CI/CD

- **Continuous Integration**
- CI is all about integrating code and making sure it works.
- **Continuous Delivery**
- Continuous delivery is an extension of continuous integration.This means that on top of having automated testing, you also have to automate your release process which will allow deploy application at any point of time by clicking on a button.
- **Continuous Deployment**
- Continuous deployment goes one step further than continuous delivery. With this practice, every change that passes all stages of your production pipeline is released to your customers. There's no human intervention, and only a failed test will prevent a new change to be deployed to production.

So what's the difference?

- ### Continuous Integration - advantages:

- - Less buggy product

- - Building release is getting easier as all integration issues have been solved

- - Whole team is reported about build process

Continuous Integration - costs:

- - Team needs to write automated tests

- - Server for automated tests is required

- - Devs need to merge their changes as often as possible

- ### Continuous Delivery - advantages:
- - Automated process of deploying software
- - Releases may happens more frequently
- - Hotfixes and small improvements can be shipped to production much faster

Continuous Delivery - costs:

- - Strong foundations in CI process
- - Special mindset while developing software is needed

- ### Continuous Deployment - advantages:
- - No release days
- - Release are less risky
- - Team can fully focus on developing new features

Continuous Deployment - costs:

- - Testing culture must be at its best. CD process require the highest quality of tests
- - Documentation needs to be updated frequently to keep up after deployments
- - Overall process is knowledge demanding and require experienced team
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