

Welcome to **INTERNSHIP STUDIO**

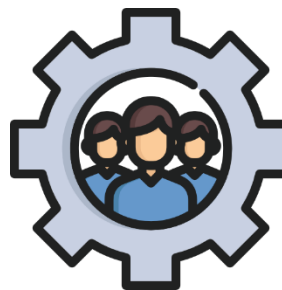
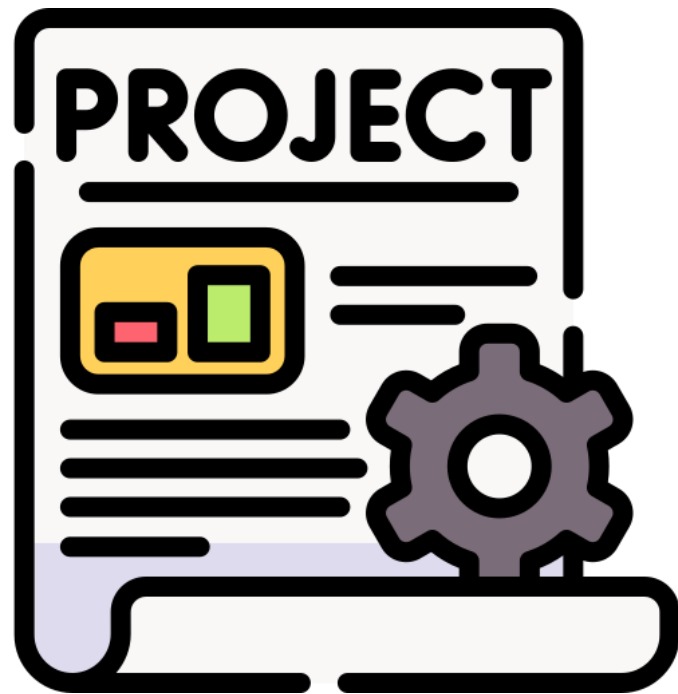
Module 01 | Lesson 01

Introduction to DevOps

Learning Outcomes

Topic	No. of Hours
Introduction to DevOps	1
Linux	3
Maven	3
GIT & GITHUB	4
Tomcat	1
Jenkins	3
Project	1
Total Hours	16

Introduction

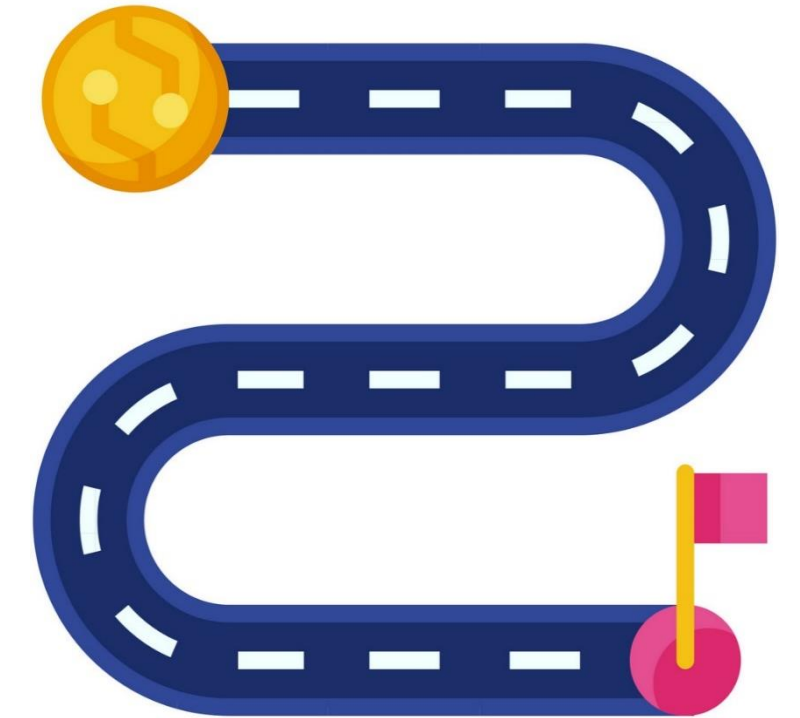


Software Development Life Cycle

It refers to a methodology with **clearly defined processes** for creating high-quality software projects.

Is a **series of stages** a software passes through during its lifetime.

It offers us an overview of what it takes to create software.



