

DevOps Demo

Madhan

What is the Meaning of DevOps?

What is the Meaning of DevOps?

Development + Operations

Developer + Operations

Continuous Process

General Question

???

What is ECommerce Application?

What is ECommerce Application?

allows users to shop online, browse product catalogs, create wish lists, add items to a cart, and complete purchases.

Examples:



Example:

Purchase

Mobile : 20K





Delivery : 5 Days



Delivery : 2 Days

Which one you PREFER?

“DEVOPS IS ALSO THE SAME!”

FASTER TO THE MARKET

Which one you PREFER?



Delivery : 2 Days

The Delivery is FASTER

SAME EXAMPLE IN REAL WORLD!



COMPANIES ALSO
LOOKING
FASTER TO THE MARKET

INVEST



THOUSANDS OR CRORES

PRODUCT



FASTER TO THE MARKET

MAIN INTENTION TO DEVOPS

Deliver the Application to the market
very Speedily or Faster

Lets say

Deliver



Market

Speedily
Slowly

Lets say

Deliver



Market

Speedily

Slowly

Speedily = Agility

**To Make the process of delivering the
application speedily
we are using DevOps!**

Why Devops?

Why Devops?

→ To Deliver the Application into market
very speedily.

→ To Deliver the Software into market
very speedily.

In Simple Definition:

Deliver Application very Speedily.

Lets Understand in Some Examples

Food Order Booking

zomato

 **SWIGGY**

Book Tickets Buses

 **redBus**


abhibus

Book Taxi Rides

 **OLA**

Uber

Book Movie Tickets

book  show

JUSTICKETS

SOLC

What is SDLC?

