→ workflow / pipeline

→ jobs
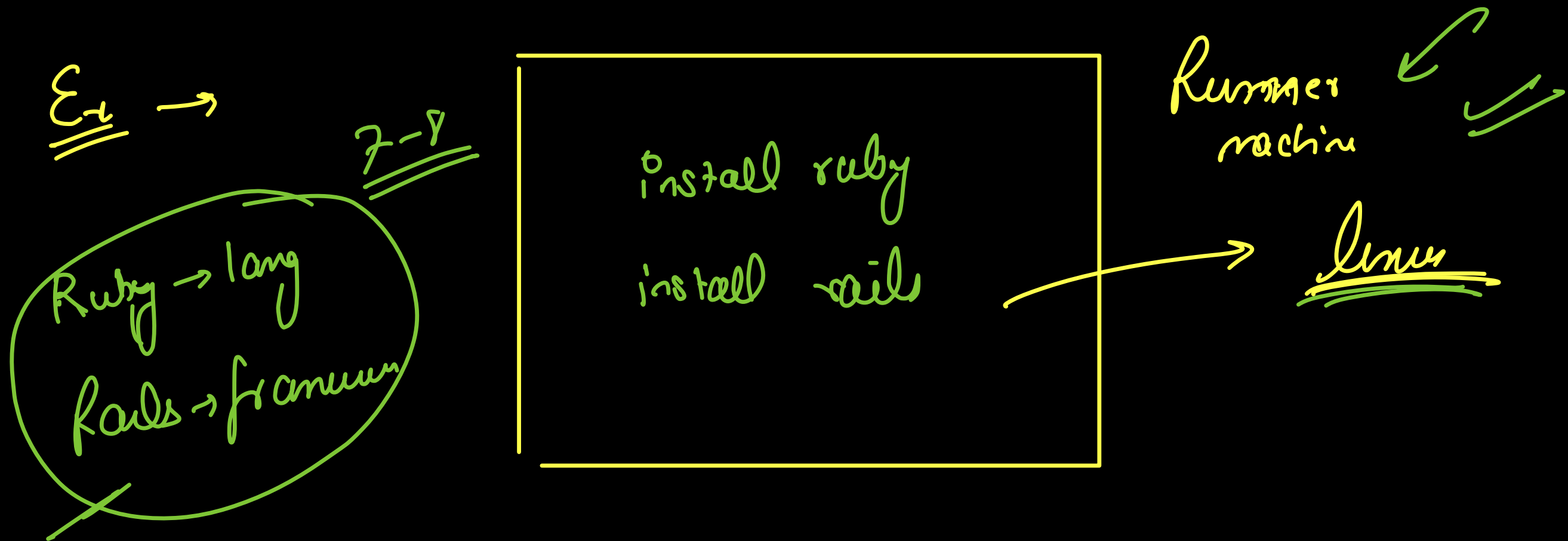
→ steps → linux

→ command → windows

→ macos

→ github action commands

github action command is a predefined operation that is done as a step in a job.

$E_1 \rightarrow$

7-8

Ruby → lang
Rails → framework

install ruby
install rails

Runner machine

linux

Project 1
$\downarrow$
p1

Project 2
$\downarrow$
p2

Project 2
$\downarrow$
p3

github actions → whole ecosystem   workflows / jobs / steps etc

github action → predefined operation

```yaml
name: "Sample React CI Pipeline / Workflow"

on:
    push:
        branches:
            - main
            - master

jobs:
    build-and-test:
        runs-on: ubuntu-latest

        steps:
            - name: "Setup Node JS"
              uses: actions/setup-node@v4
              with:
                node-version: '21'

            - name: "Check node version"
              run: node --version
```

Handwritten annotations:

- name of the pipeline
- event — whenever we push code on master / main branch
- job name
- env
- Step1
- name of Step
- helps to define github
- action for setting nodejs
- cache
- Steps
- Step2
- linux command

```yaml
name: "Sample React CI Pipeline / Workflow"

on:
    push:
        branches:
            - main
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jobs:
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              uses: actions/setup-node@v4
              with:
                node-version: '21'

            - name: "Check node version"
              run: node --version
```
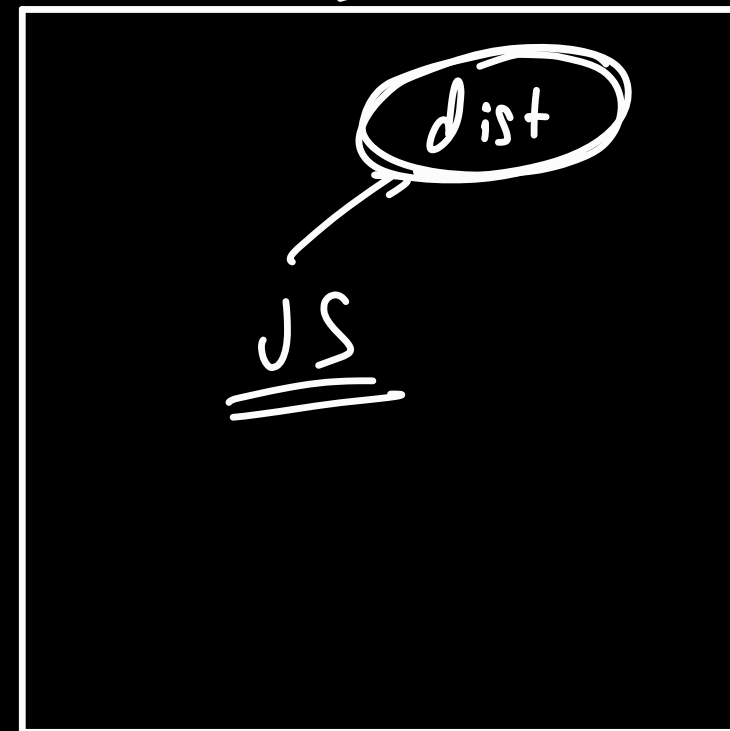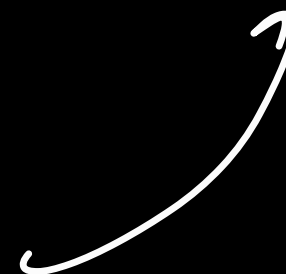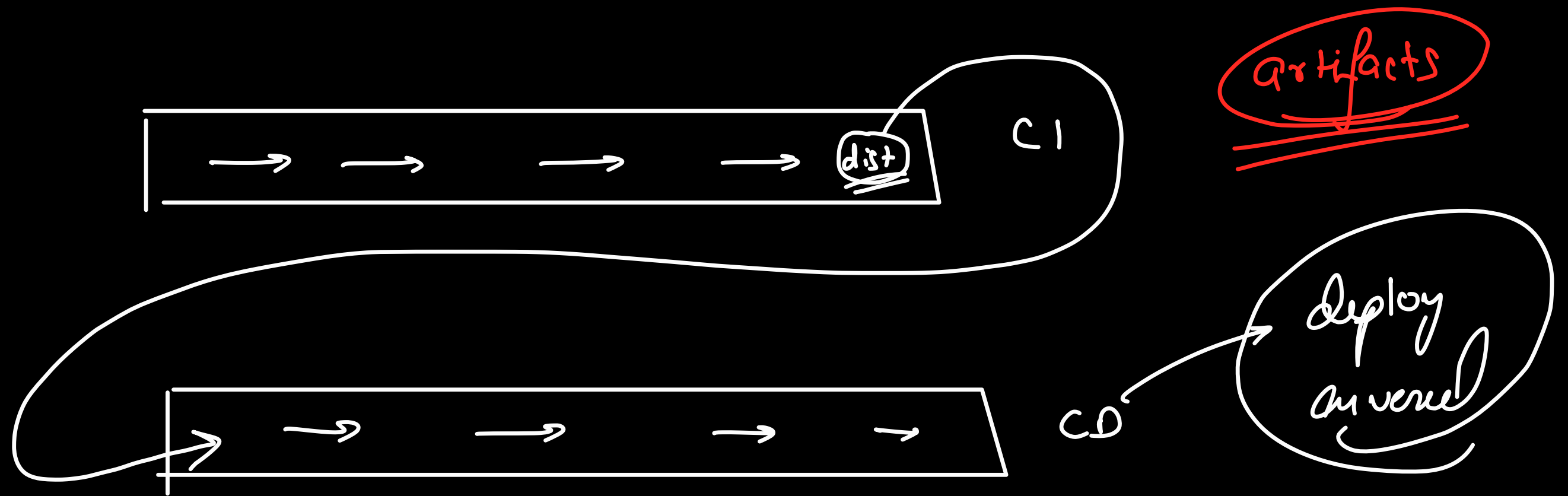
github machine