Phases of SDLC:



PLANNING



REQUIREMENTS



DESIGN



CODING



TESTING



DEPLOY



MAINTENANCE

1. Waterfall Model
2. Iterative Model
3. V-Model (Verification and Validation Model)
4. Spiral Model
5. Agile Model
6. Scrum
7. Kanban

1. Waterfall Model

2. Iterative Model

3. V-Model (Verification and Validation Model)

4. Spiral Model

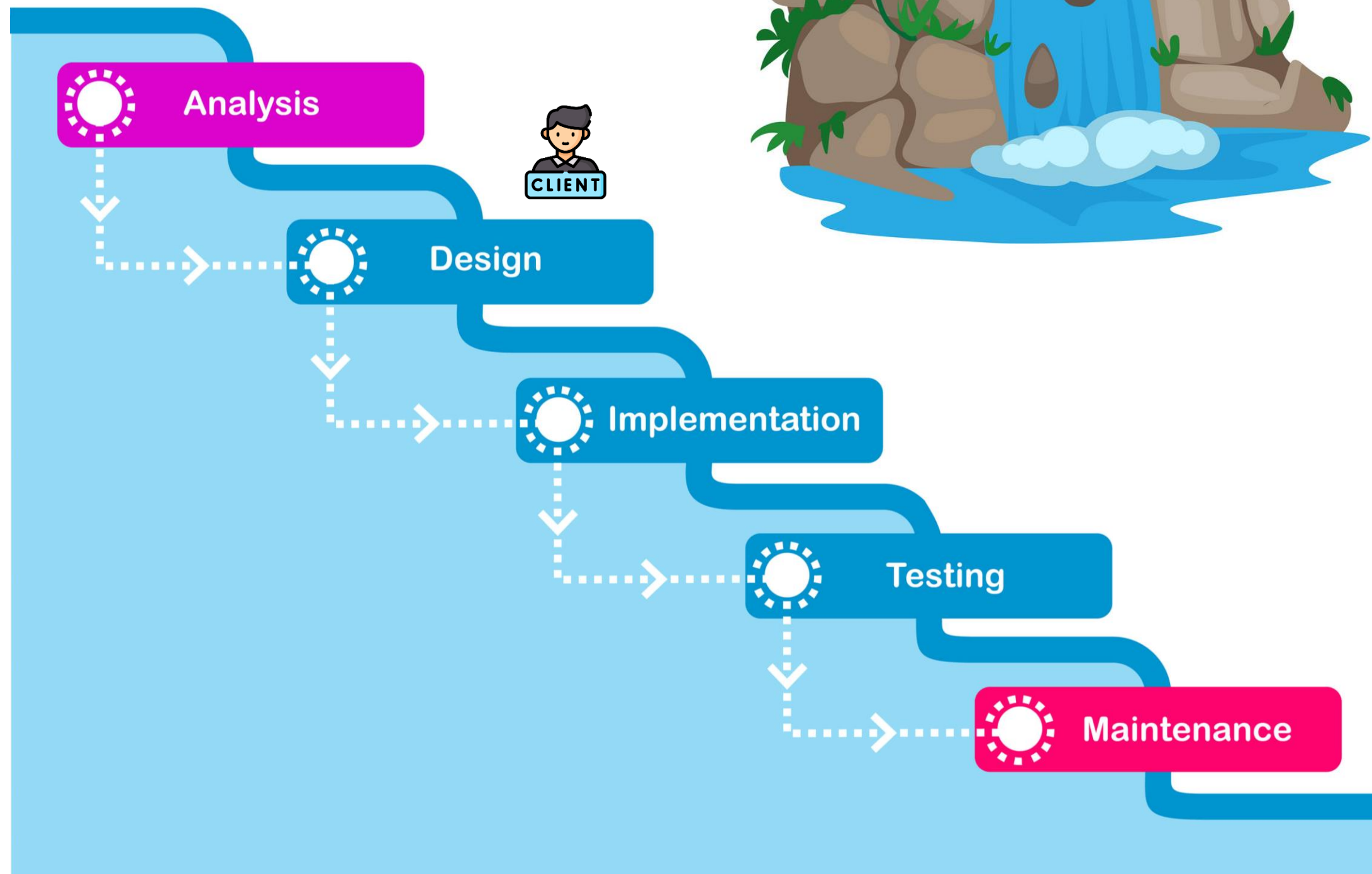
5. Agile Model

6. Scrum

7. Kanban

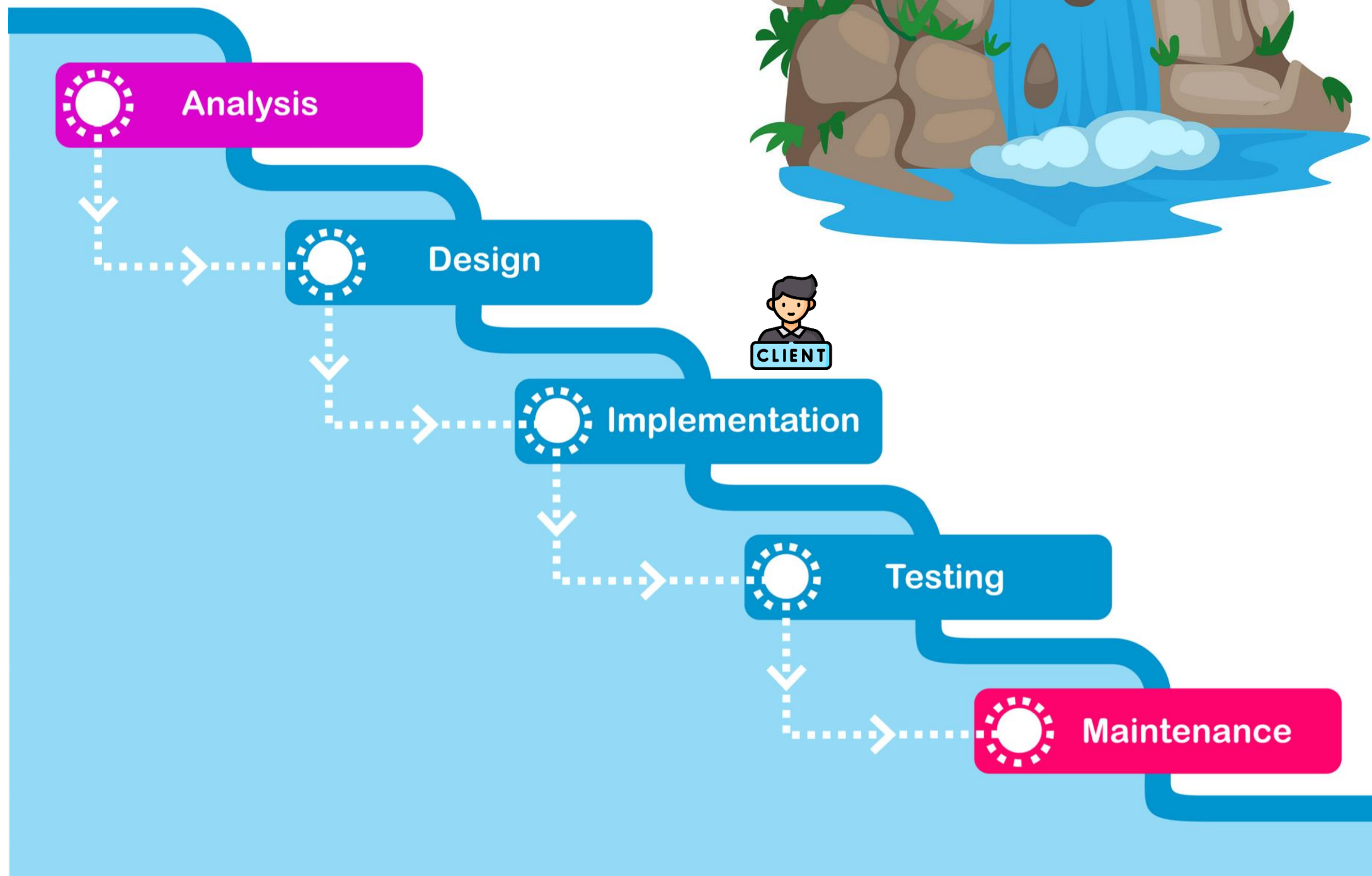
Note: DevOps doesn't belong to SDLC models.

