UDAPEOPLE

Proposal for development of CI/CD pipeline

Continuous Integration

Practice of merging all developers' working copies to a shared mainline several times a day

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

Continuous Deployment

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

- *Creating infrastructure*
- *Provisioning servers*
- *Copying files*
- *Promoting to production*
- *Smoke Testing (Verify)*
- *Rollbacks*

Business Benefits

Avoiding & Reducing costs

- Less developer time on issues from new developer code
- Less bugs in production and less time in testing
- Prevent embarrassing or costly security holes
- Less human error, Faster deployments
- Less infrastructure costs from unused resources

Business Benefits

Increasing & Protecting Revenue

- New value-generating features released more quickly
- Less time to market
- Reduced downtime from a deploy-related crash or major bug
- Quick undo to return production to working state

CI/CD Tools

GitHub

circleci

ANSIBLE

amazon web services

Prometheus