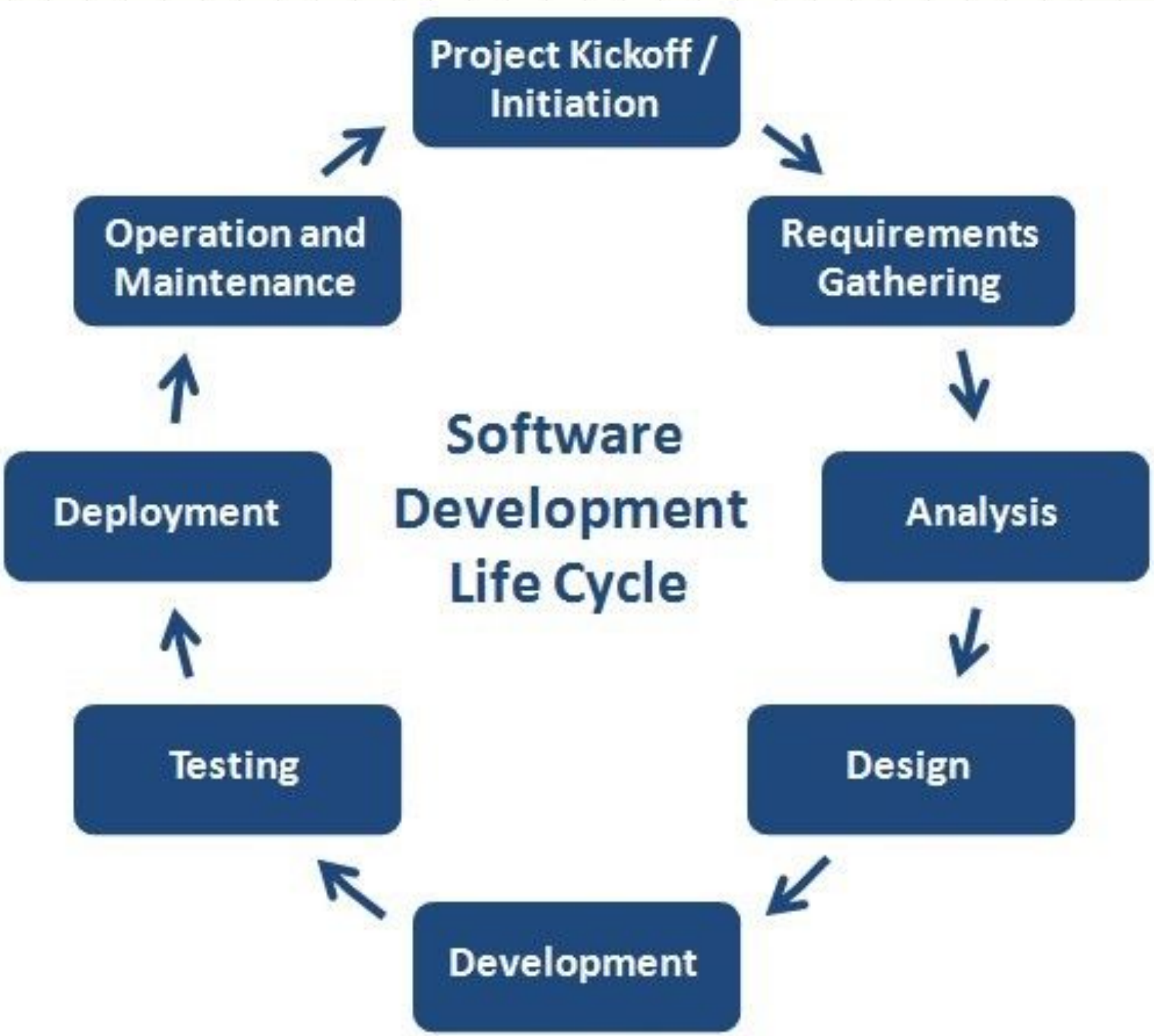
Agenda

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 Kubernates basics
12. AWS basics

Introduction to DevOps and tools


Project Kickoff / Initiation
Requirements Gathering
Analysis
Design
Development
Testing
Deployment
Operation and Maintenance
Software Development Life Cycle

