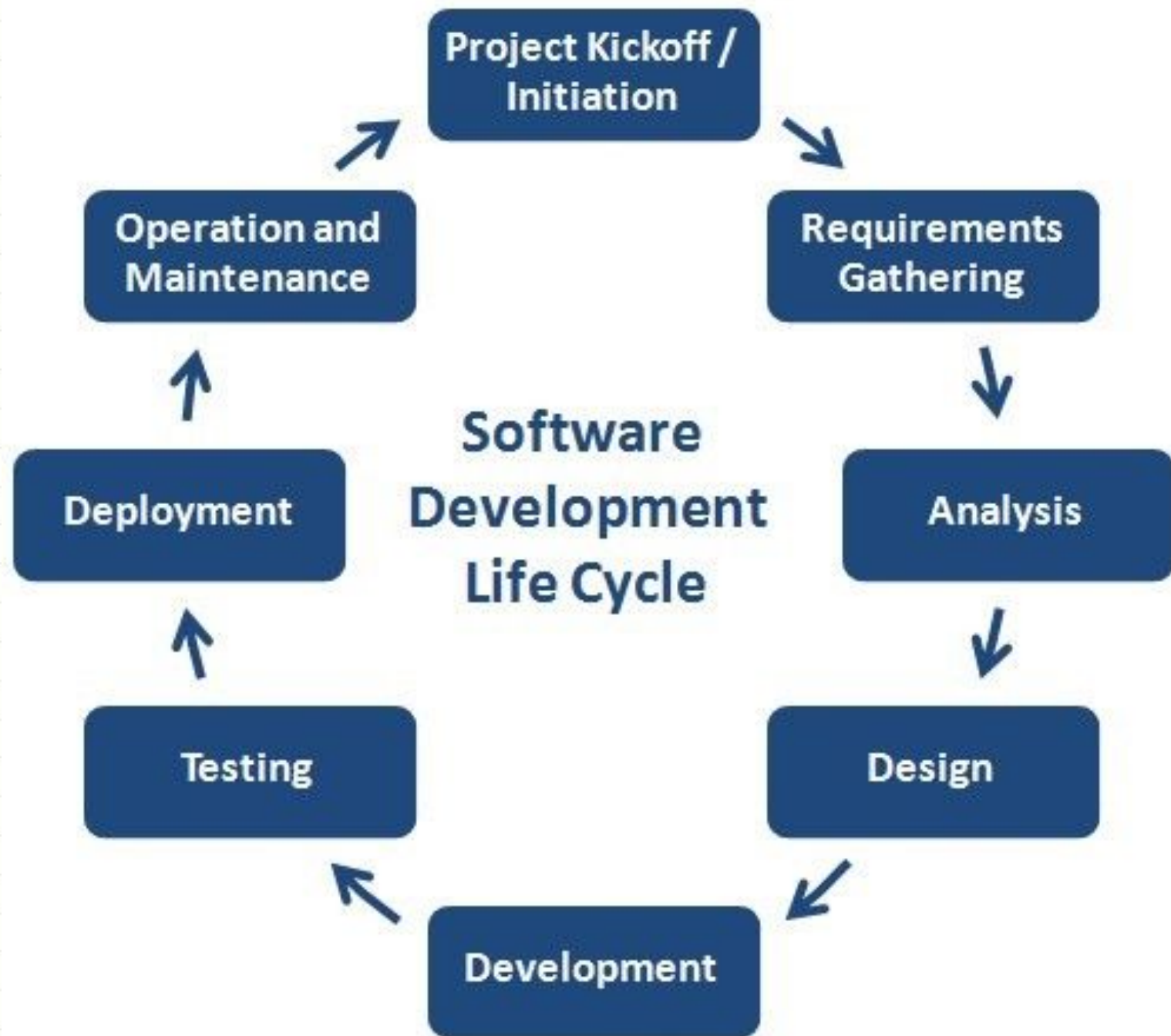


Agenda

1. DevOps and DevOps tools (intro)
2. DevOps Concepts and practices
3. Basic Python scripting
4. Basic Linux commands
5. Git Basics
6. Git, Maven and Jenkins integration
7. Jenkins Administration
8. SonarQube
9. Selenium basics
10. Puppet basics and Ansible
11. Docker and Kubernetes basics
12. AWS basics

