CI/CD

What is it & Why We Need It

Continuous Integration & Delivery

- It is the Automation of:
 - Integration of new features with the existing code base.
 - Some tests to insure the quality of the newly added code.
 - Deployment of new features.
 - Testing on a production environment.
 - Promoting a new production.

Faster Time To Market

- Automating releases allows for having back to back releases
- Ensures higher quality because we'll always run tests.
- Less time spent on deployment tasks means more time to focus on developing new features.
- We can focus on making more granular changes, merge them faster and introduce them to customers faster.

Customer Satisfaction

- Faster delivery of customer needs.
- Thanks to CI/CD we can adapt faster to customers feedback
- More frequent releases and faster bug fixes.
- Less bugs because we're making sure the unit tests are run with every code push.

Reduce Costs and Boost Profits

- Having the same process done with every release
- Having a process that is less prone to errors and making sure that each time we're repeating the same process
- Higher quality and less costly bugs because we are testing every release.

Gaining Visibility Of The Development Process

- Collecting and analyzing the data of past deployments and their success rates help in decision making and feature prioritizing.
- Having a clear demonstration of the whole process helps defining bottleneck in the process and allows for quick recovery.