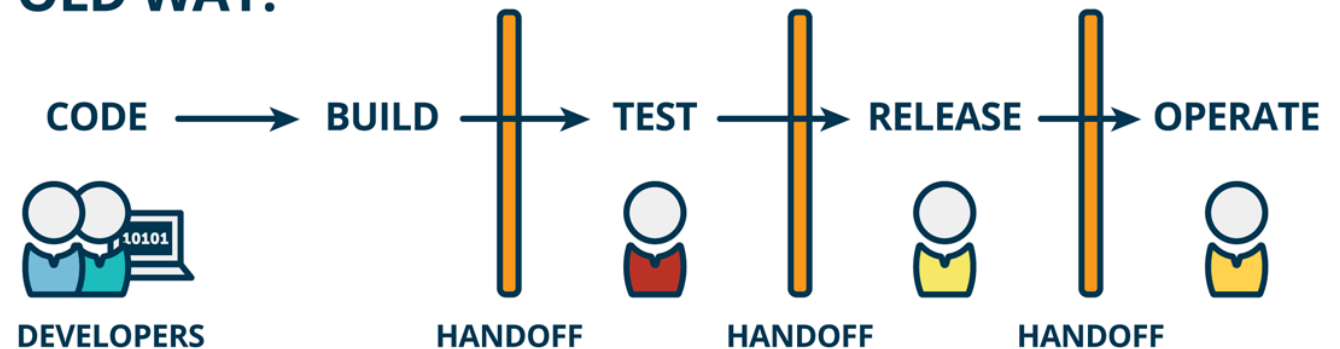Benefits of CI/CD to achieve, build, and deploy automation faster and reducing costs

Current Situation at UdaPeople

- New deployments of our product take ages, downtimes are common to publish to the market

- Releases can be only published quarterly or even only on yearly basis

- Bugs and poor quality are more likely since a lot of manual work and manpower is involved

- Less resources in delivering value to customers since we need to take care of our release cycle

OLD WAY:

CODE → BUILD | TEST | RELEASE | OPERATE

DEVELOPERS   HANDOFF   HANDOFF   HANDOFF

CI/CD Fundamentals

Continuous Integration

- Practice of merging all developers working copies to a <u>shared mainline</u> several times a day

  -> less code conflicts due to reduced codes branches

Continuous Deployment

- Value is delivered frequently through <u>automated</u> deployments

  -> no human intervention needed for release to production

Benefits of CI/CD

Faster and more frequent deployments per day

Early bug detection through unit tests and merged branches

Automated smoke tests and rollbacks in case of job failure

Automated infrastructure creation and cleanup

$ $ $

New features are faster visible for our customers, results in more revenue

Less developer resources needed and avoided costs fixing errors in production

Revenue is protected since fast rollback to production is guaranteed

Less infrastructure costs from unused resources