Introduction to **DevOps** and tools



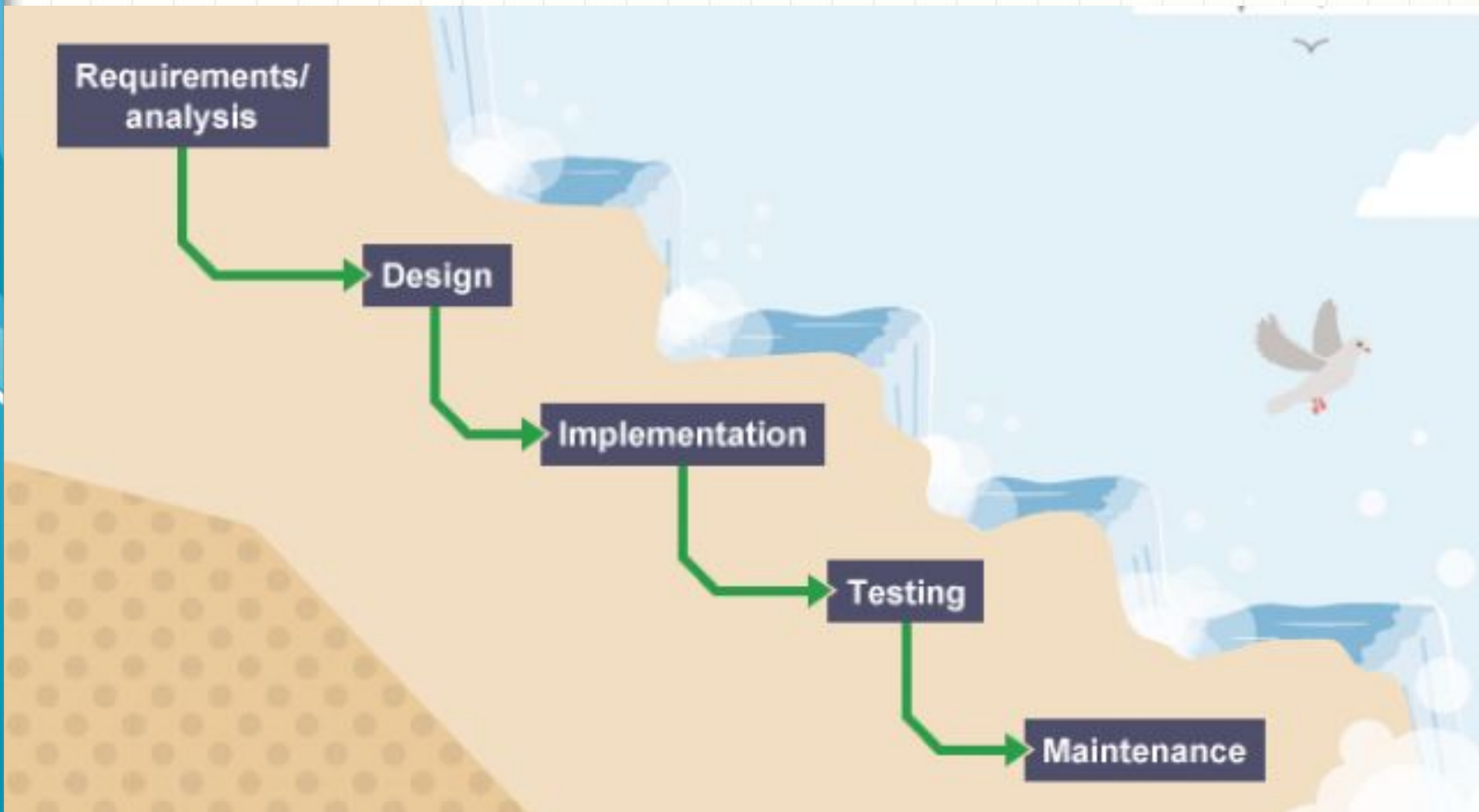
SDLC Models

Various software development life cycle models defined and designed which are followed during software development process