Waterfall Model



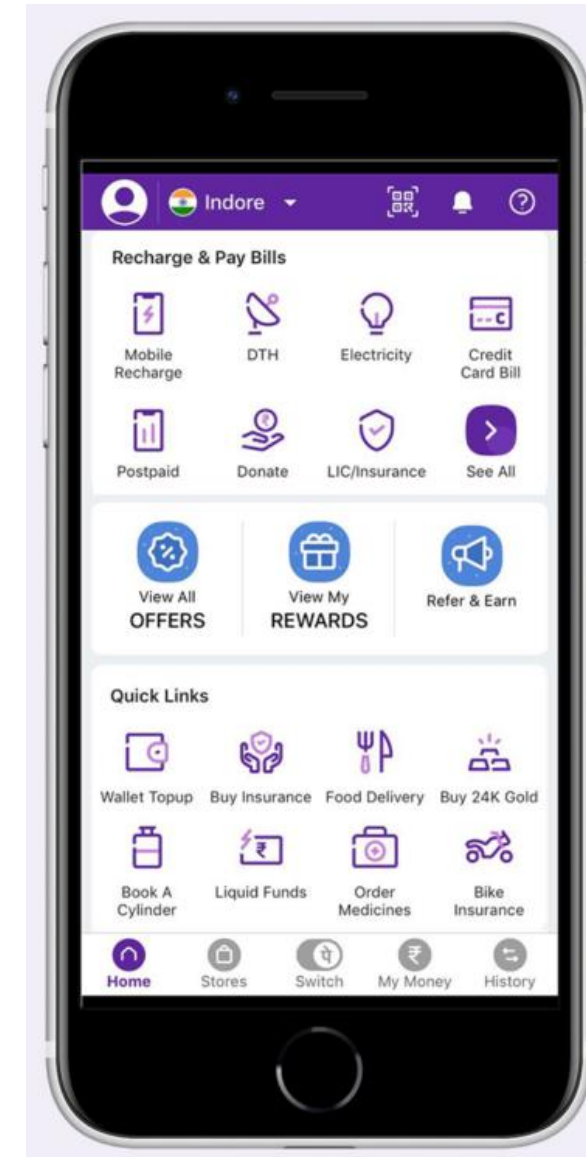
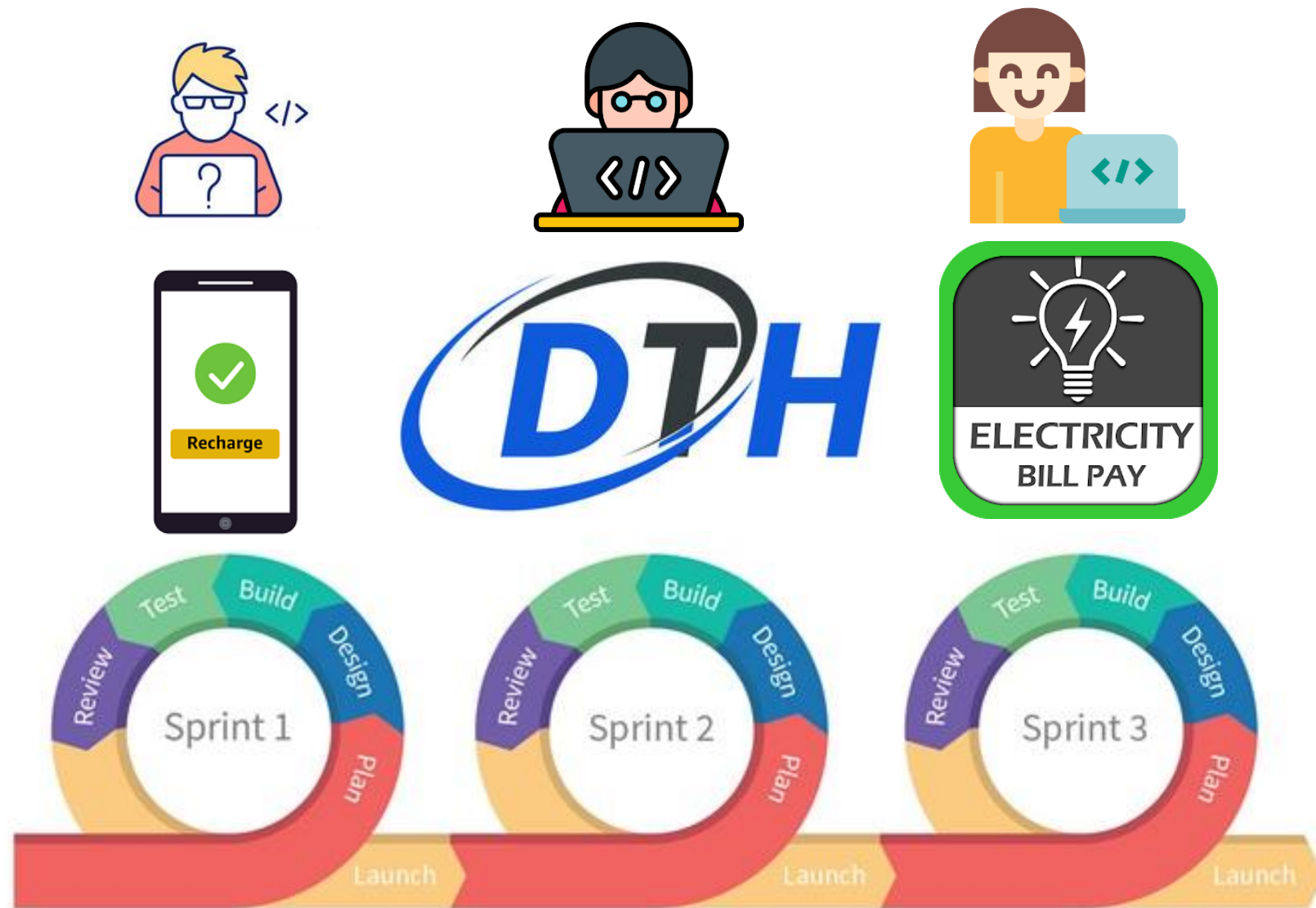
- It is a step-by-step process.
- Linear methodology.

