



SELLING CI/CD UDACITY PROJECT 3

Fundamentals and Benefits of CI/CD to
Achieve, Build, and Deploy Automation
for Cloud-Based Software Products

FUNDAMENTALS OF CI/CD

□ Continuous Integration

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

□ Continuous delivery

An engineering practice in which teams produce and release value in short cycles.

□ Continuous deployment

A software engineering approach in which the value is delivered frequently through automated deployments. Deploying automatically pushes features and fixes to customers quickly, encourages smaller changes with limited scope, and helps avoid confusion over what is currently deployed to production.

BENEFITS OF CI/CD

- Being the lead in development of Udapeople product, we would implement the best practices of CI/CD in this project. This will enable the product reach to the market faster. Also through autonomous flow from design to deployment guarantee better integration, delivery and accelerated value to the clients.
- The following are some of the benefits of CI/CD.

Increased delivery of the product

With CI/CD pipelining, multiple daily releases are achieved thus enabling fast delivery of the product.

Reduced risks

Without CI/CD, there could be a lot of risks occurring due to fixing of bugs and features during last minute delivery. CI/CD has curbed this by ensuring bugs are fixed earlier hence reduced risks.

Automated infrastructure provisioning

Automated smoke tests and rollbacks will protect the project revenue due to reduced downtimes during deployment and deployment crashes and fast and automated rebuilding of production ready states.

Increased customer feedback

With continuous deployment changes are made at any given point during project development process. CI/CD have enabled customer involvement throughout the project development thus ensuring instant customer feedback leading to customer satisfaction.

Generation of extensive logs

CI/CD integration has the aspect of observability which detects logs and if something is wrong, it will be easier to identify it. Generated logs in the system will help in getting immediate feedback about the system and make it easier, cheaper and faster to fix the problem

Increased software quality

CI/CD integration has enabled delivery of quality product to the market. This is achieved through continuous fixes of bugs ensuring clean code thus leading to more revenues the company will get more customers because of good quality.

THANK YOU