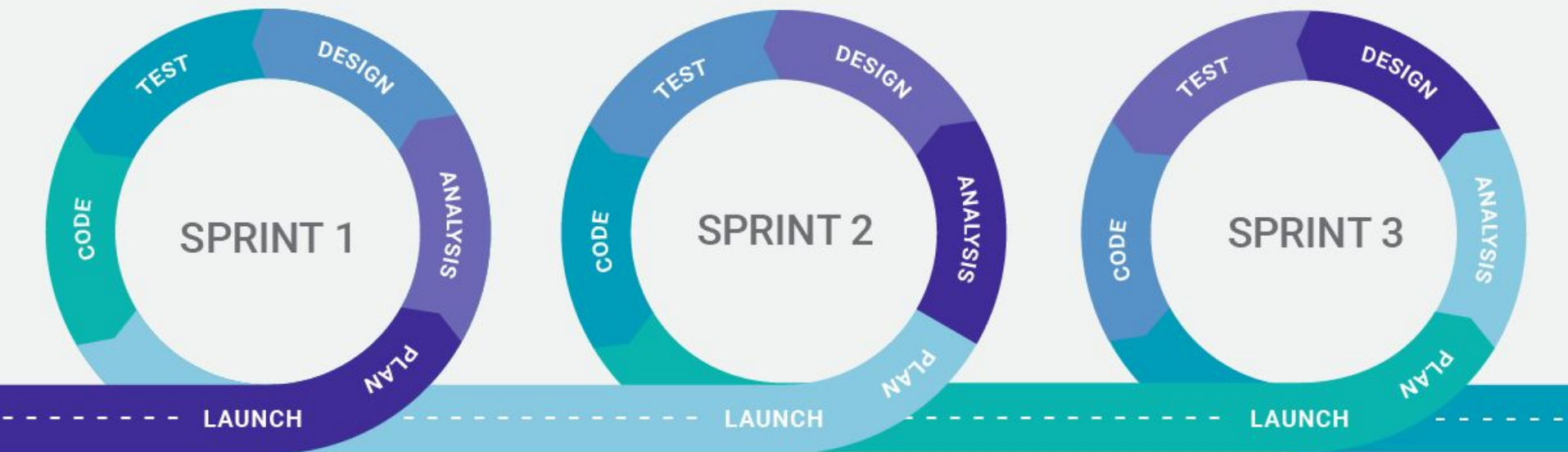
The Models are:

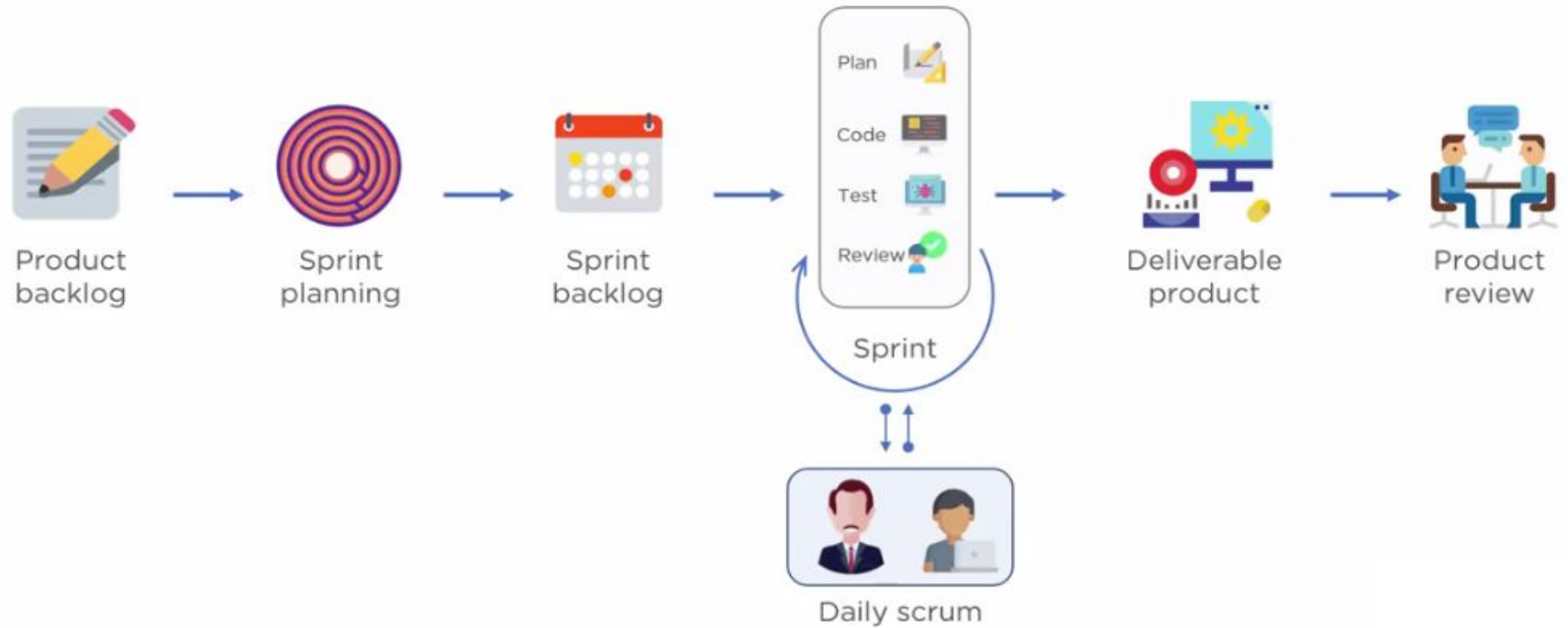
1. Waterfall Model
2. Iterative Model
3. Spiral Model
4. V-Model
5. Big Bang Model
6. RAD (Rapid Application Development) Model
7. Prototyping Models
8. Agile Model

