

Accelerate inner dev loop while developing Kubernetes applications with Skaffold

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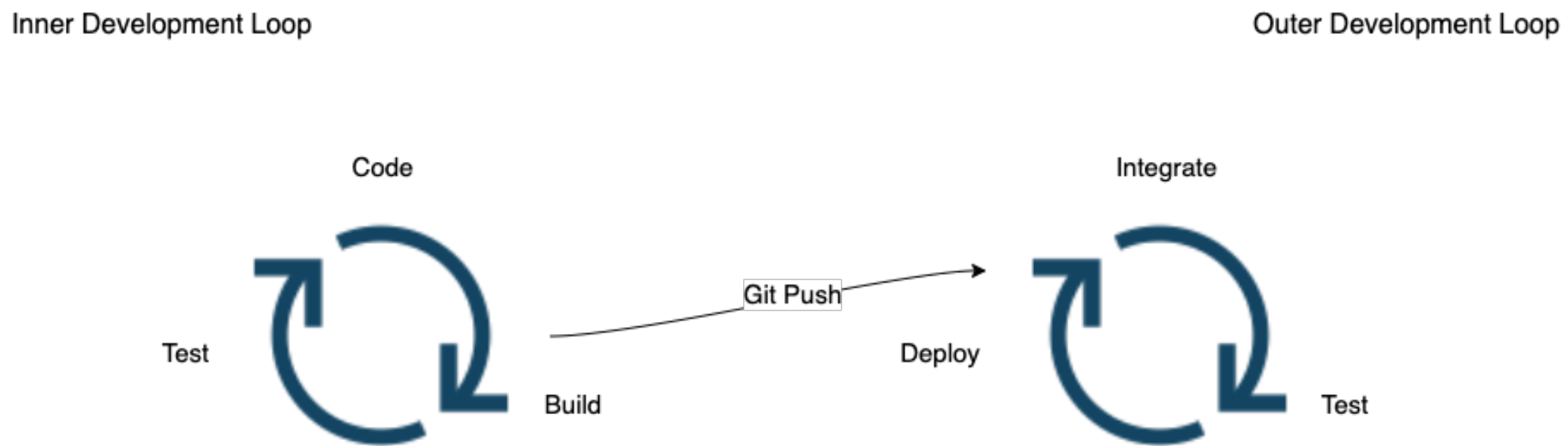
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Agenda

- Application development inner and outer loop
- How is the developer experience with Kubernetes?
- Skaffold to rescue
- Lights, Camera, GitHub Actions!
- Demo (Building and Deploying Java application on GKE using GitHub actions and Skaffold)
- References
- Let's Connect

Application development inner and outer loop

Traditional application development



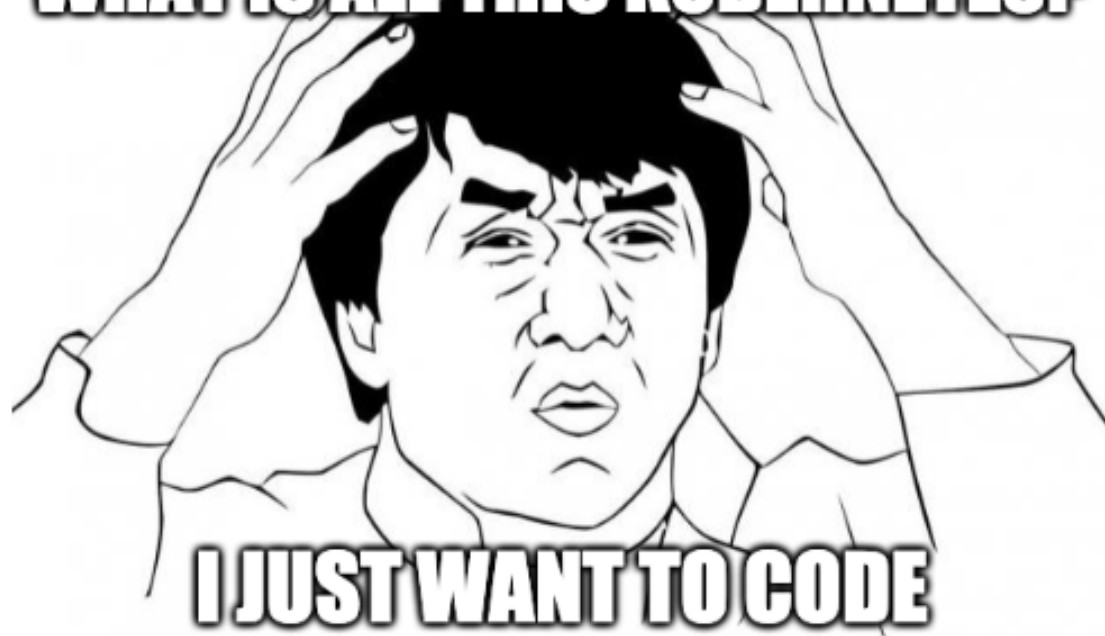
How Kubernetes affect the development loop?

Additional steps added to the development loop.

- a. building the image
- b. tagging the image
- c. pushing the image
- d. creating/updating Kubernetes manifests
- c. deploying, testing and repeating the cycle

**How is the developer experience
with Kubernetes?**

WHAT IS ALL THIS KUBERNETES?



