A code review is when a developer finishes working on a piece of code, another developer looks at it to look for answers to questions such as, is there any obvious logical error in the code? Are all requirements met? Are automated tests sufficient for the code, is there a need to change existing automated tests? Is the code in conformity with the current guidelines?

When conducting a code review, it is important to keep it aligned with the existing team processes. Here is a checklist for conducting a code review successfully.

# Divide Review into Time Slots

It is not recommended to review the entire project at once. According to experts, one should not review more than 400 lines of code at one time. Furthermore, one check should not take more than one hour. This recommendation is based on the fact that humans are unable to process a large amount of information for longer time periods. Going beyond this mark can decrease the ability to detect bugs, and cause a reviewer to miss critical errors.

# Ask Team Members for Help

The review quality can immensely increase if there are more people reviewing. Using different tools, one can assign reviewers from the team and discuss chosen source code lines. Performing code review collaboratively not only enhances the code but also the team’s expertise by sharing knowledge and discussing changes.

# Develop Metrics

When starting the review, it is best to set up goals such as “reduce the defects by 50 percent.” It is important to develop measurable goals instead of generic ones like “to find more bugs”. Also gather metrics like number of bugs detected per hour, speed of review, and average bugs per line of code. Tracking review performance constantly can show a true picture of inner processes.

# Keep a Positive Approach

Code review can sometimes cause relationships within the team to strain. This is why it is important to keep the criticism positive and friendly to ensure that the coworkers remain motivated.

# Set Up a Process for Fixing Bugs

Once the code review is done, there should be a process for fixing all the bugs found. It is important to discuss bugs with the creator (unless one is reviewing the code for another team), and get the changes approved before submitting them into the source code.

For assistance in performing code reviews, contact Aardwolf Security today to find out more about how our team can help.