Waterfall Model



- It is a step-by-step process.
- Linear methodology.
- Oldest model.
- Requirements are fixed.
- Client involvement is very less
- Client can see the output of the project only after the deployment.
- Not suitable for large and complex projects.

Agile Model



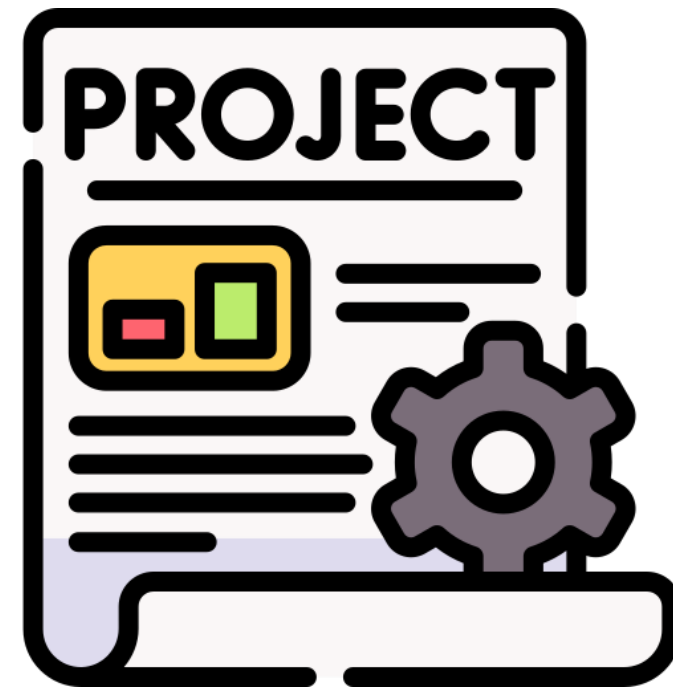
It started in the year 2001.
Invented by John Kern and Martin Fowler

- Breaks the project into sprints - Iterative approach
- Requirements are not fixed.
- Client involvement is very high.
- Client feedback at the end of each sprint.
- Incremental development.

It refers to a **collaborative** approach to make the **Application Development team** and the **IT Operations team** of an organization to seamlessly work with better communication.