Software Development Life Cycle

*If I want to build any
Software / Application*

SDLC

Traditional IT

In Software Domain, We have 2 teams for Developing the Application

DEVELOPMENT

Planning
Coding
Building
Testing

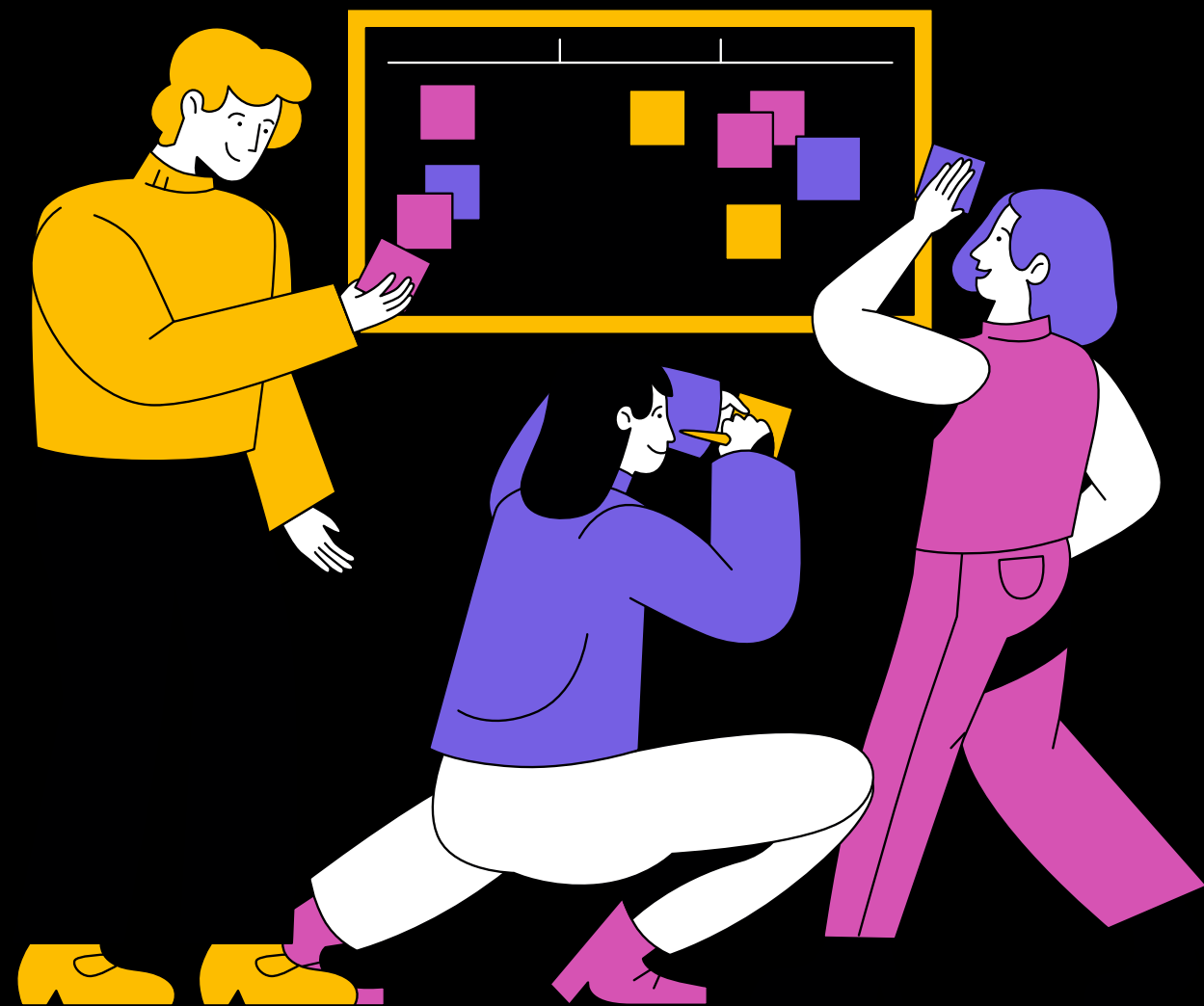


OPERATIONS

Deploy
Operation
Monitoring



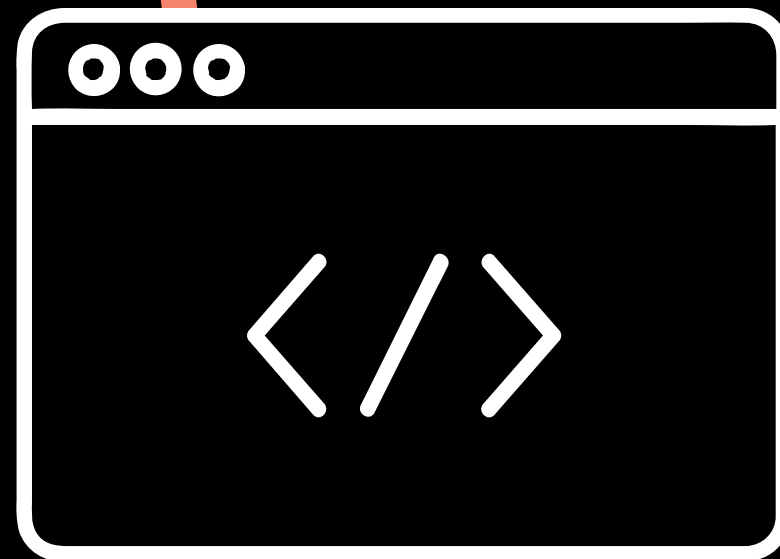
