CI/CD - A better way to build and ship products to market

Benefits of CI/CD to achieve build and deploy automation within our company's products

Eng. Shimaa Badawy

Continuous Integration (CI)

Continuous integration (CI) is the practice of merging all developers' working copies to a shared mainline several times a day. It's the process of "Making". Some examples of CI-related phases include:

- Dependency vulnerability testing
- Static Analysis
- Store artifact
- Unit Test
- Compile

Continuous Deployment

Continuous deployment (CD) is the engineering approach in which the value is delivered through frequently automated deployments. It's the process of "Moving" the artifact to production without human intervention. Some CD-related phases might include:

- Creating/configuring infrastructure
- Rollbacks in case if any failure
- Promoting to production
- Smoke Testing

Benefits of CI/CD at the Business Level

- Detect Security Vulnerabilities: Will help to avoid cost by preventing costly security Vulnerabilities.

- Deploy to Production Without Manual Checks: Will increase revenue by making features take less time to be deployed and introduced to market.

- Automate Infrastructure Creation: Will help to avoid cost by providing less human error, which means faster deployments

Benefits of CI/CD at the Business Level

- Automated Smoke Tests: Protecting revenue by reducing downtime from a a crash or a major bug.

- More Frequent Production Deployments: Increasing revenue by releasing new value-generating features more quickly