Waterfall Model



AGILE APPROACH

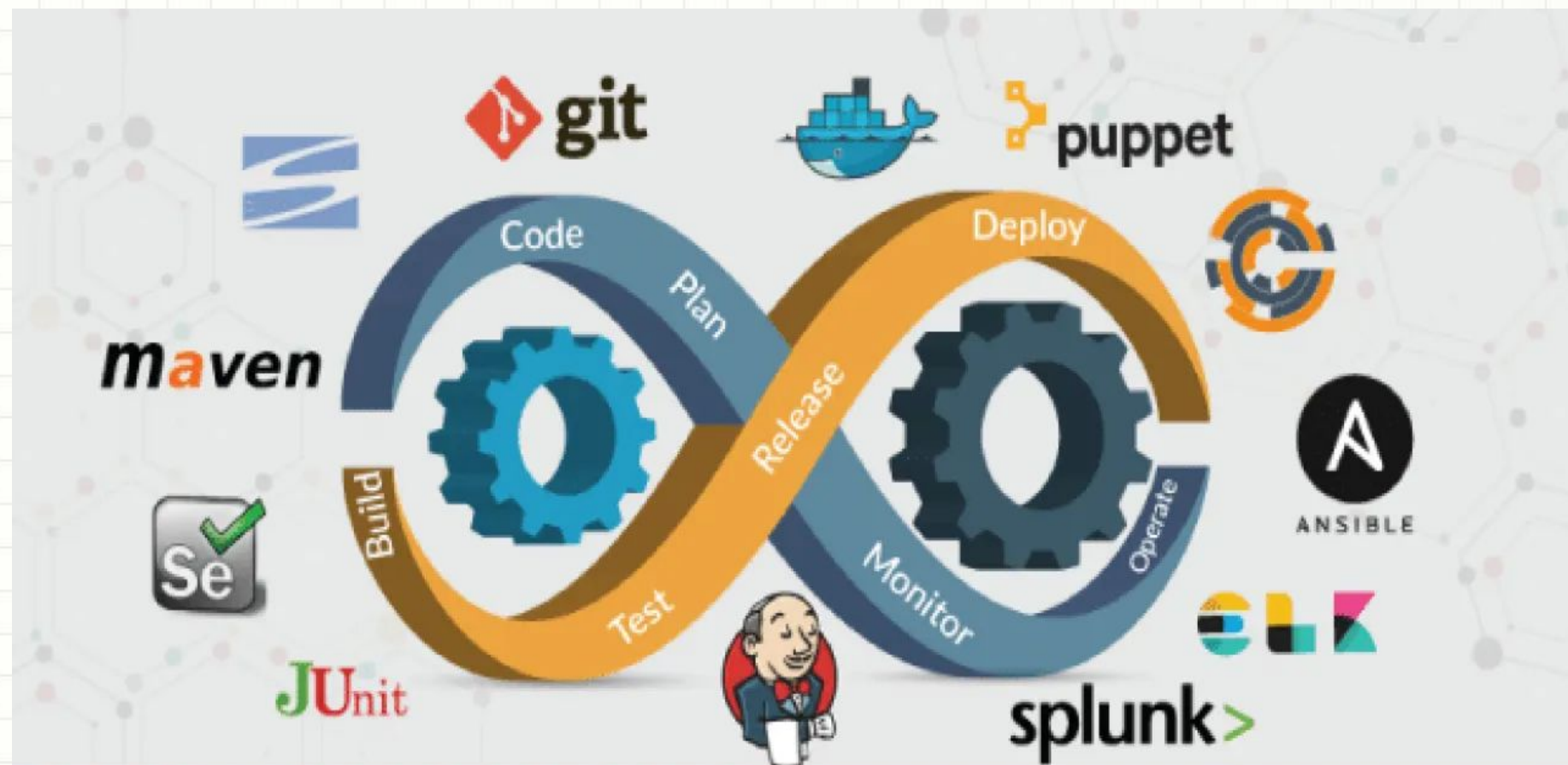