Plan



Code



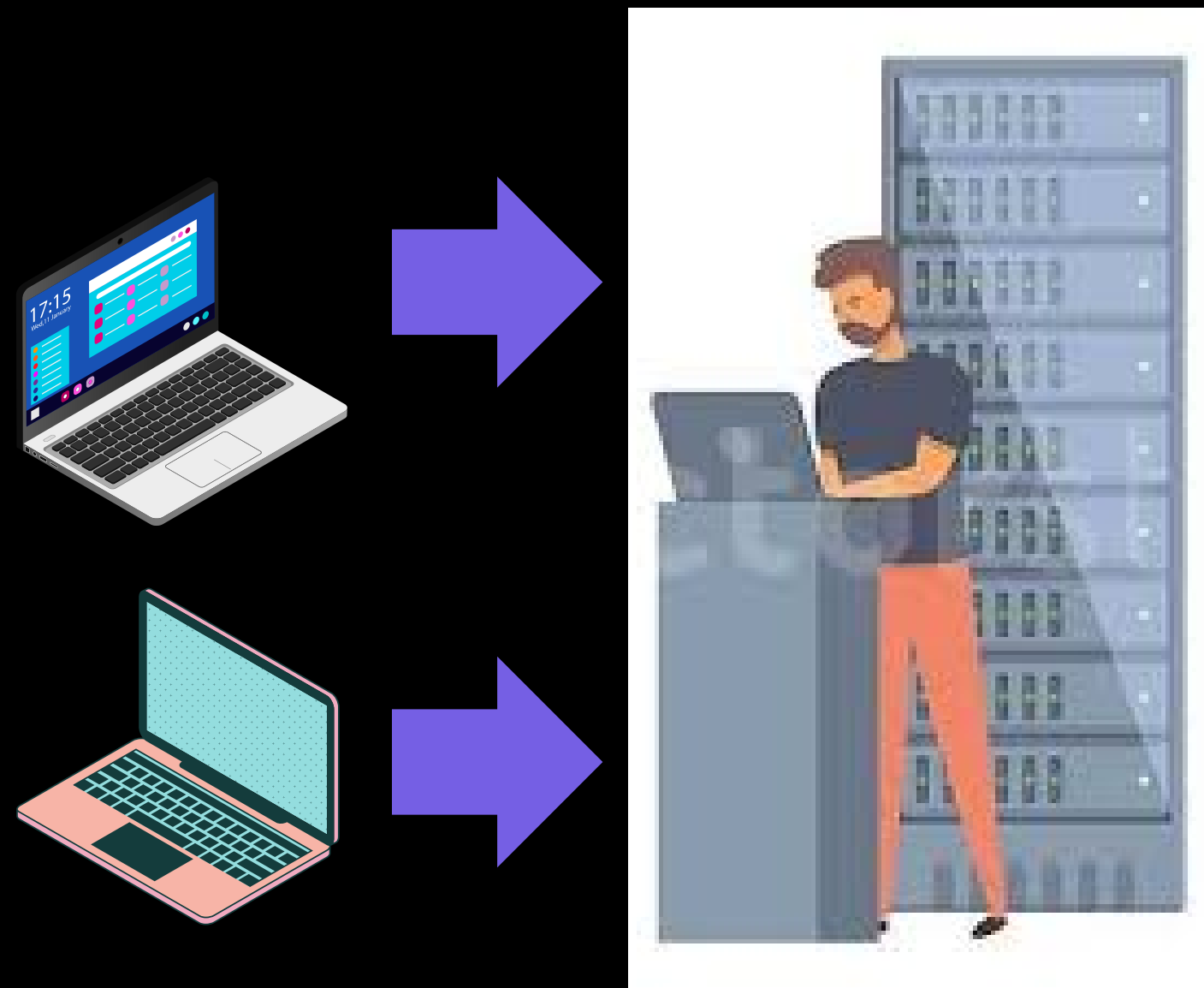
Build



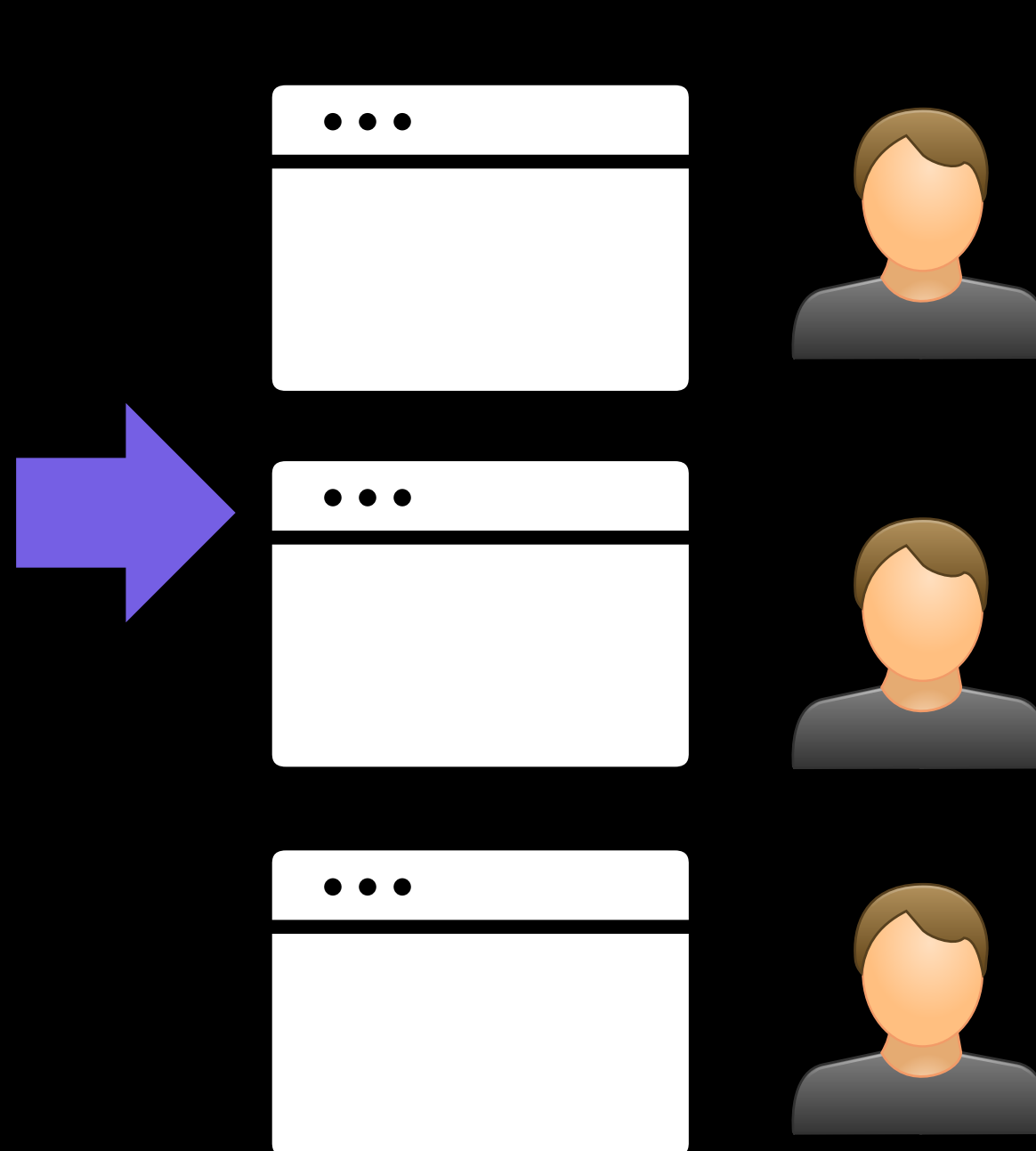
Test



Deploy



Operate

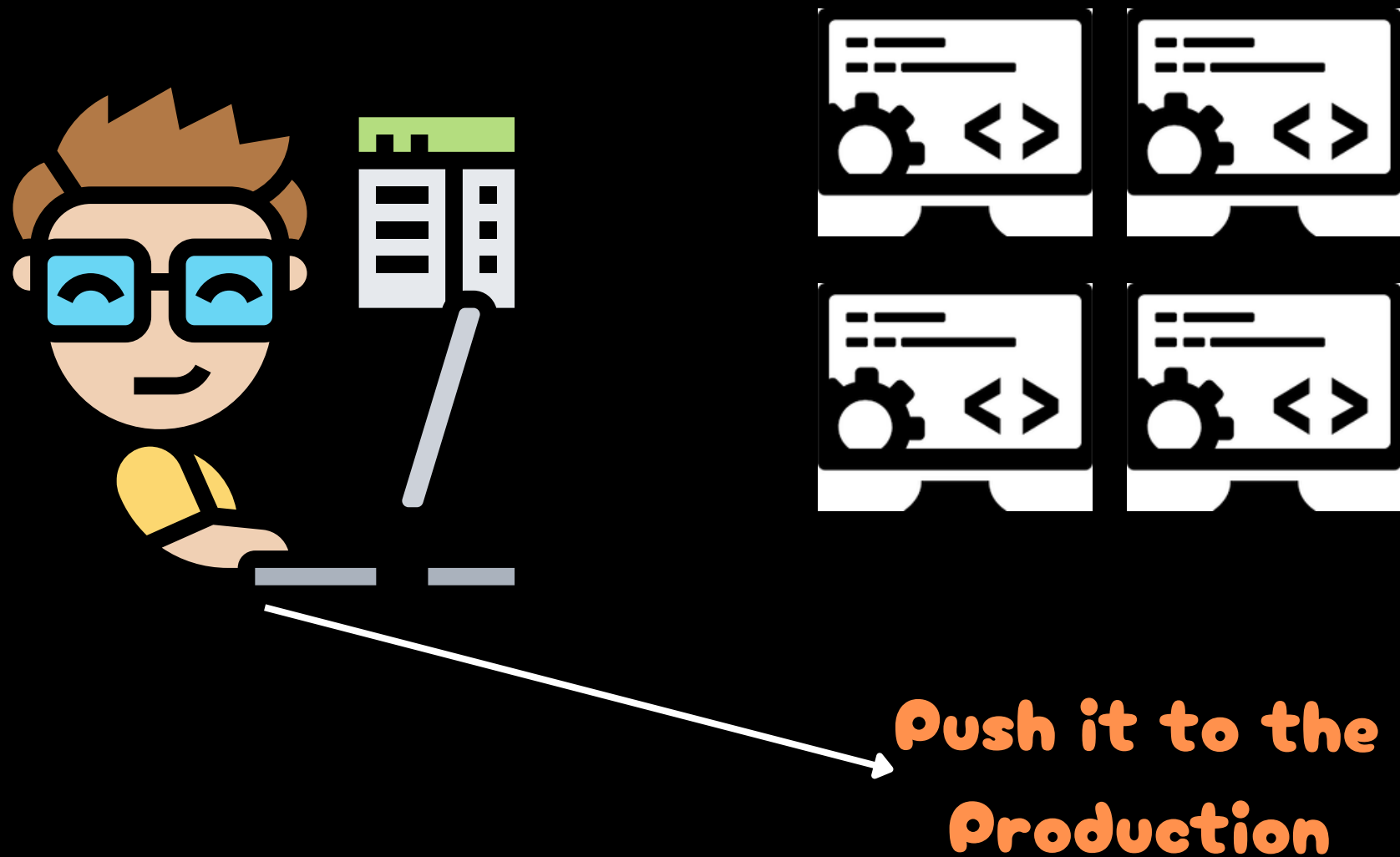


Monitor



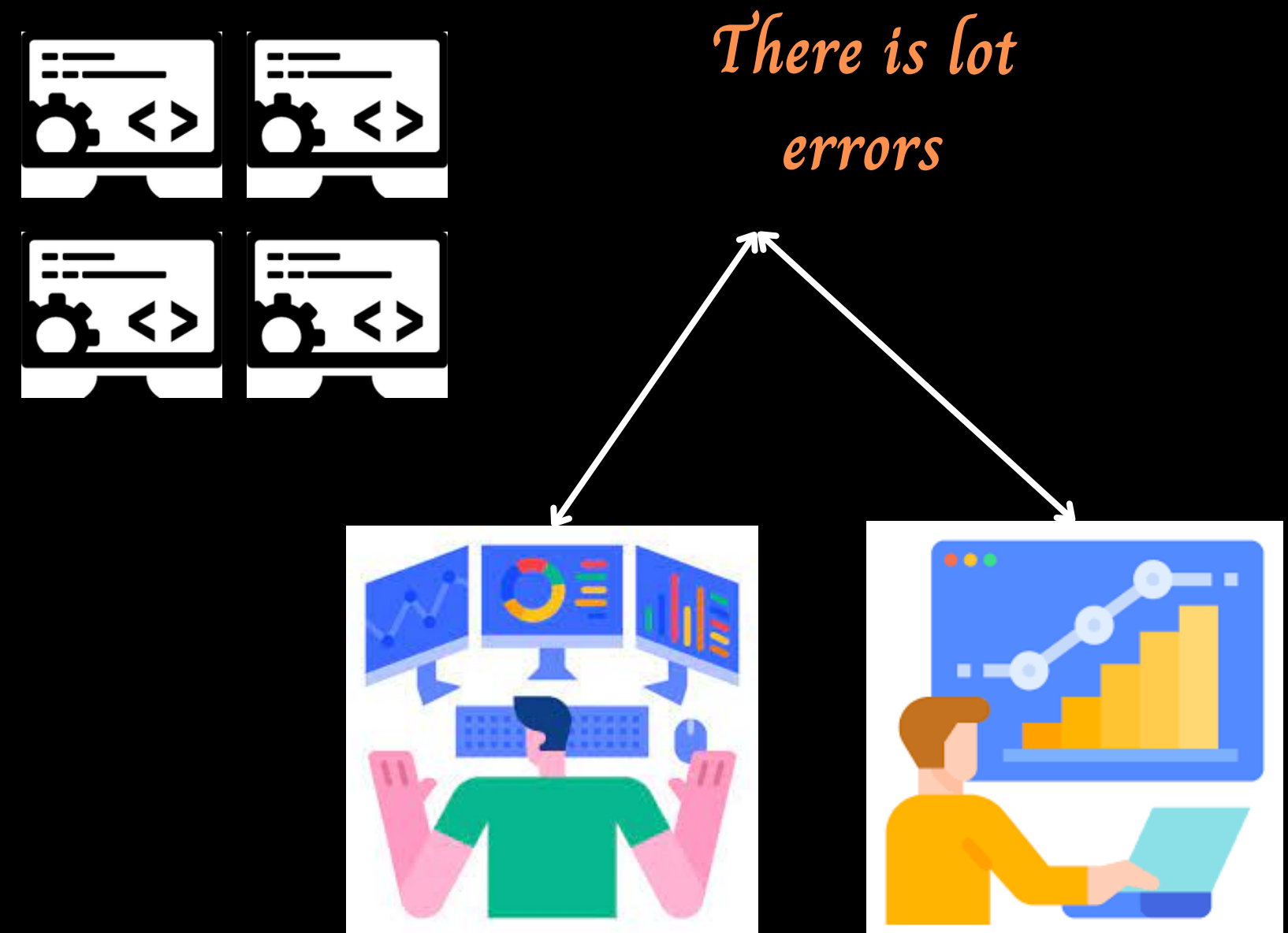
Development

The Dev Team Writes the Code for the Entire Application and Tosses it to Operational Team for Production