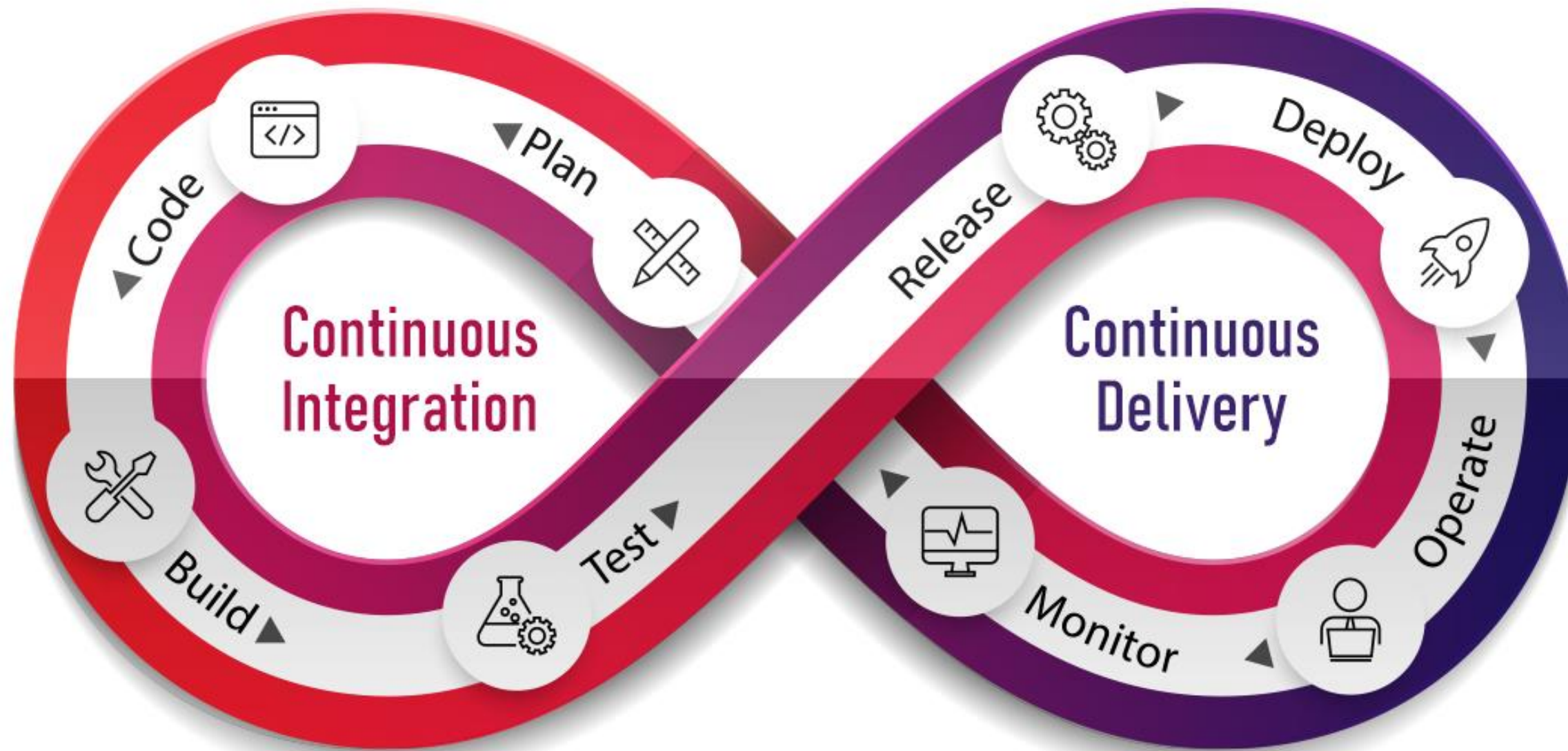
Development Team



Operations Team

DevOps

DevOps Process



Activities of Dev Team



Client requirement



Code

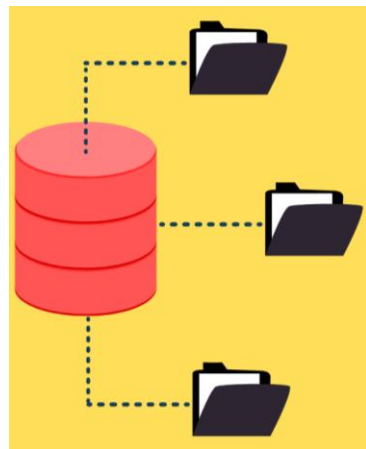


Code Testing



Code Repository

Activities of Ops Team



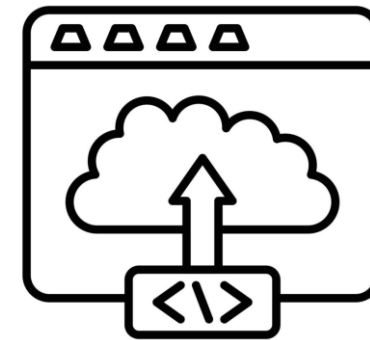
Code from
Repo.