A developer who just want to code



Skaffold to rescue



Scaffold handles the workflow for building, pushing and deploying your application, allowing you to focus on what matters most: writing code.

Scaffold architecture



Scaffold's inner development loop

Skaffold workflow

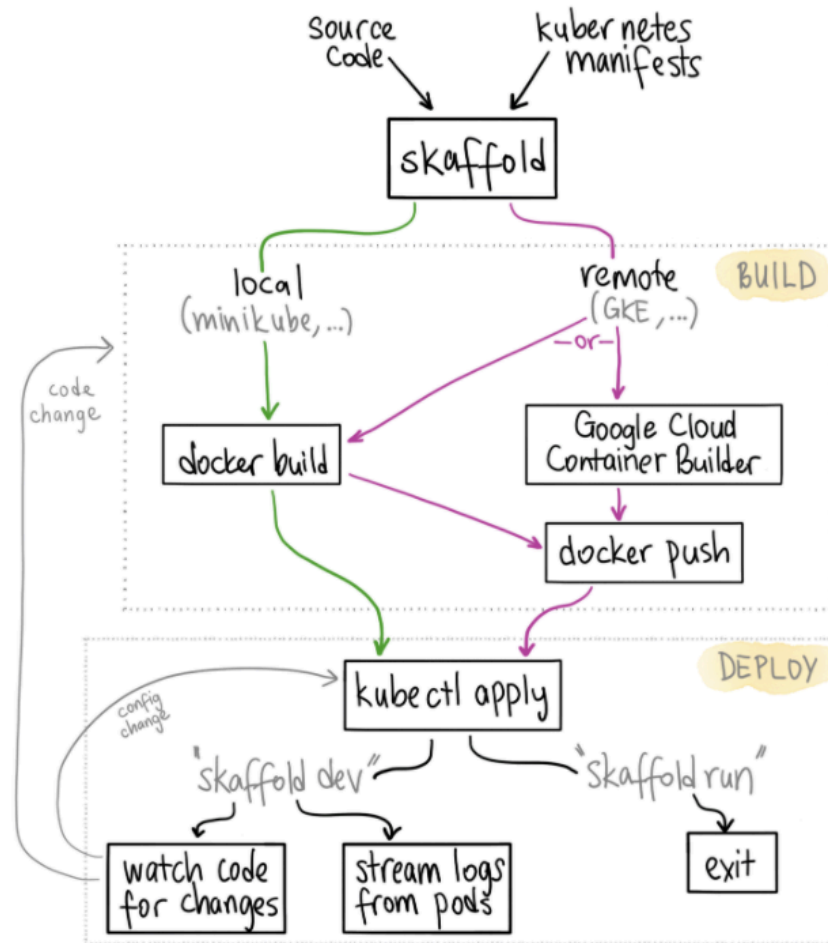


Image Source <https://ahmet.im/blog/>

Skaffold configuration



```
apiVersion: skaffold/v2beta12
kind: Config
metadata:
  name: indian-states
build:
  artifacts:
    - image: gcr.io/{project-id}/image-name
    jib:
      project: com.example:indian-states
deploy:
  kubectl:
    manifests:
      - k8s/mydeployment.yaml
      - k8s/myservice.yaml
```

Lights, Camera, GitHub Actions!

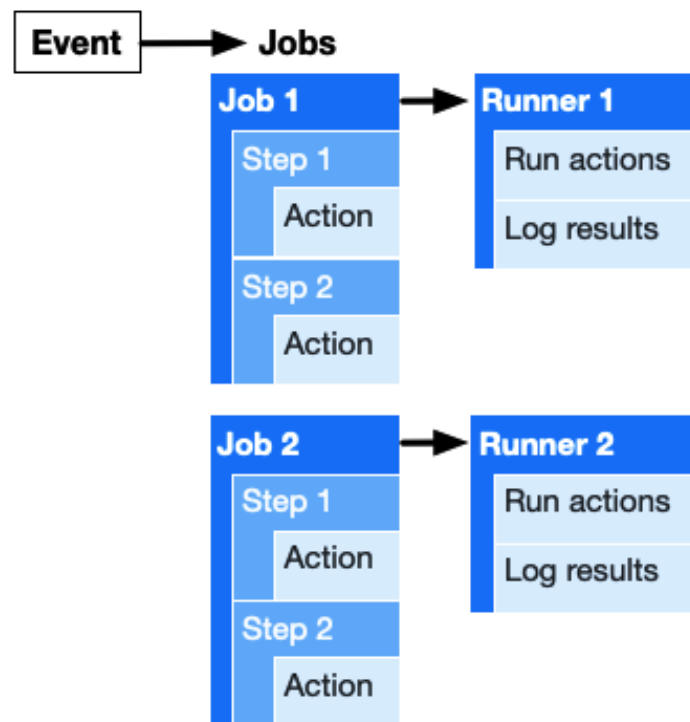


Image Source Github Documents

Demo

References

- GitHub repository for demo application: <https://github.com/yrashish/indian-states>
- My article on Skaffold: <https://ashishtechmill.com/cicd-workflow-for-spring-boot-application-on-kubernetes-via-skaffold>
- Skaffold docs: <https://skaffold.dev/docs/>
- Skaffold GitHub repository: <https://github.com/GoogleContainerTools/skaffold>

Let's Connect



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