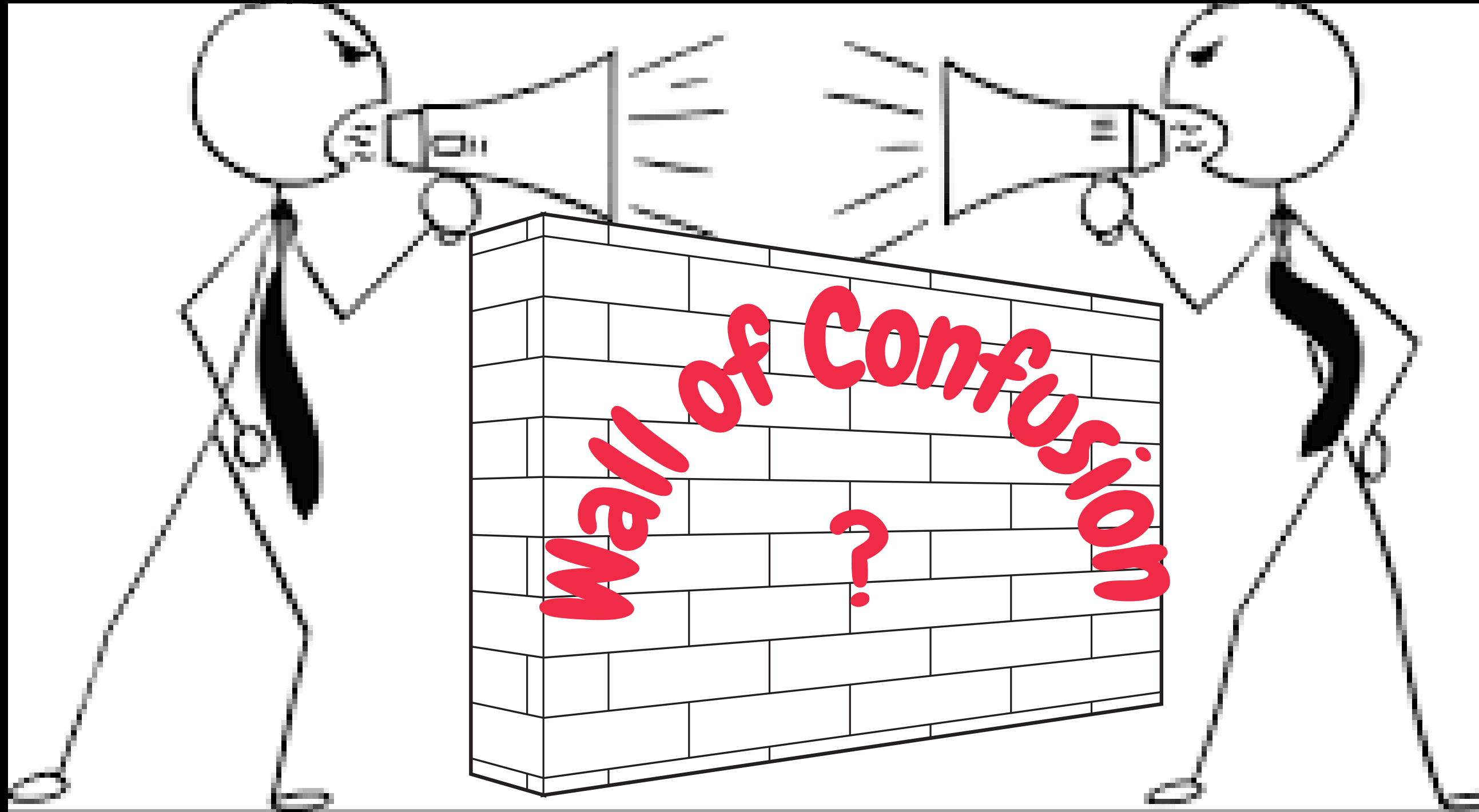
Operations

The Ops Team Deploys, Monitor Operate and Maintain the Application



Dev Team

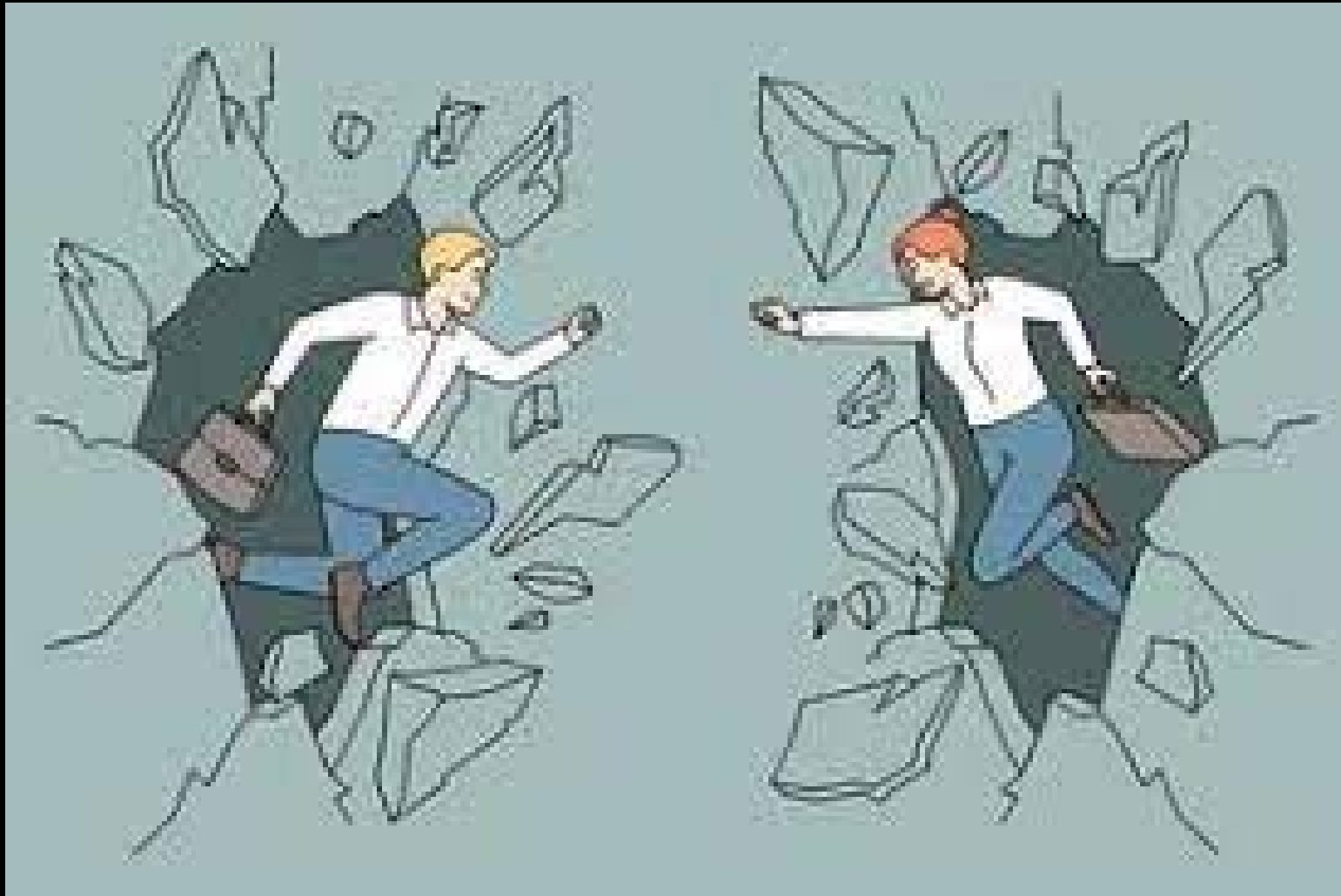
Ops Team



alamu