Setup the
infrastructure



Package the code

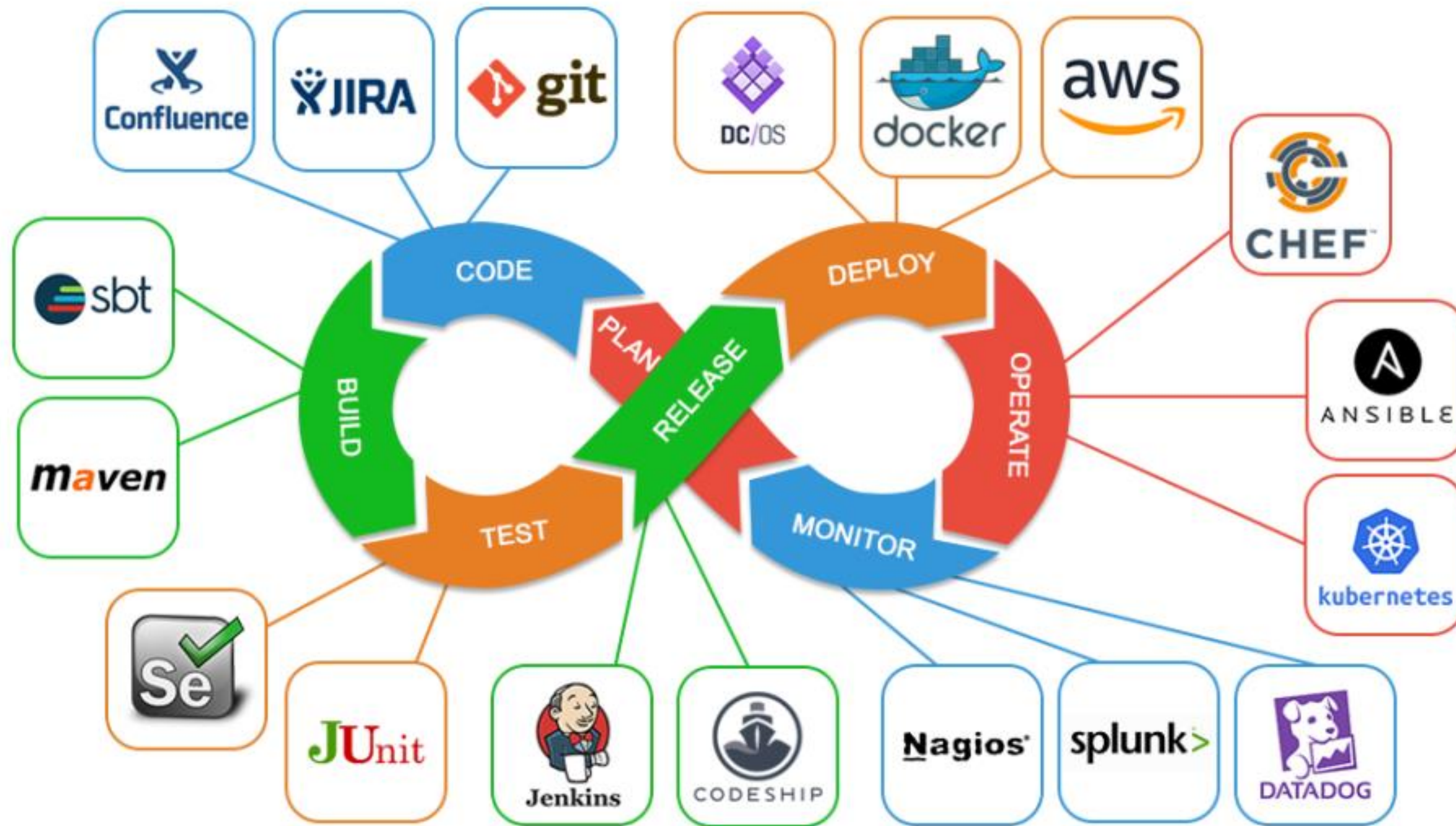


Deploy the code

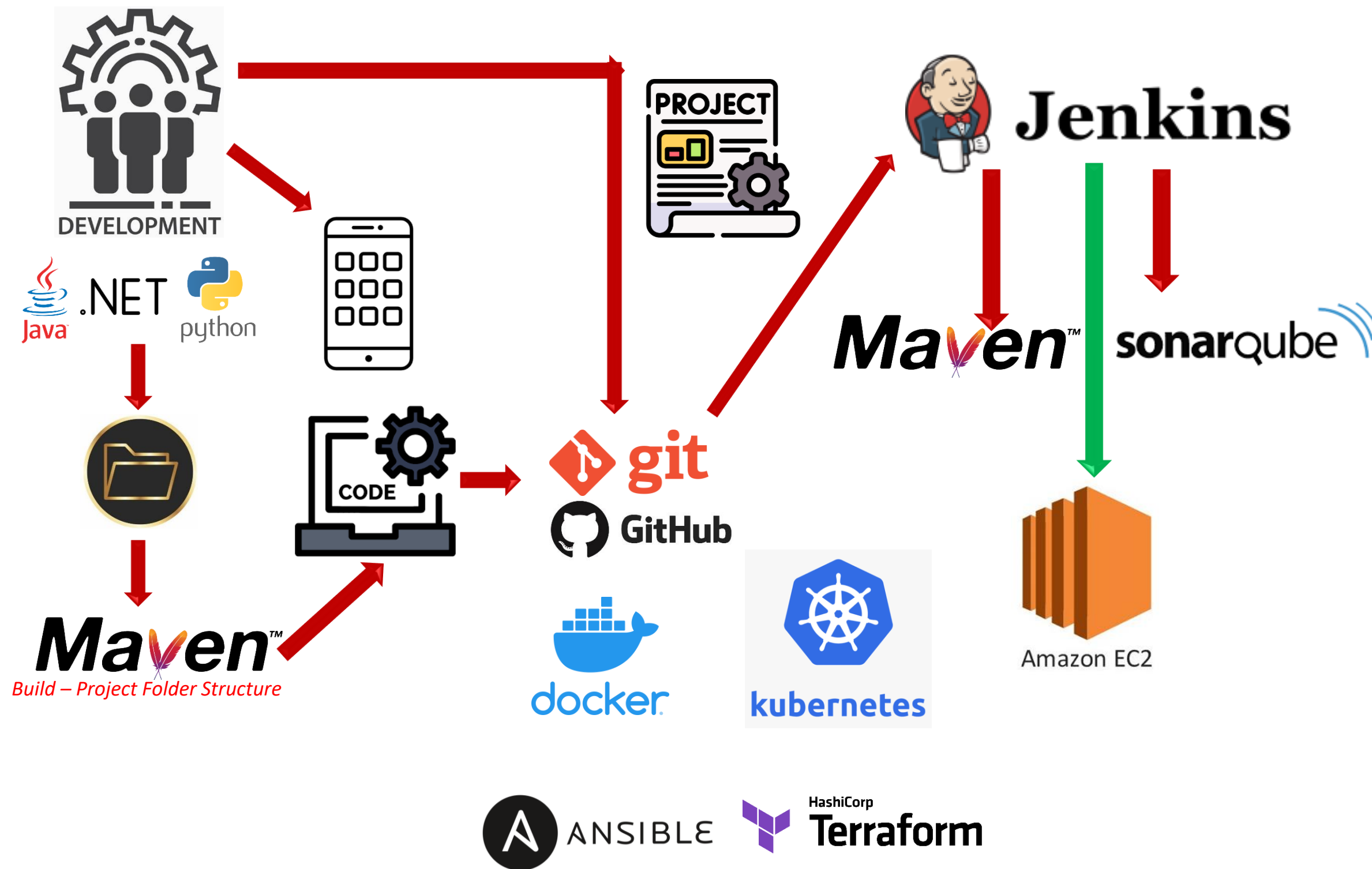


Deliver the project

DevOps Tools

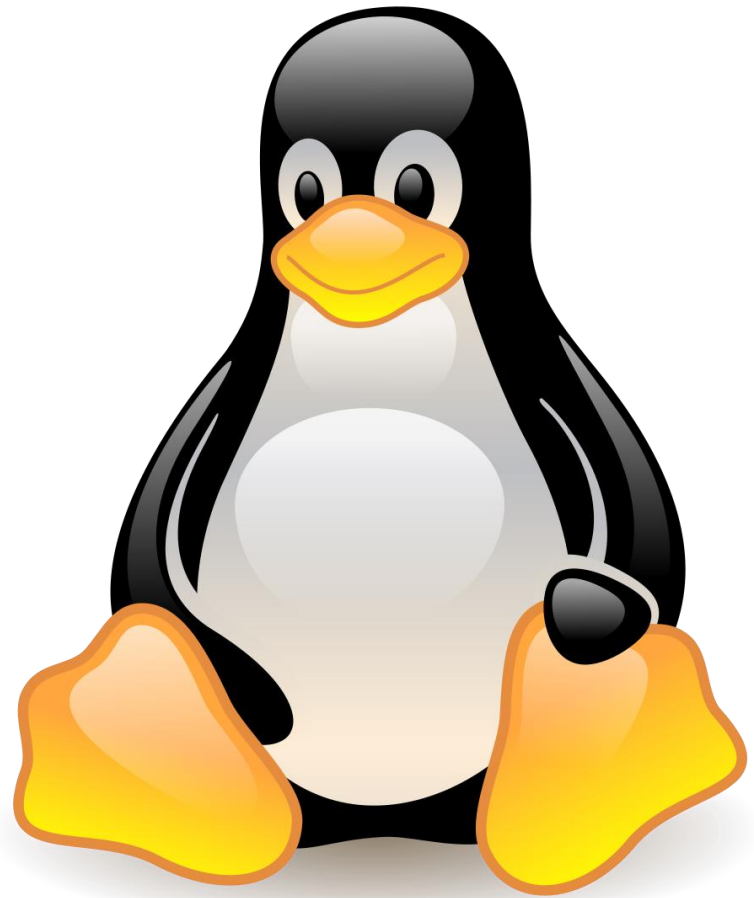


Understanding the Build & Deployment Process



Pre-requisites

Linux



AWS Account



SUMMARY

You got this

1. SDLC
2. Types of SDLCs
3. DevOps Process

Next session

1. Introduction to Linux
2. Operating System
3. Launching EC2 Instance