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CSD380 Module 5.1 Discussion

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Trunk-Based Development

Hello,

For the Module 5 discussion I will be covering the main topic of Trunk-Based Development (TBD) and how it compares to feature branches. Trunk-Based Development is a practice for version control where developers merge small updates to a core “trunk” or main branch (Zettler). By doing these small updates, CI/CD improves and allows for better delivery and performance. TBD is required for following CI/CD practices and these small additions keep releases going.

Feature branching is also known as Gitflow and is a practice that only adds a branch of fully functional features before trying to merge. This can lead to implementation issues and crashes that require much more collaboration to keep conflicts from occurring (Zettler).

The benefits of TBD include continuous code integration, code review, and consecutive code releases. Some disadvantages may include the need for developers to have paradigm shifts to understand small, incremental changes are the focus, testing requirements have to be much stricter, and these rapid small additions could result in instability if the process of reviews and testing aren’t followed. TBD had significant advantages if you can maintain discipline and stay on top of code management.

Some best practices include small batch development, feature flags that wrap code in an inactive path that can be activated later, automated testing, immediate code review, minimal active branches in the repository, merge any ready branches daily, avoid code freezes, and test execution with releases utilizing third-party tools (Zettler).

Hopefully that was quick and informative.

Thank you for your time,

Jeremiah K.

References:

Zettler, K. (n.d.). Trunk-based development | Atlassian. <https://www.atlassian.com/continuous-delivery/continuous-integration/trunk-based-development>