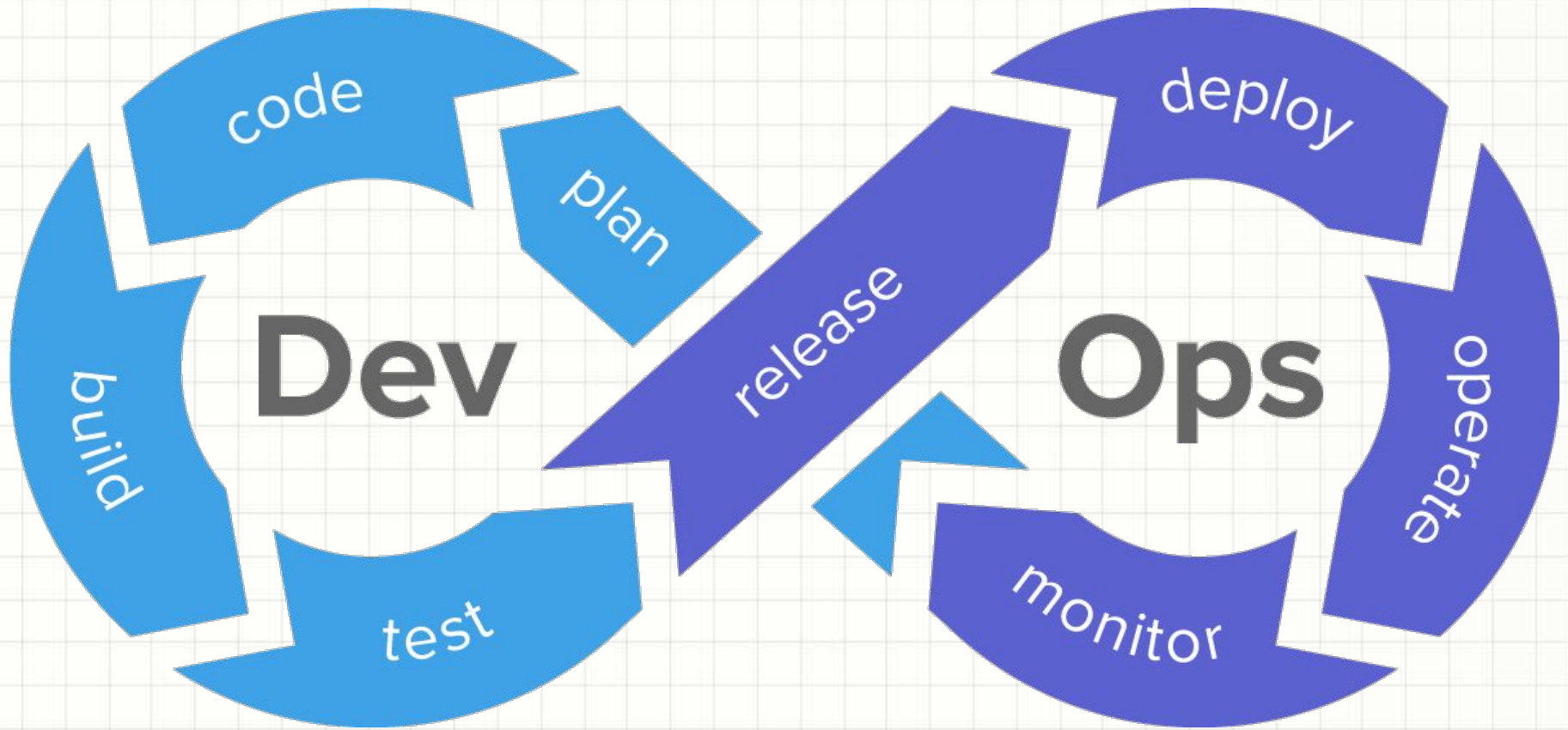


What is Devops?