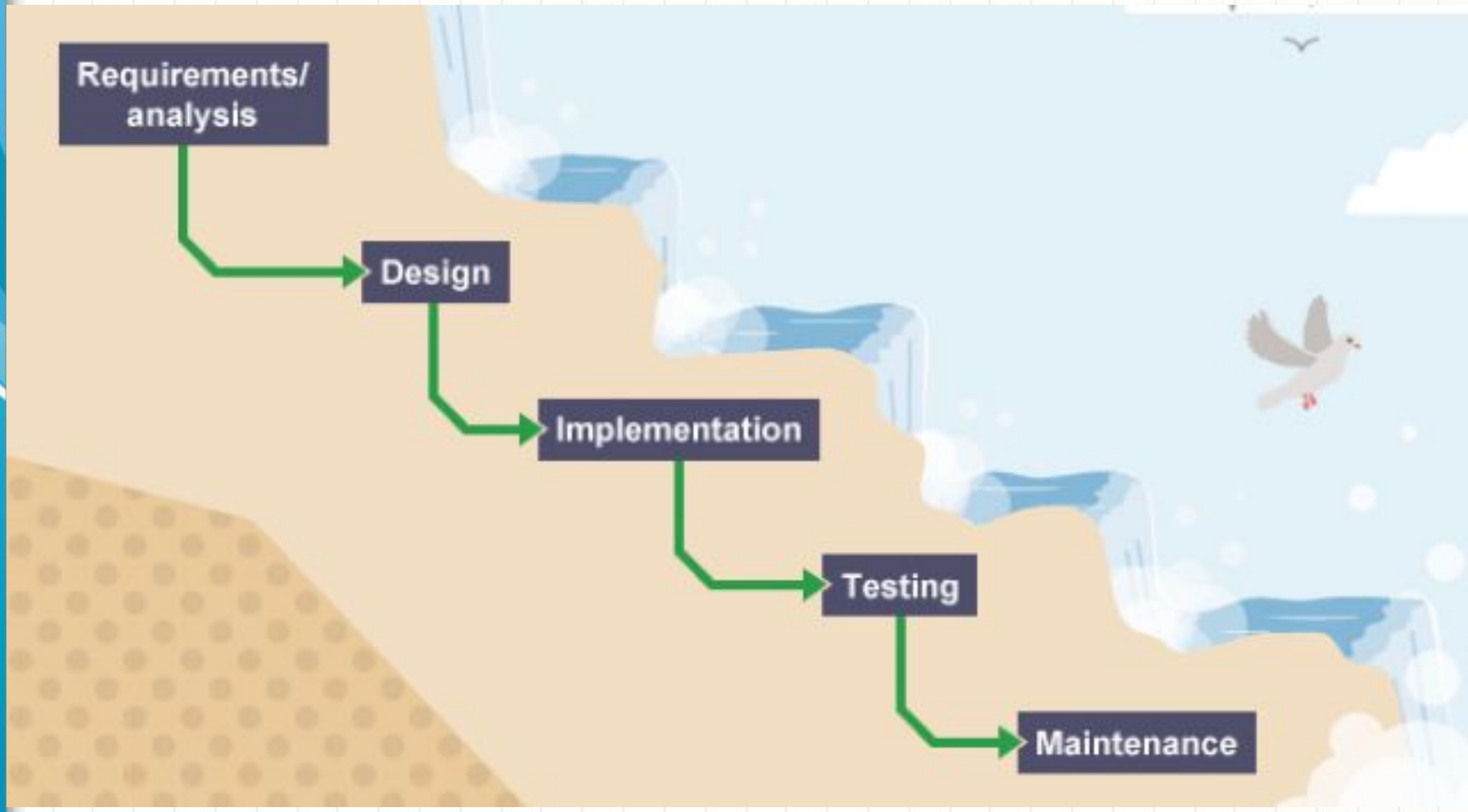
SDLC Models

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

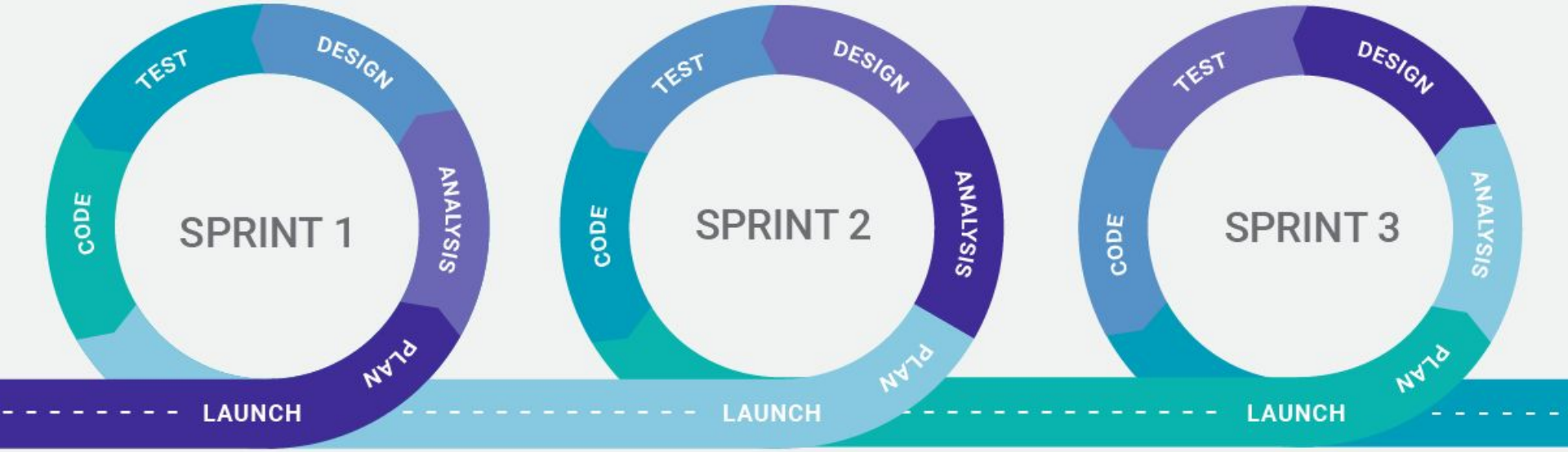
The Models are:

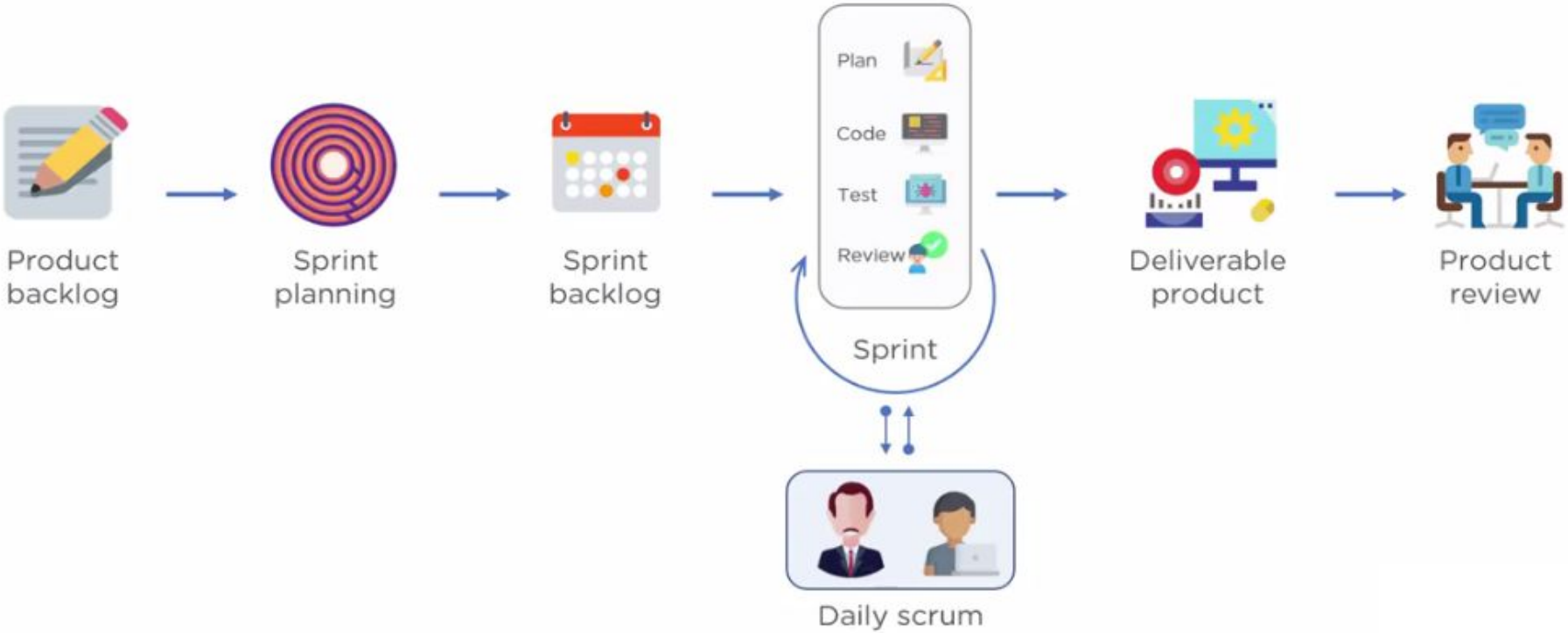
1. Waterfall Model
2. Iterative Model
3. Spiral Model
4. V-Model
5. Big Bang Model
6. RAD (Rapid Application Development) Model
7. Prototyping Models
8. Agile Model

