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
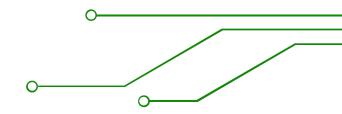
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CONTINUOUS INTEGRATION

- The practice of merging all developers' working copies to a shared mainline several times a day. It's

  the process of "Making".

- Everything related to the code fits here, and it all culminates in the ultimate goal of CI: a high quality,
  deployable artifact!

- Some common CI-related phases might include:
      - Compile
      - Unit Test
      - Static Analysis
      - Dependency vulnerability testing
      - Store artifact

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CONTINUOUS DEVELOPMENT

- A software engineering approach in which the value is delivered frequently through automated deployments.

- Everything related to deploying the artifact autonomously fits here. It's the process of "Moving" the artifact from the shelf to the spotlight without human intervention.

- Some common CD-related phases might include:
    - Creating and configuring infrastructure
    - Promoting to production
    - Smoke Testing (aka Verify)
    - Rollbacks in case if any failure

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Benefits of CI/CD at the Business Level

- The rationale of CI/CD is the famous saying: 'a penny saved is a penny earned', so here's a preview of the benefits of setting up a CI/CD pipeline:

    - Automate Infrastructure Creation:
        This will help to avoid cost by providing less human error, which means faster deployments.
    - Faster and More Frequent Production Deployments:
        This would help to increase revenue by releasing new value-generating features more quickly.
    - Automated Smoke Tests:
        This would help protect revenue by reducing downtime from a deploy-related crash or a major bug.
    - Detect Security Vulnerabilities:
        This would help to avoid cost by preventing embarrassing or costly security holes.
    - Deploy to Production Without Manual Checks:
        This would help to increase revenue by making features take less time to market.
    - Detect Security Vulnerabilities:
        This would help to avoid cost by preventing embarrassing or costly security holes.
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THE END