Is it Viable to use Continuous Integration to Reduce Development Time for an RPG?

MANGO GILCHRIST

What is Continuous Integration?

- Developers commit code to the development branch early and often (Ideally multiple times a day.
- The code is automatically built after it is committed.
- Tests should then be run often by an automated testing process to ensure successful integration.

Benefits

- Avoids "Integration Hell".
- Fast identification of issues allows them to be solved early.
- Increases transparency of development.
- Less bugs and faster integration leads to a shorter development time.

Drawbacks

- Initial setup period and adjusting workflow.
- Building the code can take a long time.
- CI requires tests to function efficiently. Fully automated tests can take a long time to construct.

In the Games Industry

- Writing tests for games is less simple than with traditional enterprise software.
- Complex logic and human aspects such as testing how "fun" the game is.
- Games can take an especially long time to build.

In a Role Playing Game Project

- Compared to other games, RPG's often emphasise story elements and player choice – difficult testing requirements.
- Often large-scope games with large amounts of content which leads to longer builds.
- Larger development teams means more commits and more potential for errors without good CI.

Conclusions

- Useful in large teams where merge errors can cause serious issues.
- However, can be complex to set up and automate, could be unnecessary for smaller projects.
- Relevant for games development as the need for playable builds and demo's is supported and encouraged by CI.

Conclusions

- Use minimal builds during the day to keep integration fast and do full builds at night.
- Just because games require manual testing doesn't mean automated tests don't work at all.

Any Questions?