

# Benefits of CI/CD

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"It's one small step for man, one giant leap for mankind."

- NEIL ARMSTRONG

• CI = continuous Integration bugs cost many – lets catch them as early as we can.

\* CI is a system where once a developers code is ready, it will trigger a set of automated builds which ensures bugs are caught earlier.

# Main benefits of CI

# 1) Increased Transparency

By having a CI pipeline, your entire team have a common tool which they can monitor the builds. This way they can collaborate more efficiently to fix the most common breaking tests and raise issues earlier.

### 2) Improves code quality

It is important to deliver a high quality software code to our clients. Having a CI pipeline helps us achieve that by making builds break if a certain threshold coverage is not met for example. This was developers know they need to know write enough unit tests to satisfy the code qualities standards.

# Main benefits of CI

# 3) Improved Mean Time To Resolution (MTTR)

MTTR is the measure of reliability and maintainability of any or all the repairable features. Having an automated trigger-based build help you keep this number down.

\* Frequent code check-in allows software developers to create modular, less complex code

# • *CD* = *continuous Delivery*

\* CD means delivering software through an automated fashion through short cycles.

# Main benefits of CD

### 1) Accelerated Time to Market

Having an automated software delivery means we can deliver software more frequently. Having a CD pipeline ensures software is delivered to clients in short cycles and with a higher frequency, while maintaining a high quality.

### 2) Building the accurate product

Having short software releases means developers can get instant feedback from their clients in order to deliver the software in the exact shape that was needed.

# Main benefits of CD

### 3) Increasing product quality

Having a CD pipeline means after the code is completed by a developer, that functionality is deployed in an automated fashion after his/her commit (code check in). Before the deployment is done, a set of code quality checks takes place in the pipeline, which ensures bugs are caught as early as we can.

# 4) Improved customer satisfaction

Fast and frequent releases, new features shipped regularly, bugs fixed promptly and immediate reaction to feedback eventually makes our customers happy.