Waterfall Model



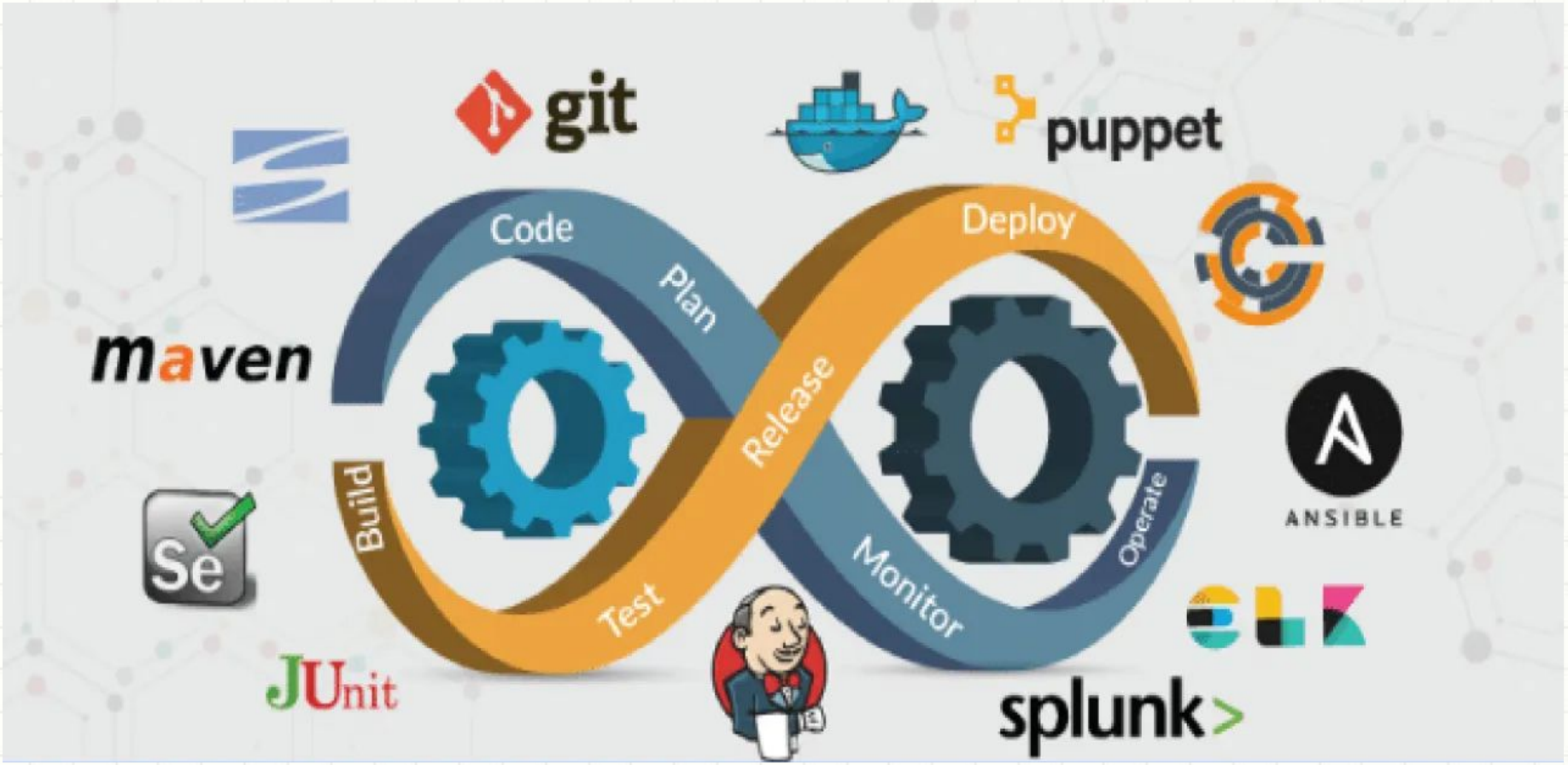
AGILE APPROACH




Product backlog
Sprint planning
Sprint backlog
Plan
Code
Test
Review
Sprint
Deliverable product
Product review
Daily scrum

