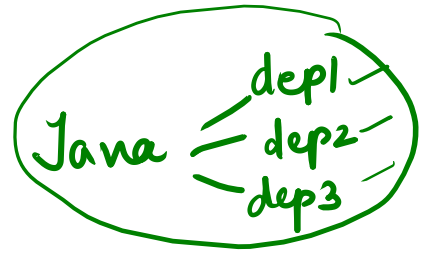
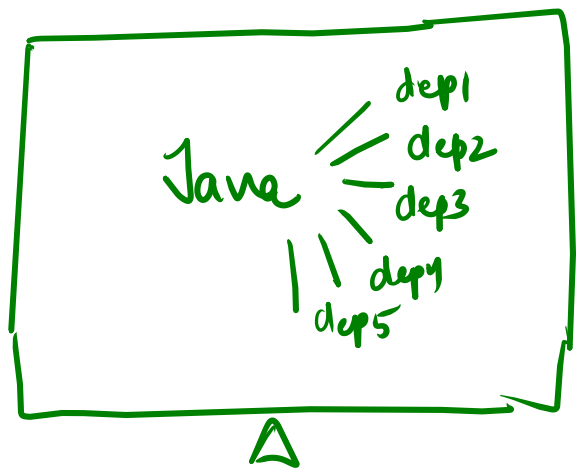
Managed compute platform that lets you run containers directly on google Infrastructure.

Cloud Run → Launched in 2019

Cloud Run → Create the Infra and deploy the app in container.

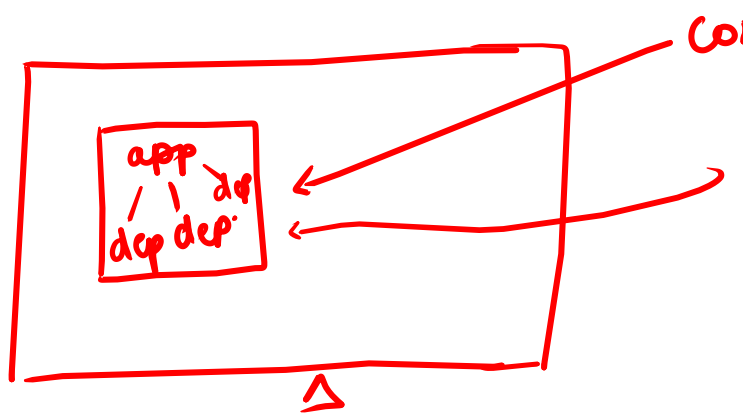
Understand container ←





VM ← This Java app requires 100+ dependency to run. Installing so many dependency is very difficult.

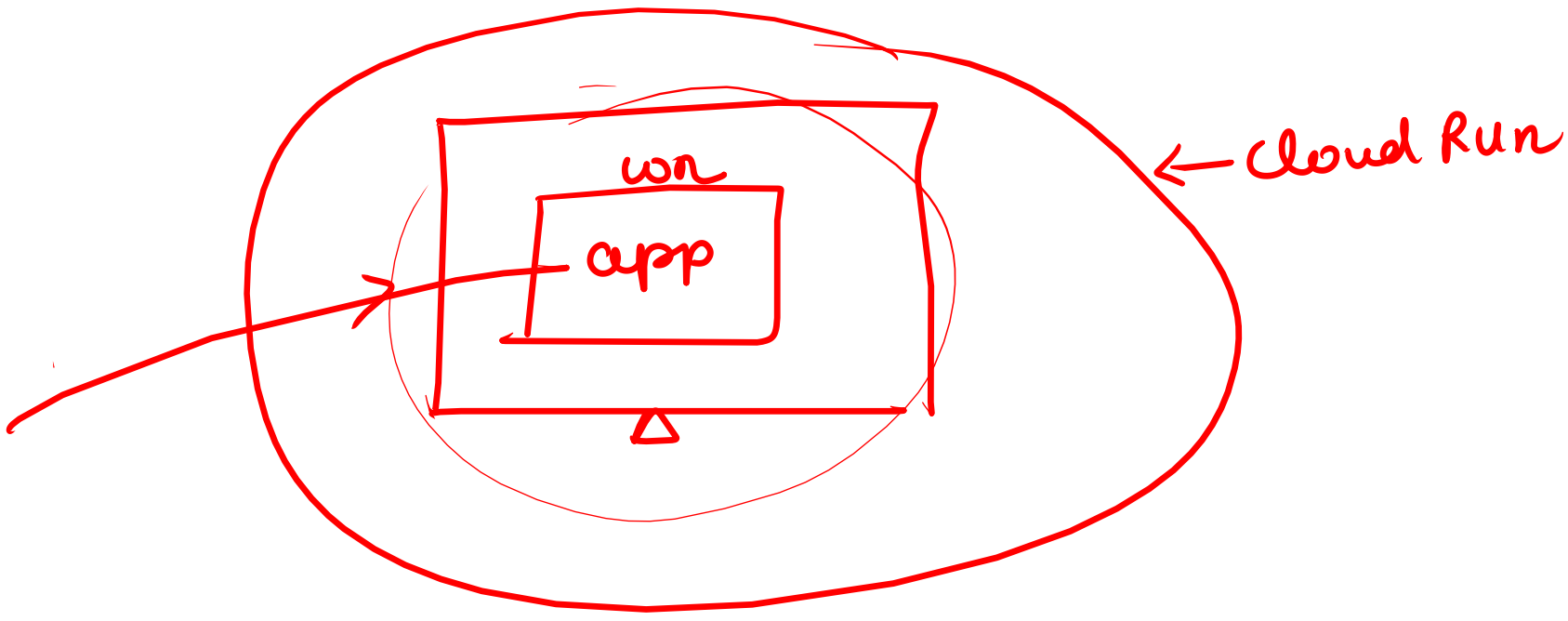
lightweighted standalone, executable package of software that includes everything needed to run a piece of sofware -> Code, runtime, libraries , environment variable



This container runs Inside the VM but all dependencis is present within the container.

» you can deploy the code written in any programming language.

»



The app in is inside containers can be accesible through web requests or api calls.

→ Cloud run offers automatic scaling.

→ you need only pay whenever you are accsing.

→ It is serverless ← you will not accss to Infra created by cloud Run

→ It is similar to AWS fargate service.

	Cloud Run	Appengine
Deployment unit:	container images	source code + app.yml config
Language :	any language	specific language
Flexibity:	High - Bring ur own runtime ,library	Limited
Scalability	Autoscales	Autoscales
Pricing	Per request	Standard: per instance + useage Flexible: VM pricing
Customisation	Full control	Limited
Startup latency	very low	very low (standard) high (flexible)
Devops control	High	Low
Ideal for	Microservice , API , containerised app	Quick web application, monolithic app

Use cloud run if:
> you want to deploy the containerised application
> you need full control over runtime, dependencies and language
> You want portable workloads
> you want flexibility and serverless billing

Use app engine if:

> you want zero devops overhead
> you are using supported language
> you need fast deployment from just ur source code