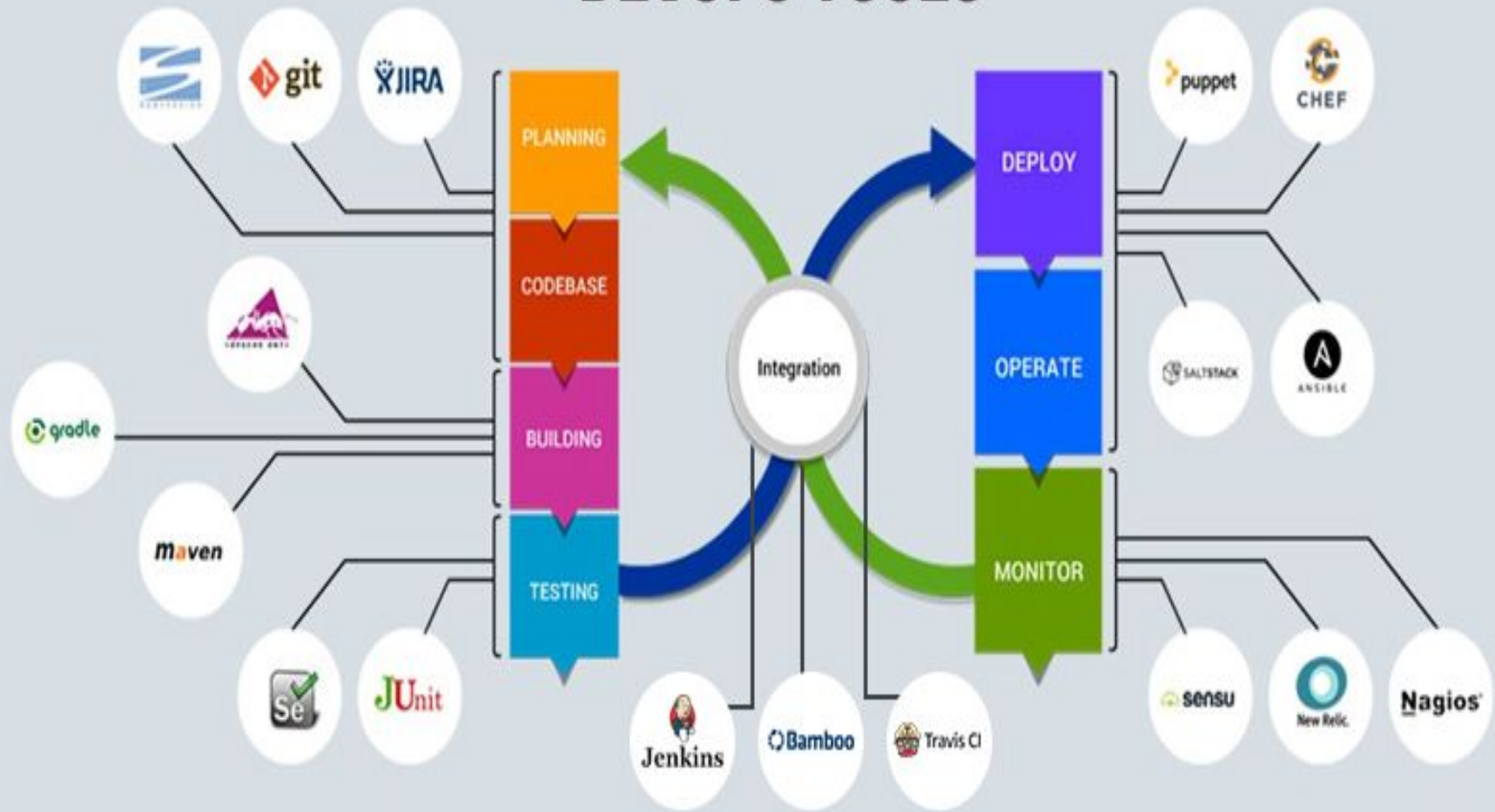
DevOps is a phrase in SDLC, mean to Change and Improve the work relationship between Development and Operations Teams thereby improving collaboration and productivity by automating infrastructure , workflows, Continuous testing and Continuously measuring application performance.

