## Fundamentals and benefit of CI/CD

To achieve build and deploy project for Udapeople app

## What is CI/CD?

• CI (Continuous Integration): is a fundamental practice where developers frequently merge code changes into a central repository where automated builds and tests run.

 CD (Continuous Deployment): is a software engineering approach in which the value is delivered frequently through automated deployments.

## Benefits of CI/CD

Here are some benefits of CI/CD to help the organization in creating and protecting revenue, control and reduce cost

- Faster and frequent production deployments: with CI/CD, features/products are delivered to customers quickly which will lead to increase in revenue.
- Consistent and early feedback: features can immediately be made available to users and defects or unhelpful implementations can be caught early before the team devotes extensive effort in an unproductive direction.

- Reduced deploy errors: This help to reduce production downtime thereby also protecting revenue. That is, with the implementation of automated smoke tests, there is high confidence that deployments to production will not cause any major downtime which helps in protecting revenue.
- Customer Satisfaction: If a customer is satisfied with the products and features delivered, the organizations revenue is increased. i.e, customers will use the product or feature more often and also make referrals to other individuals leading to new customers and an increase in revenue.

## Conclusion

With the benefits of CI/CD in the previous slides, I believe has given the organization more insight on what CI/CD brings to the table (Customer satisfaction, faster deployments, increase in revenue and reduced cost) if the implementation is approved.