Imperative vs Declarative

Imperative

Hey robot, create 3 toy blocks, color them red, green, and blue, and stack them on top of each other.

Declarative

Its like giving a robot a picture of how you want things to look and saying "Make it look like this picture"

| Scenario | Imperative Approach | Declarative Approach |
|----------------------------|--|--|
| Create a Deploymen t | kubectl create deployment my- deployment image=my-app | Create a YAML file specifying deployment details and use kubectl apply -f my-deployment.yaml to apply it. |
| | kubectl scale deployment my- deployment replicas=5 | Update the YAML file's replicas field to 5 and use kubectl apply -f my-deployment.yaml to apply the update. |

| Scenario | Imperative Approach | Declarative Approach |
|----------------------------------|---|---|
| Change a Container's Image | kubectl set image deployment/my- deployment my- container=my-new- image | Update the YAML file with the new image and use kubectl apply -f my-deployment.yaml to apply the change. |
| Delete a Resource | kubectl delete deployment my- deployment | kubectl delete -f my- deployment.yaml |