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.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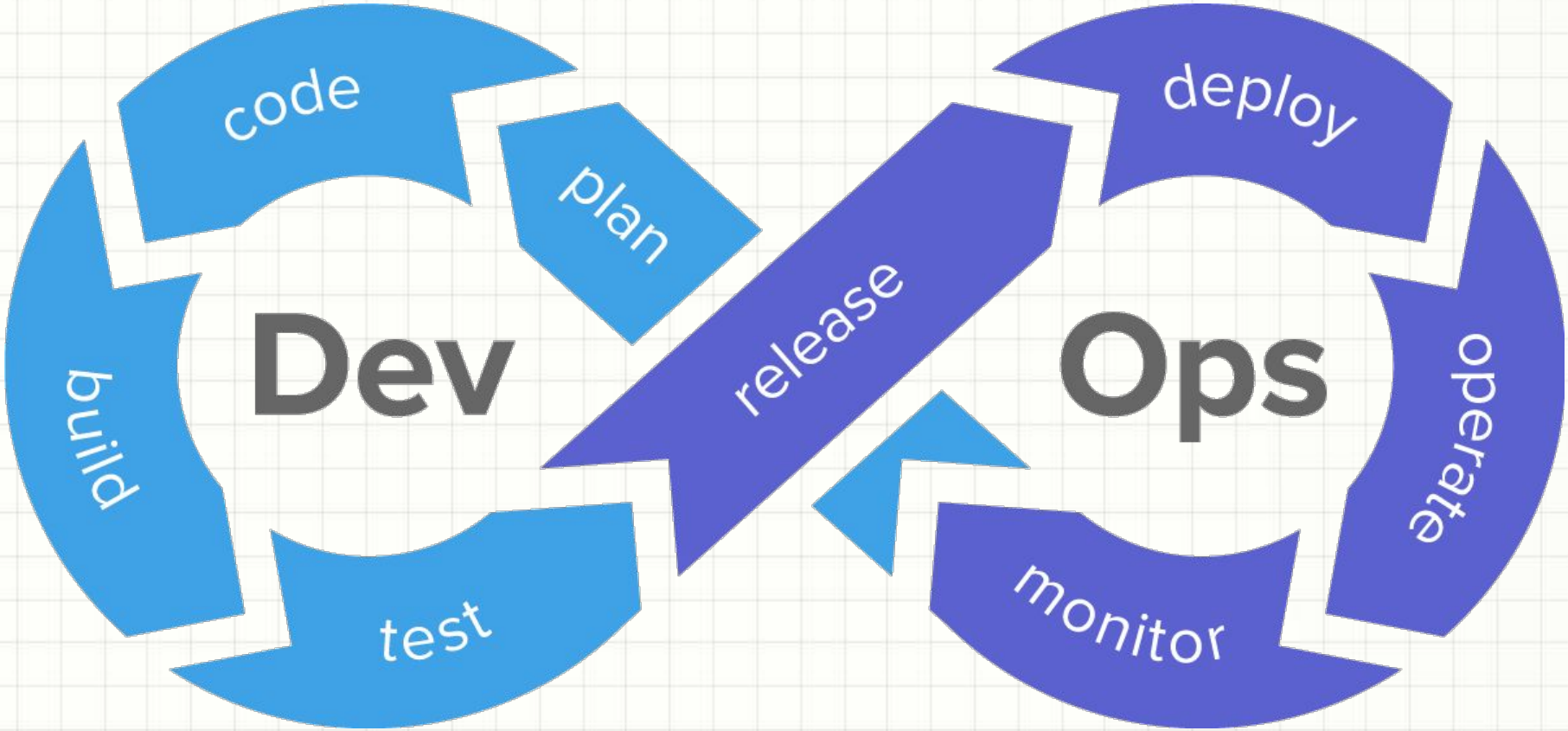
JUnit
splunk>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