



What is CI and CD ?

- **Continuous Integration (CI)** is a set of practices to integrate developer's work into the main source code to be deployed later. It contains of an automated process to build, test and analyse the code before merging it into the source code. That way developers can focus on writing codes and discussing best practices and use cases instead of trying to manually build and test the code before approving it for merge.
- **Continuous Deployment(CD)** is a set of practices to automate the deployment process. It handles the infrastructure creation, configuration, and even quick smoke tests before promoting a new code into production.

Why should we implement CI/CD Pipeline ?

- The less code we release in a single release, the better. With an automated deploy process we could reach dozens of small deploys weekly. This is more value being delivered at a constant pace.
- Fault isolation is quicker and the time spent by each developer catching issues in other developer's code is huge. Automating this would allow developers to focus on what really matters to deliver value.
- The number of issues we produce after a new release is much bigger than it should. With a well structured pipeline we can ensure to reduce the number of issues, which improves the user experience and helps to retain our users
- But what if a deploy fails? We can easily roll back to previous stable version of the software.
- All that infrastructure that we are not using anymore but it is still being charged by AWS, that can also be cleaned up in an automated deploy process.