 **Developer** +  **Operations** = **DevOps**





DEVOPS TOOLS



Tools

- <https://xebialabs.com/periodic-table-of-devops-tools/>

PERIODIC TABLE OF DEVOPS TOOLS (V1)

Os Open Source

Fr Free

Fm Freemium

Pd Paid

En Enterprise

Database

CI

Deployment

Cloud / IaaS / PaaS

BI / Monitoring

SCM

Repo Mgmt

Config / Provisioning

Release Mgmt

Logging

Build

Testing

Containerization

Collaboration

Security

XebiaLabs

Deliver Faster

Aws

Amazon Web Services

Ch

Chef

Pu

Puppet

An

Ansible

Sl

Salt

Dk

Docker

Az

Azure

Ssh

SSH

Bl

BladeLogic

Va

Vagrant

Tf

Terraform

Rk

akt

Hk

Heroku

Pq

PostgreSQL

Mc

Mercurial

Mv

Meven

Gr

Gradle

Mr

Meister

Jn

Jenkins

Bb

Bamboo

Tr

Travis CI

Ar

Archive

Fn

FitNesse

Se

Selenium

Gn

Gatling

Gd

Deployment Manager

Sf

SmartFrog

Cb

Cobbler

Bc

Bcf2

Kb

Kubernetes

Rs

Rackspace

Mg

MongoDB

Gh

GitHub

Br

Buildr

At

ANT

Bm

BuildMaster

Cs

Codship

Sn

Snap CI

Cr

CircleCI

Nx

Nexus

Cu

Cucumber

Cj

Cucumber.js

Qu

Quint

Cp

Capistrano

Ju

Juju

Rd

Rundeck

Cf

CFEngine

Pk

Packer

Bx

Bluemix

Db

DB2

Bb

Bitbucket

Qb

QuickBuild

Ub

UrbanCode Build

Ta

Visual Build

Tc

TeamCity

Sh

Shippable

Cc

CruiseControl

Ay

Artifactory

Ju

JUnit

Jm

JMeter

Tn

TestNG

Rd

RapidDeploy

Cy

CodeDeploy

Oc

Octopus Deploy

No

CA Nallo

Eb

ElasticBox

Ad

Apprenda

Cs

Cassandra

Hx

Helix

Msb

MSBuild

Rk

Rake

Lb

LintBuild

Cu

Continuum

Ca

Continuum CI

Gu

Gump

Ng

NuGet

Ap

Applum

Xltv

XL TestView

Tc

TestComplete

Go

Go

Ef

ElectricFlow

Xld

XL Deploy

Ud

UrbanCode Deploy

Mo

Mesos

Cf

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Fm

102

Fm

103

Fm

104

Pd

105

En

Xlr

XL Release

Ur

UrbanCode Release

Ls

CA Service Virtualization

Bm

BMC Release Process

Hp

HP Codear

Ex

Exal

Pl

Plutora Release

Sr

Serena Release

Tr

Trifolia

Jr

Jira

Rf

HyChat

Sl

Slack

Fd

Flowdock

Pv

Pivotal Tracker

Sn

ServiceNow

106

En

107

Os

108

Fm

109

Os

110

Os

111

Os

112

Os

113

Os

114

Fm

115

Os

116

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118

Os

119

Os

120

En

Sp

Splunk

Ki

Kibana

Nr

New Relic

Ni

Nagios

Gg

Ganglia

Ct

Cacti

Gr

Graphite

Ic

Icinga

Sl

SumoLogic

Ls

Logstash

Lg

Loggly

Gr

Graylog

Sn

Snort

Tr

Trippwire

Cy

CyberArk

Benefits of DevOps

Technical benefits:

- Continuous Product delivery
- Less complex problems to fix
- Faster resolution of problems

Business benefits:

- Faster time to market
- More stable operating environments
- More focus on adding values to the product

Obstacles in DevOps

- Lack of resources
- Developers are so costly due to lack of resources
- Difficult to hire good DevOps Engineer
- DevOps require deep cultural and behavioral change
- DevOps strategy requires support from top to bottom of organization



THANK YOU