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www.dreamstime.com

What if we Break the wall

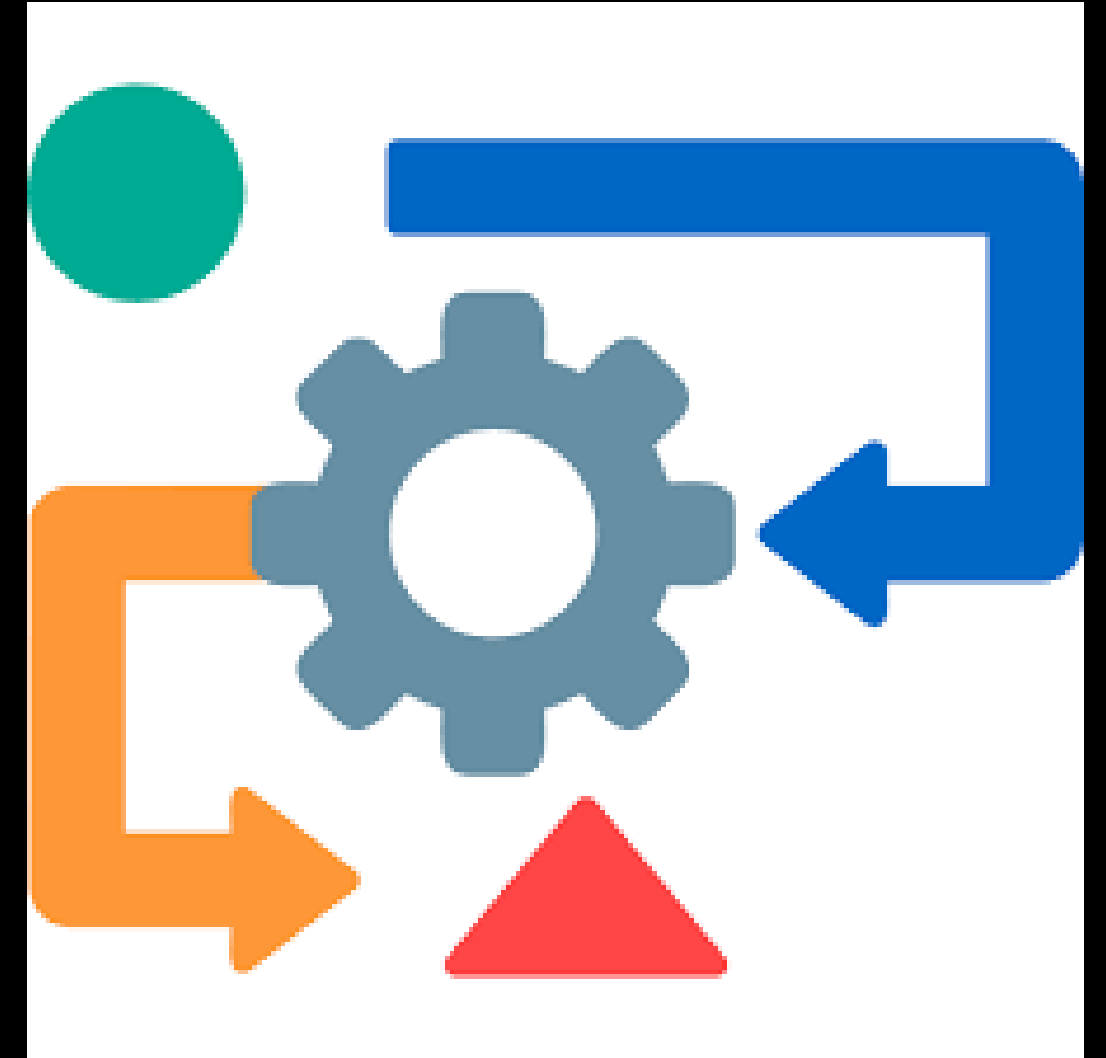
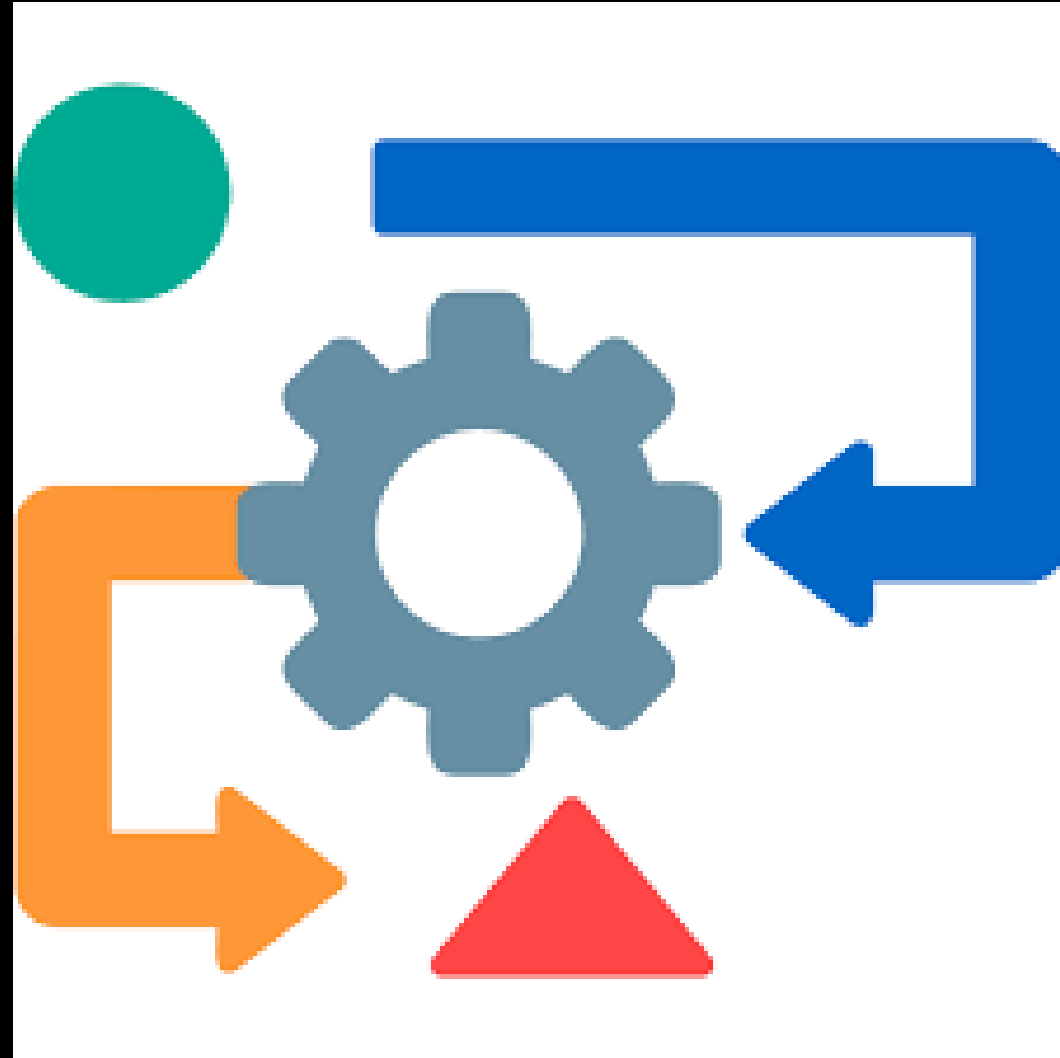
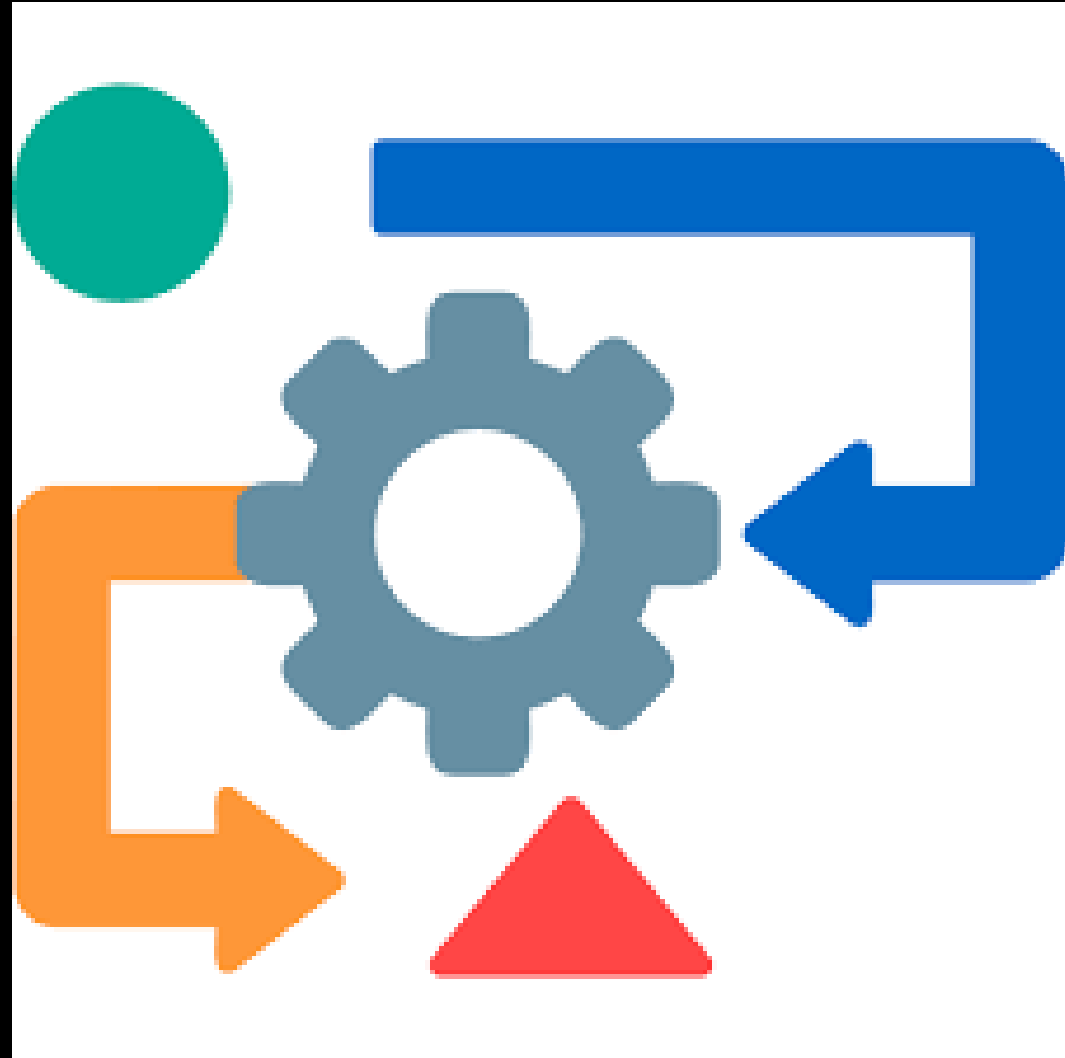


