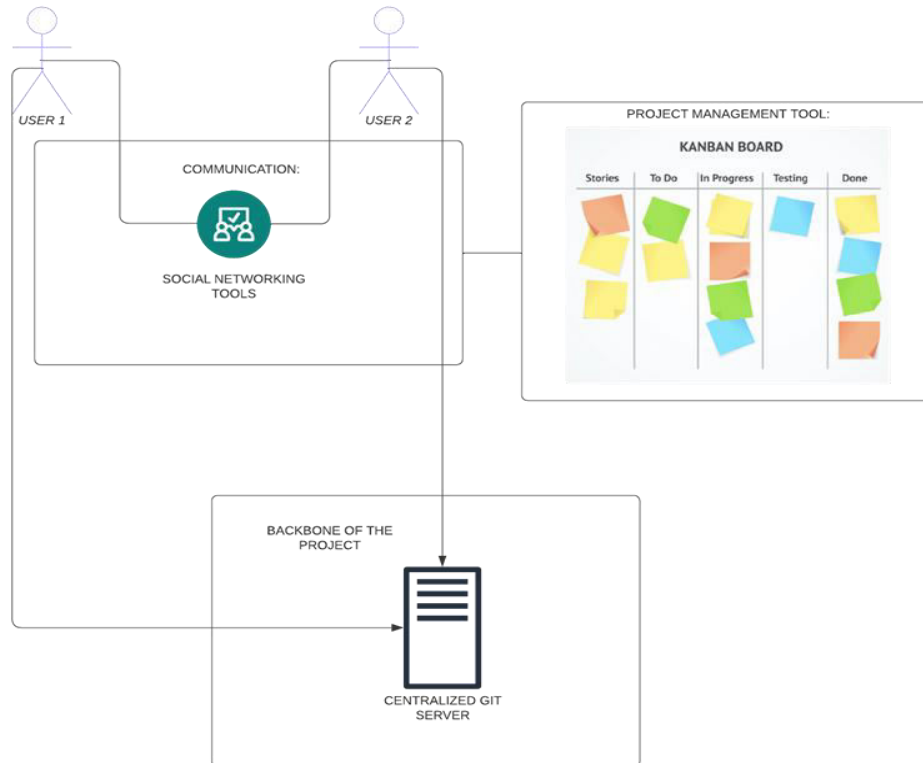
## I. INTRODUCTION

Collaborative development is a methodology in which more users contribute on a single project, common example includes open-source project. Among many VCS (Version Control System) GIT is renowned. Using GIT in a centralized server, makes the project easily accessible, with VCS functionality one can easily diff changes, track and create different branches, which can be merged, these functionality extends to more user, it means leads to pathway to collaborative coding, yet there is a drawback, one cannot categorize or directly implement SDLC (Software Development Life Cycle) directly into [3] GIT, so a using another well-known agile project management tool called [4] Kanban board helps in huge extend it includes visualizing work, limit work-in-progress, and maximizing efficiency (or flow). It can help both agile and DevOps teams establish order in their daily work, still there exists a gap in communication of the project, using social networking service which is capable of video conferencing and chatting addresses the issue.

## II. RELATED WORK

The concept of VCS dates to 1972, [1] the original Git development began in 2005, after many developers of the Linux kernel gave up access to BitKeeper, a proprietary source-control management (SCM) system that they had been using to maintain the project since 2002. The copyright holder of BitKeeper, Larry McVoy, had withdrawn free use of the product after claiming that Andrew Tridgell had created Source Puller by reverse engineering the BitKeeper protocols. The same incident also spurred the creation of another version-control system, Mercurial. [2] Git, the brainchild of Linus Torvalds, began its life in 2005 as a revision management system used for coordinating the Linux kernel's development. Over the years, its functionality, portability, efficiency, and third-party adoption have evolved by leaps and bounds to make it its category's leader. (Two other systems with similar characteristics are Mercurial and Bazaar.) Kanban board exists and widely used and same as social networking service is also widely used, commonly used includes Instagram, Facebook, WhatsApp, Snapchat.

### III. METHODOLOGY



Users communicate with each other using inbuilt social networking tool plans and tracks using Kanban board. Creates and updates code collaboratively using centralized GIT server. GIT is backbone of the system, [2] GIT makes it natural and easy to push a revision to a remote repository (remember, each developer has a separate complete repository copy) or to pull some revisions from a remote repository to the local one. This in turn allows developers and their managers to build a variety of interesting workflows, most of which are impossible to run on a traditional centralized version control system.

### IV. CONCLUSION

Overall, this project provides a comprehensive solution for team collaboration and project management, enabling teams to work together more effectively and efficiently. By leveraging the power of Git, Kanban boards, and Social networking service, teams can streamline their workflows, improve communication, and deliver high-quality results.

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