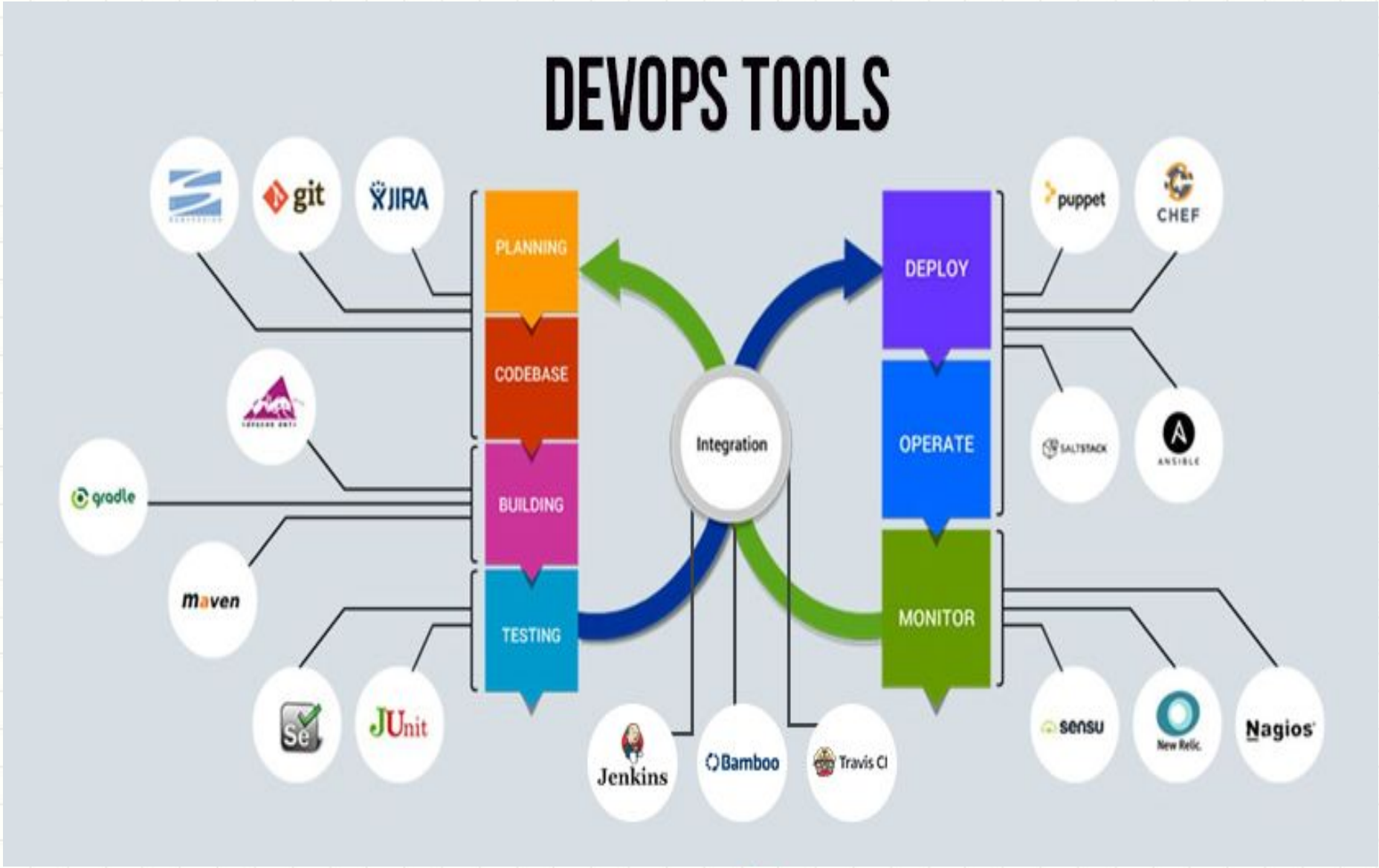
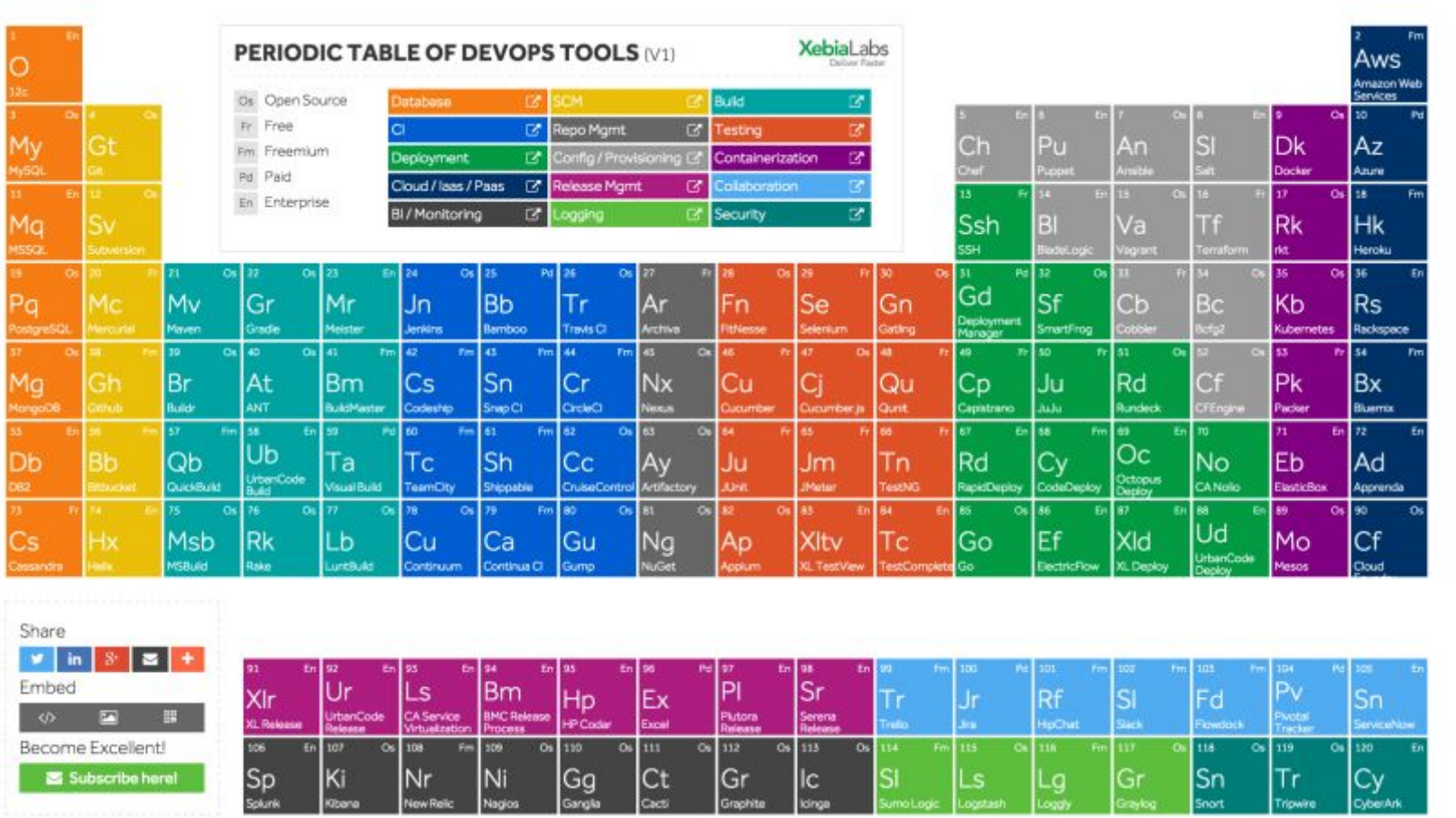
operate
Ops
monitor


DEVOPS TOOLS
git
JIRA
gradle
maven
JUnit
PLANNING
CODEBASE
BUILDING
TESTING
Integration
Jenkins
Bamboo
Travis CI
DEPLOY
OPERATE
MONITOR
puppet
CHEF
SALTSTACK
ANSIBLE
sensu
New Relic.
Nagios

Tools

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



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