@MikeVelayudham

This is DevOps ==> Dev + Ops

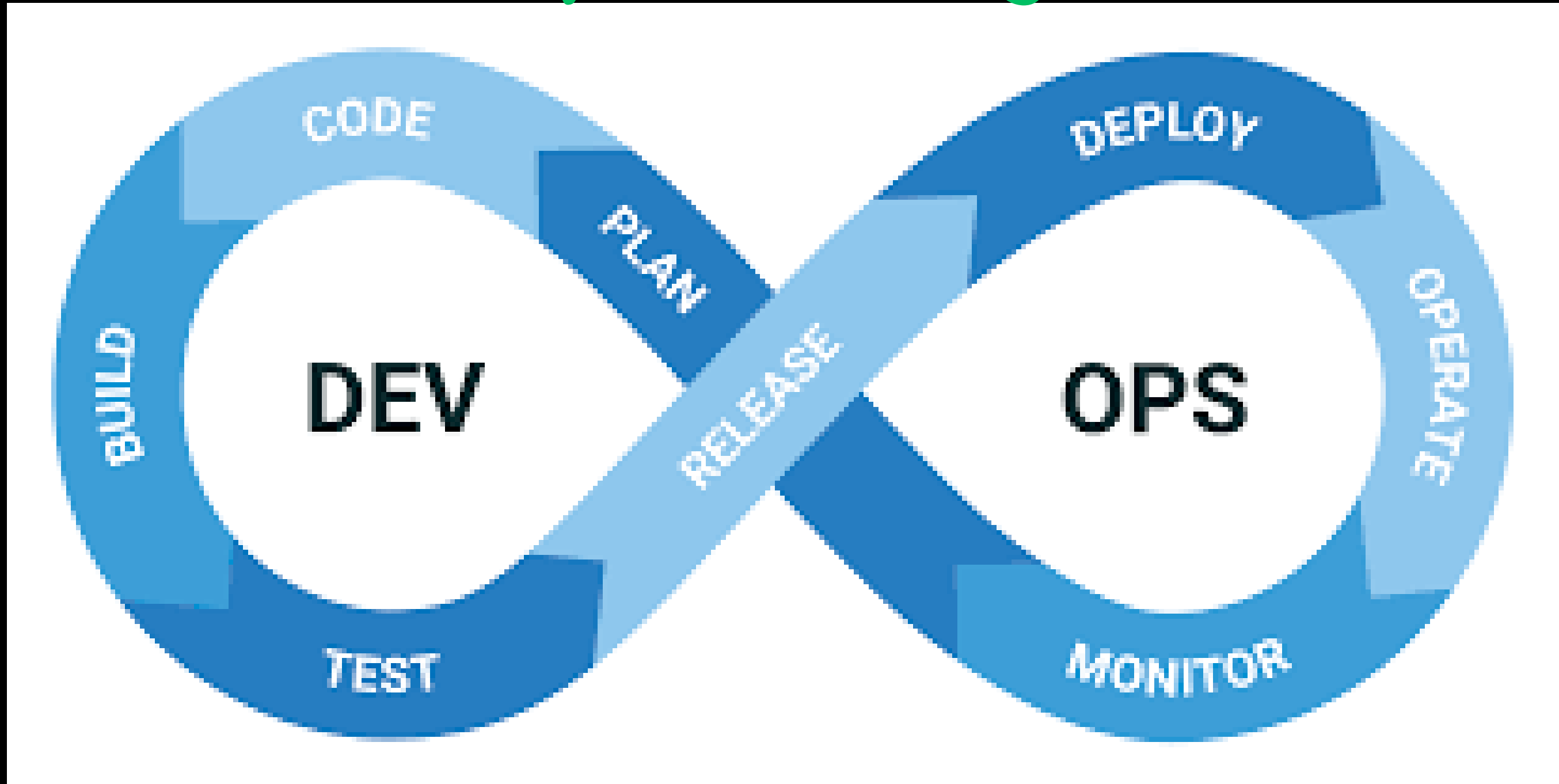
DevOps is Not a Tool,
Technology, or
Framework

Methodology



The Methodology which is used to create
the Application and Release the
Applications
very speedily/Faster.

