The Deployment Pipeline is a process that is automatic and created to precisely and swiftly add new code from versioning to production. (*What Is a Deployment Pipeline? | PagerDuty*, 2021b) It lessens the number of manual tasks such as testing and deployment of code which would take a lot of time and prone to errors of manual testing and deployments. The pipeline stages consist of four parts, Version control, Acceptance test, independent deployment, and production deployment. (*What Is a Deployment Pipeline? | PagerDuty*, 2021b)

Stage one of the Deployment pipeline is Version Control. Version Control happens when the developer completes a portion of code and it is then pushed to the source control, like GitHub, CVS, SVN, or Mercurial just to name a few. Where the code is automatically added, analyzed, and even tested. Once the code is free of errors and passes the first stake it will then store the code in the repo. (*What Is a Deployment Pipeline? | PagerDuty*, 2021b)

With stage two we have Acceptance Tests. Once the code is compiled it will then be pushed into a set of automated tests. These tests are created to verify our code alongside our teams’ criteria of acceptance. (*What Is a Deployment Pipeline? | PagerDuty*, 2021b) “These tests will need to be custom-written based on your company goals and user expectations” (*What Is a Deployment Pipeline? | PagerDuty*, 2021b) However once written then should be able to automatically test the code.

Stage three is Independent Deployment. In this stage it is automatically published to the development environment. This environment is very similar to production. (*What Is a Deployment Pipeline? | PagerDuty*, 2021b)

The last stage, stage four, is Production Deployment. Very close to the independent deployment since the requirement of the independent deployment was to be very similar to the production. Upon getting to this stage the code is now pushed live so that users can interact with it. (*What Is a Deployment Pipeline? | PagerDuty*, 2021b)

References:

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*What is a Deployment Pipeline? | PagerDuty*. (2021b, May 24). PagerDuty. Retrieved June 5, 2023, from https://www.pagerduty.com/resources/learn/what-is-a-deployment-pipeline/