

UdaPeople

CI/CD





What CI/CD?

- **Continuous Integration (CI):** It is practise of merging the developer's work to a shared mainline multiple times a day,
- **Continuous deployment (CD):** It is an engineering approach in which valuable features are delivered frequently through automated processes.
- Both CI and CD contribute to a **Continuous Delivery** of releases to the product in short periods of time.



Benefits of CI/CD

1. Reduce Cost

- a. Catch build errors after merge which means less time on solving issues from new code.
- b. Automate infrastructure cleanup which reduces infrastructure costs from unused resources.



Benefits of CI/CD

1. **Avoid Cost**

- a. Catch unit test failures which reduces bugs in production and time in testing.
- b. Detect security vulnerabilities which prevents costly security holes.
- c. Automate infrastructure creation which means less human error and faster deployments.



Benefits of CI/CD

1. Increase Revenue

- a. Faster and more frequent production deployments providing New valuable features released more quickly.
- b. Deploy to production without manual checks which reduces time to market.



Benefits of CI/CD

1. Protect Revenue

- a. Automated smoke tests which reduces the downtime from a deploy-related crash or major bug.
- b. Automated rollback after a job failure which quickly returns production to a working version.