Devops Life Cycle

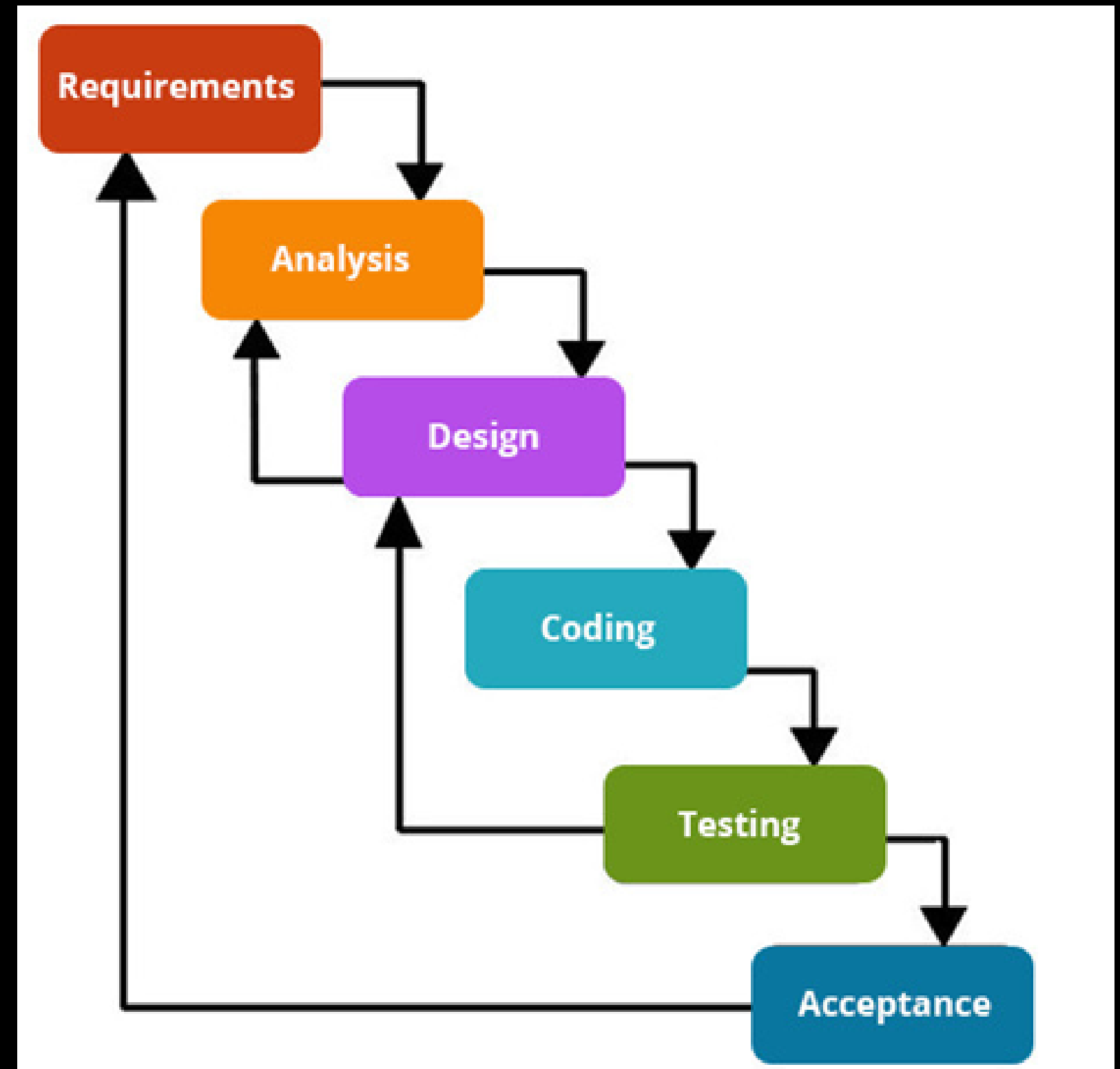


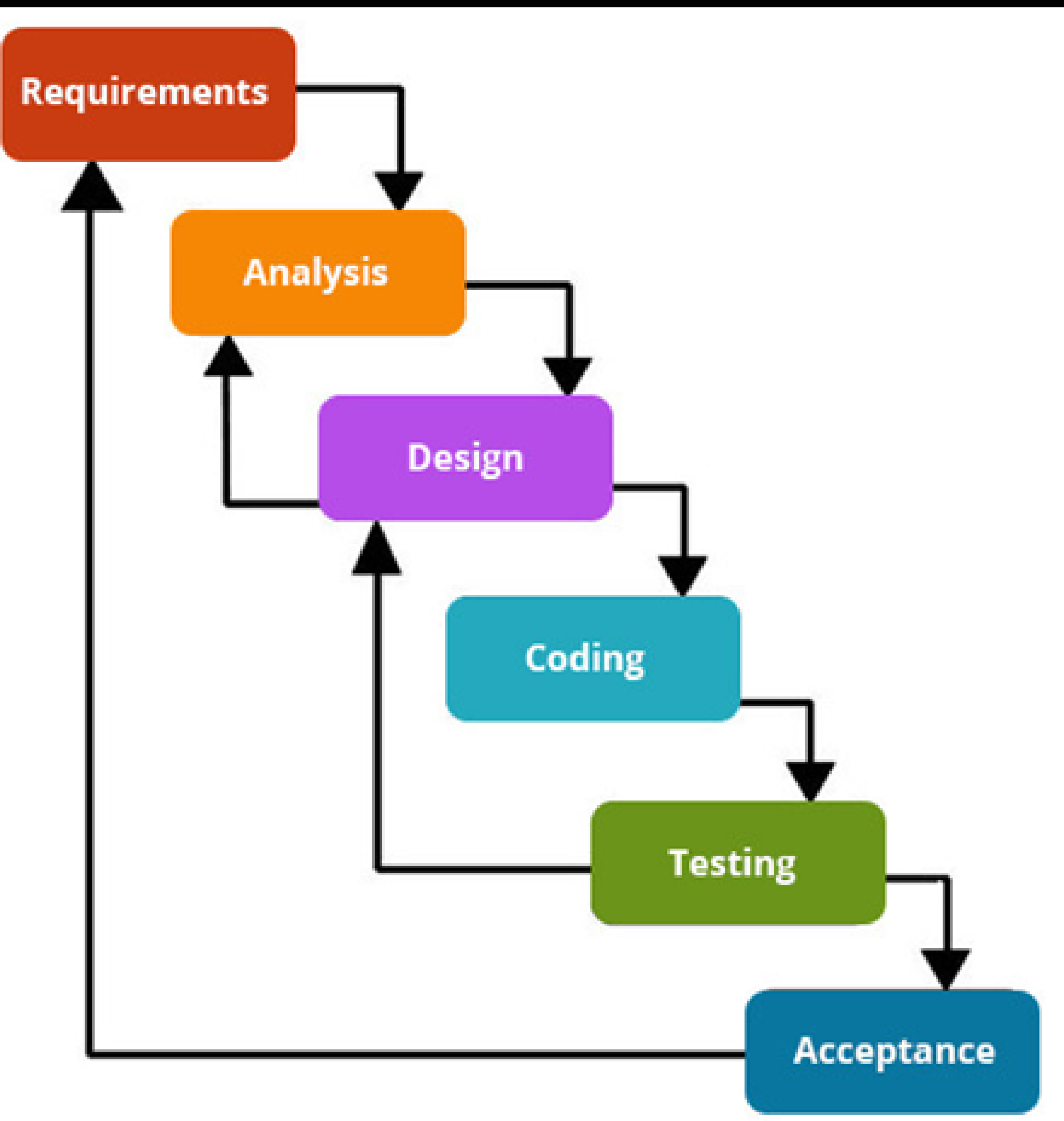
The Logo of DevOps represents infinite because its never ending continuous process.

Before DevOps?

Waterfall Methodology

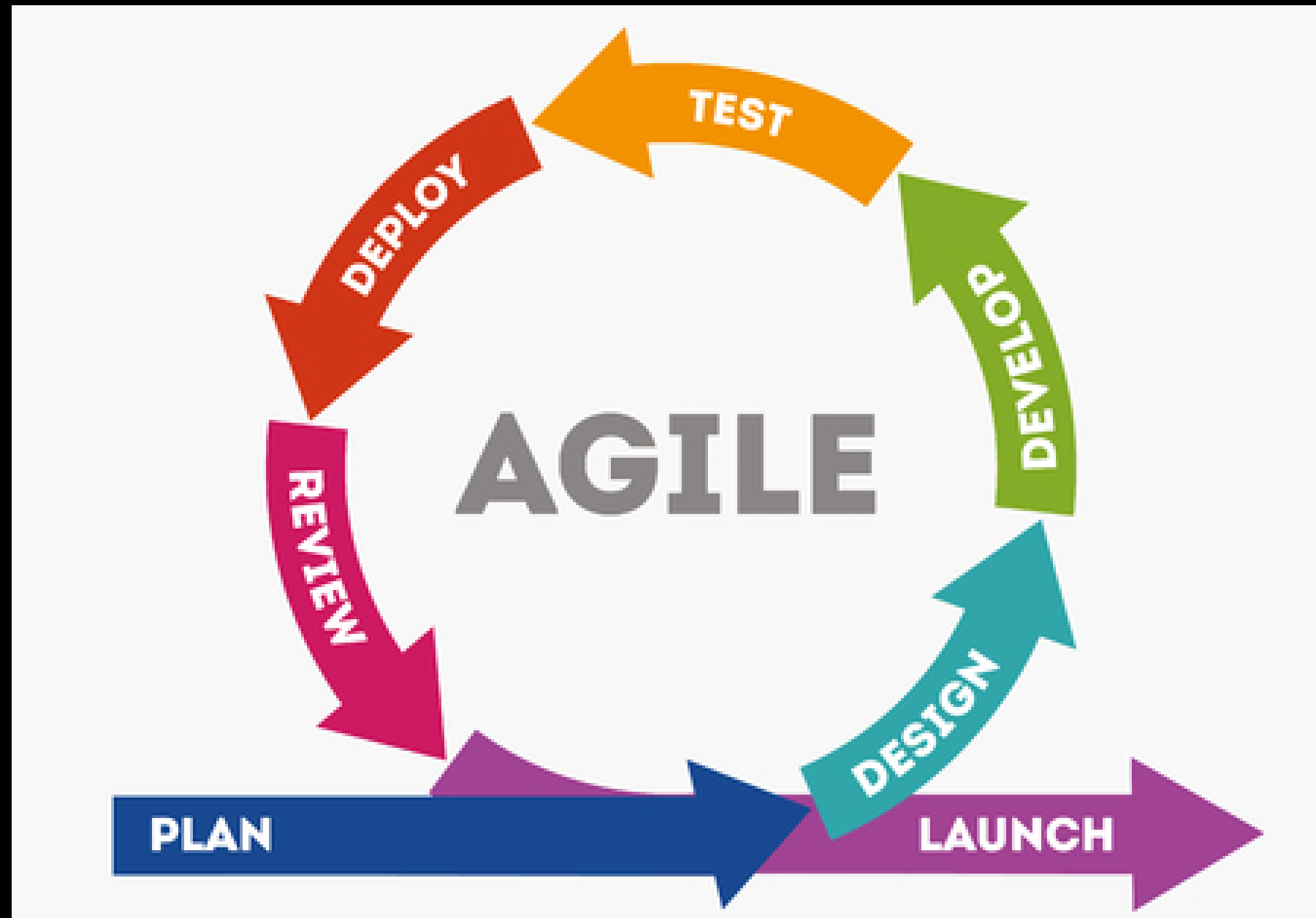
- The Waterfall methodology is also known as the Waterfall Model or Classic Model.
- It is a Sequential development process to develop the software systematically.
- It will follow step by step execution.
- We can work on one step at a time.

