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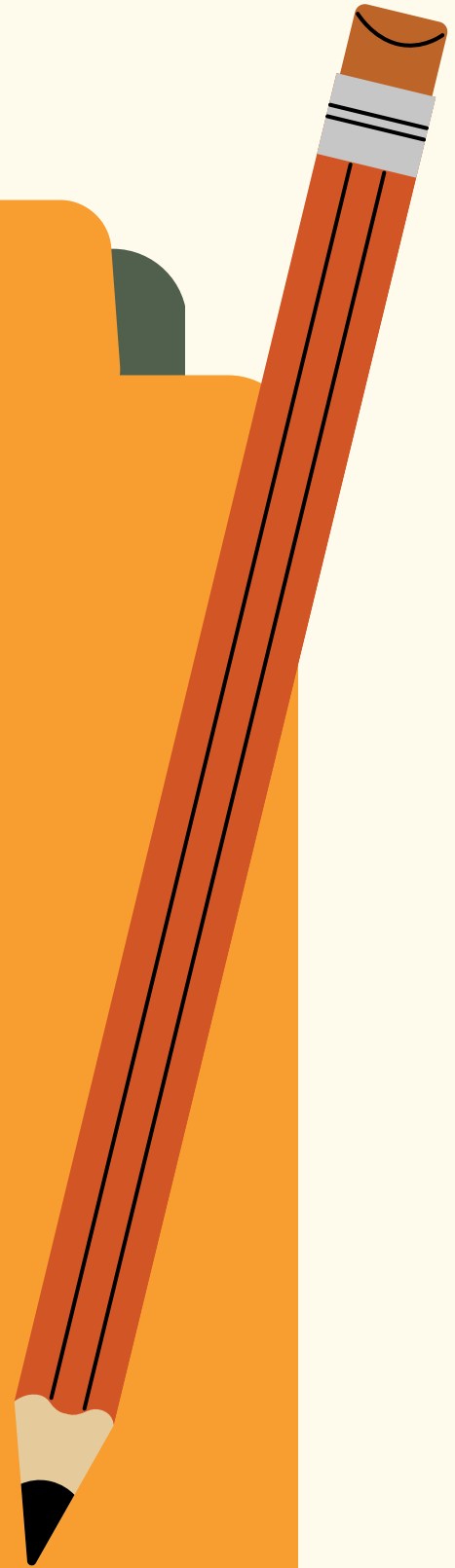
Benefits OF

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CI / CD

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In Bussiness



# What is CI/CD

Continuous integration (CI) and continuous delivery (CD) are the processes that are used to build, package, and deploy your application. Basically, it lays out some practices to follow in order for the code you write to more quickly and safely get to your users and ultimately generate value.

**just to make it clear**

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

**CD:** is the ability to deploy your integrated code into production without the need of human intervention. CD allows you to take the code stored in the repository and continuously delivery it to production

# Why CI/CD Matters

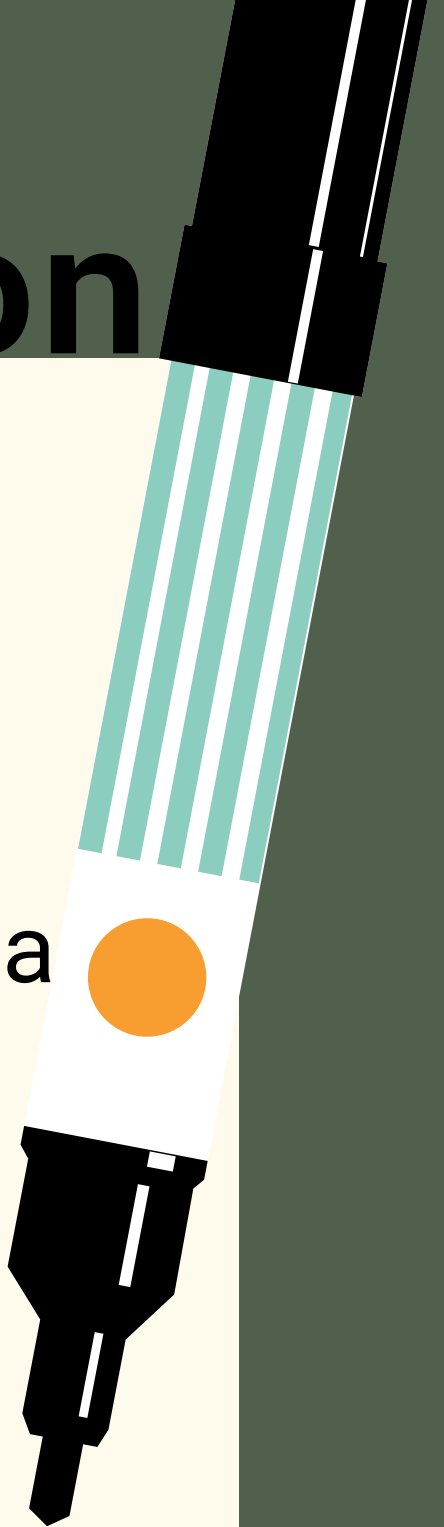


- Using CI/CD can lead to big advantages Like..

<b>Reduce Costs</b>	Using automation in the CI/CD pipeline helps reduce the number of errors that can take place in the many repetitive steps of CI and CD.
<b>Smaller Code Changes</b>	One technical advantage of CI and CD is that it allows you to integrate small pieces of code at one time. This helps developers to recognize a problem before too much work is completed afterward.
<b>Faster Release Rate</b>	You can only use a classmate's name once.
<b>Fault Isolations</b>	You should have nine unique names on your list.
<b>More test reliability</b>	Using CI/CD, test reliability improves due to the bite-site and specific changes introduced to the system, allowing for more accurate positive and negative tests to be conducted.

# Importance of Test Automation for CI/CD

- Test automation is a crucial component of any CI/CD pipeline. The benefits of applying CI/CD cannot be realized if there is a lack of automated testing and a low level of test coverage. Teams need to perform automated testing at all levels including unit, integration, and system testing.
- Also, teams need to apply automation testing for multiple testing types such as functionality, usability, performance, load, stress, and security.



# Conclusion

DevOps has brought with it the rise of CI/CD.

- In the present context, CI/CD practices are the most widely-accepted choice to shorten software development and delivery cycle time.
- Many software tools are available to support implementing CI/CD practices. Katalon Studio provides a comprehensive set of features for API, Web, and mobile testing.
- It can be easily integrated into a CI/CD pipeline to handle unit (API services), integration, and system testing.

