Tools of DevOps

About us

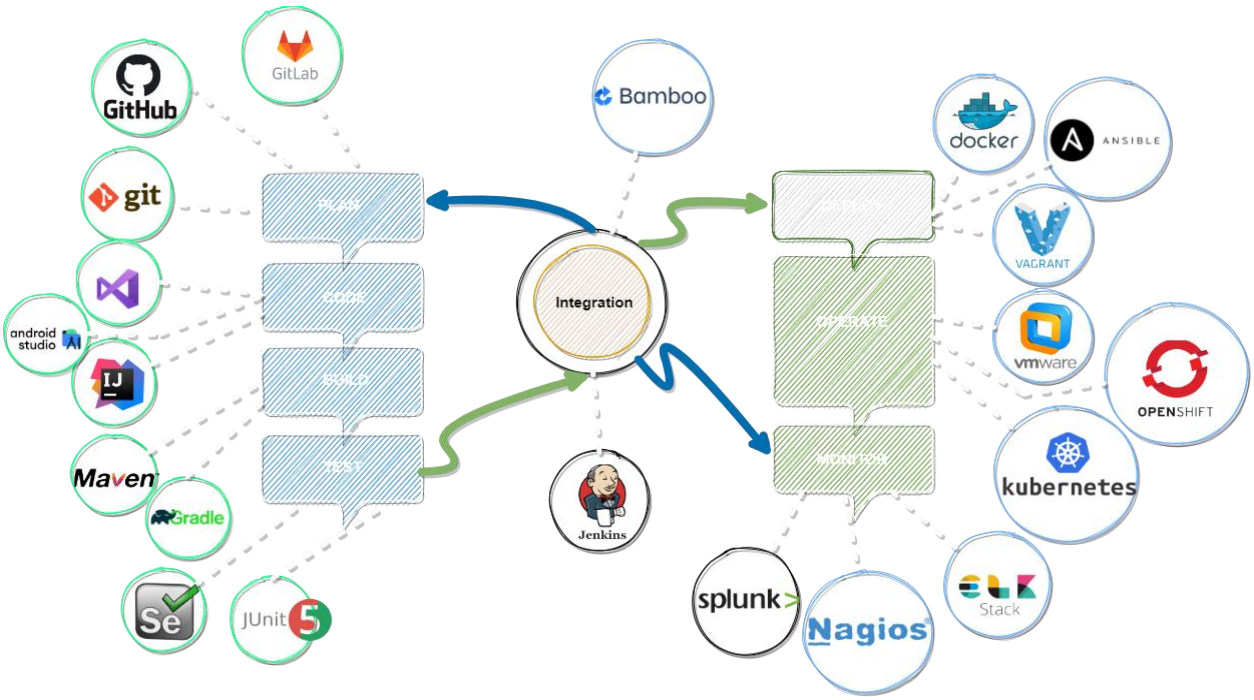
This repository is used to document all the steps and roadmaps that contribute to the learning of " **DevOps** ". I will continue this journey till the end of 2023. The reason for documenting these days is so that others can take something from it and also hopefully enhance the resources.
https://github.com/BilalMaz/DevOps-Architect-BootCamp
DevOps is a set of practices and principles that emphasises collaboration, communication, and integration between software developers and IT operations teams. It aims to streamline the software development process by automating tasks, removing bottlenecks, and improving the

speed and quality of software delivery. DevOps tools are an essential part of this process, as they help teams automate, test, deploy, and monitor their software applications.

Here are some commonly used DevOps tools:

1. Version control systems: Version control systems like Git, SVN, and Mercurial help developers manage source code changes and collaborate on code with their team members.
2. Continuous Integration (CI) tools: CI tools like Jenkins, Travis CI, and CircleCI automate the process of building, testing, and validating code changes, enabling developers to integrate changes quickly and safely.
3. Configuration management tools: Configuration management tools like Puppet, Chef, and Ansible automate the process of configuring and managing servers and infrastructure.
4. Containerization tools: Containerization tools like Docker and Kubernetes enable developers to package applications and dependencies into lightweight, portable containers that can be deployed across multiple environments.
5. Monitoring and logging tools: Monitoring and logging tools like Prometheus, Grafana, and ELK stack (Elasticsearch, Logstash, and Kibana) enable developers to monitor the performance and availability of their applications, detect issues, and troubleshoot problems quickly.
6. Collaboration tools: Collaboration tools like Slack, Microsoft Teams, and Jira enable teams to communicate and collaborate effectively, track project progress, and manage workflows.

Overall, these tools help DevOps teams build, test, deploy, and manage their applications faster and more efficiently, ensuring that software is delivered quickly and reliably to customers.



Tool	Description	Website
Git	Version control system for managing source code changes and collaborating with team members.	https://git-scm.com/
SVN	Another version control system for managing source code changes and collaborating with team members.	https://subversion.apache.org/
Mercurial	A distributed version control system for managing source code changes and collaborating with team members.	https://www.mercurial-scm.org/
Jenkins	An open-source continuous integration (CI) tool that automates the building, testing, and validation of code changes.	https://www.jenkins.io/
Travis CI	A cloud-based continuous integration (CI) tool that automates the building, testing, and validation of code changes.	https://www.travis-ci.com/
CircleCI	A cloud-based continuous integration (CI) tool that automates the building, testing, and validation of code changes.	https://circleci.com/
Puppet	A configuration management tool for automating the process of configuring and managing servers and infrastructure.	https://puppet.com/

Chef	Another configuration management tool for automating the process of configuring and managing servers and infrastructure.	https://www.chef.io/
Ansible	A configuration management tool for automating the process of configuring and managing servers and infrastructure.	https://www.ansible.com/
Docker	A containerization tool that enables developers to package applications and dependencies into lightweight, portable containers that can be deployed across multiple environments.	https://www.docker.com/
Kubernetes	An open-source container orchestration platform for automating the deployment, scaling, and management of containerized applications.	https://kubernetes.io/
Prometheus	A monitoring tool for collecting and storing metrics from a variety of sources, including applications, servers, and network devices.	https://prometheus.io/
Grafana	A visualisation tool that works with Prometheus to display metrics and monitor the performance and availability of applications.	https://grafana.com/
ELK stack (Elasticsearch, Logstash, and Kibana)	A set of open-source tools for collecting, processing, and visualising logs from applications and servers. Elasticsearch is a search and analytics engine, Logstash is a log processing pipeline, and Kibana is a visualisation tool.	https://www.elastic.co/what-is/elk-stack
Slack	A collaboration tool for communication and team collaboration.	https://slack.com/
Microsoft Teams	A collaboration tool for communication and team collaboration, developed by Microsoft.	https://www.microsoft.com/en-us/microsoft-teams/group-chat-software
Jira	A project management tool for planning, tracking, and managing software development projects.	https://www.atlassian.com/software/jira
Nagios	Nagios is an open-source monitoring system that helps organisations detect and resolve infrastructure problems before they impact critical business processes. It uses a client-server architecture to collect data from monitoring plugins and determine the status of hosts and services. Nagios provides comprehensive monitoring of network devices, servers, applications, and services, and alerts administrators when problems are detected	https://www.nagios.org/