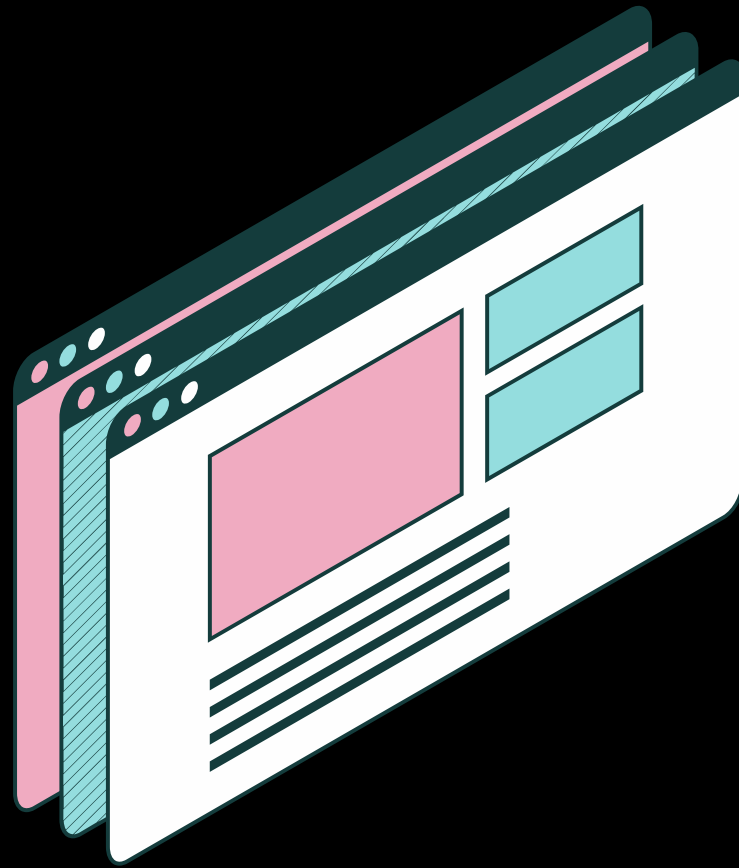




- 1) Requirement Docs
- 2) Software Arch
- 3) Construct Software
- 4) Install, Test & Deploy
- 5) Check errors, Optimize

Agile Methodology





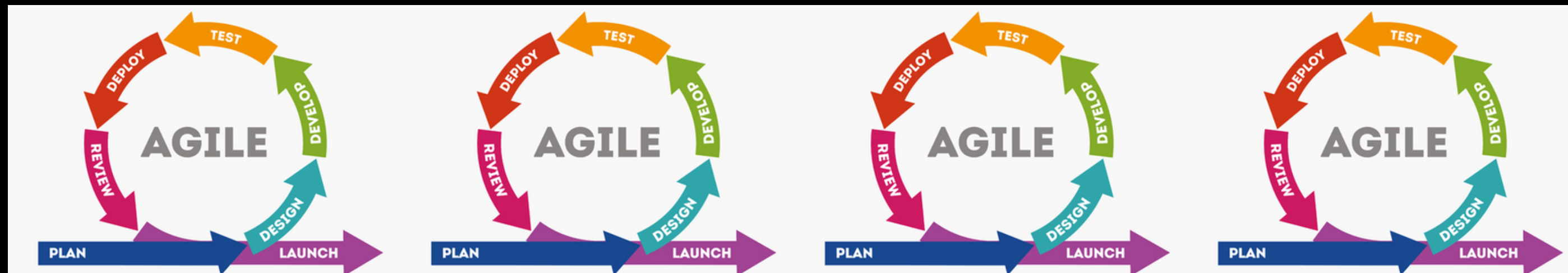
AR/VR
Application



- **Design: 2 Months**
- **Develop: 8 Months**
- **Testing: 2 Months**

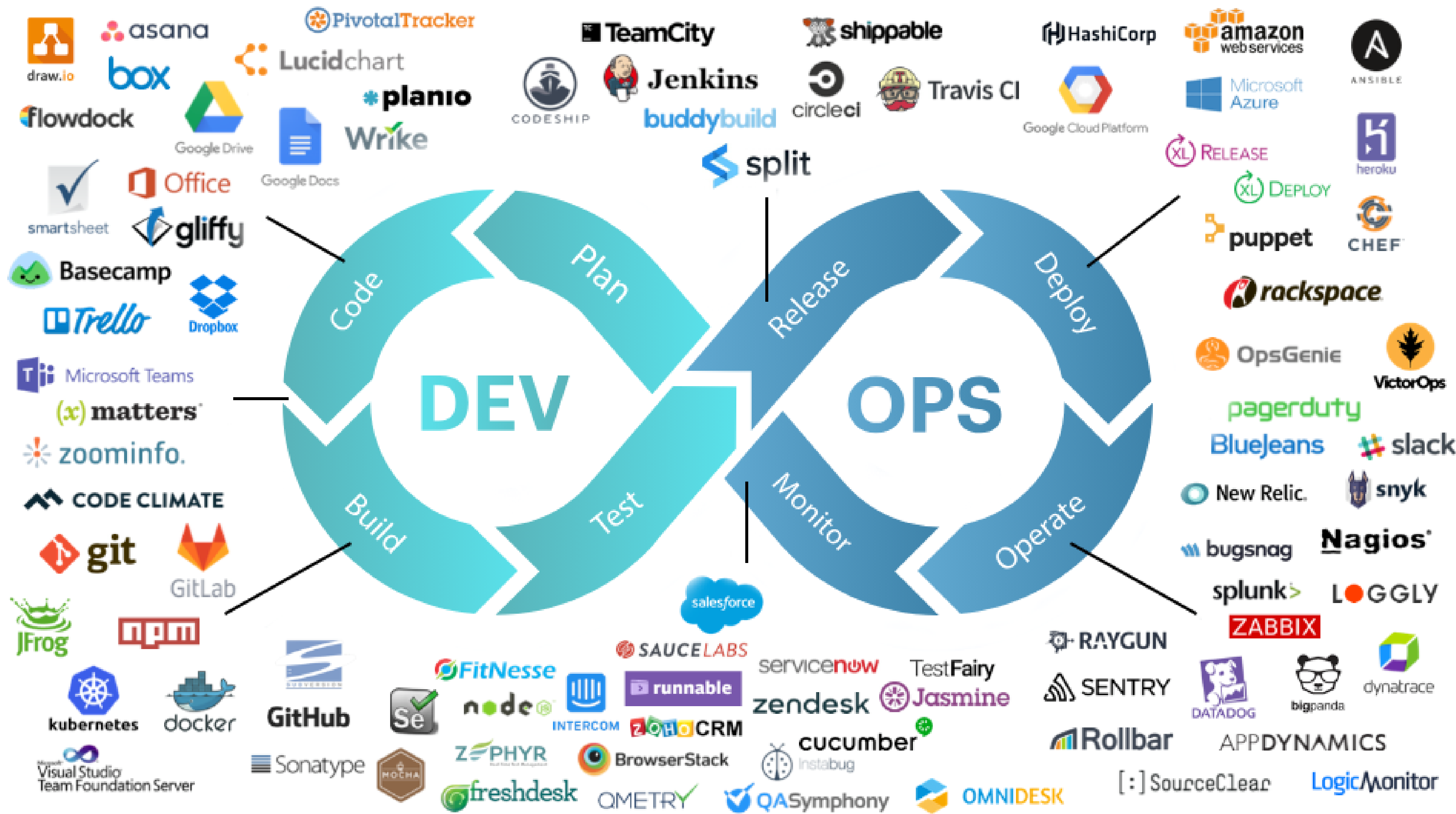
Agile Methodology

- The Agile Methodology is a way to manage a project by breaking it up into several phases.
- It delivers small pieces of working software quickly to improve customer satisfaction.
- Here both development and testing activities are done at the same time.
- Timeline of project is fixed.



DevOps History

- DevOps was Originated in the year 2008.
- Originally it was discussion between 2 people called Andrew Clay and Patrick Debios.
- In 2009 they held a summit at Belgium there they have discussed what if DevOps comes to
- the Market.
- In 2014, the annual state of DevOps report was published.
- If DevOps had a birth certificate, the fathers name would be named in as Patrick Debios.



DevOps Engineer

Roles and Responsibilities

- Cloud/Server/Network Architectures
- Configuring & Maintaining Infrastructure
- CI/CD Pipelines
- Automating Daily Tasks
- Continuous Monitoring
- Migrating from Monolithic to Microservices.

Course Content

DevOps Tools

Git

Kubernetes

Linux

Maven

Terraform

Shell

Jenkins

Nexus

Scripting

Ansible

Sonar

Docker

Monitor

Python

AWS Services

Ec2

CI/CD

S3

SNS

VPC

SQS

IAM

ELB

RDS

ASG

40%
of
AWS
Services