predefined action

JSX

CI

build

JS

dist

CD

CI

artifacts

dist

CD

deploy
on vercel

```yaml
1    name: "CD Pipeline"
2
3    on:
4        workflow_run:
5            workflows: ["Sample React CI Pipeline / Workflow"]
6            types:
7                - completed
8        workflow_dispatch:
9
```

name of the pipeline
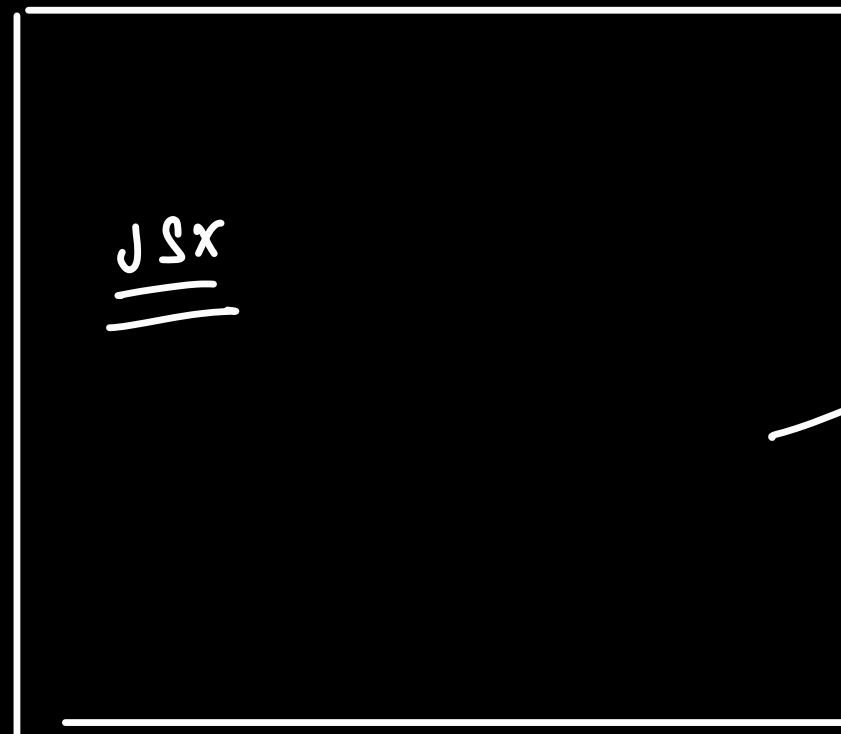
once our CI pipeline is completed

event on which we trigger the pipeline

→ *manual UI trigger*

```yaml
jobs:
    deploy:
        runs-on: ubuntu-latest
        environment: production

        steps:

            - name: "Setup nodejs"
              uses: actions/setup-node@v4
              with:
                node-version: '21'

            - name: "Setup vercel cli"
              run: npm install -g vercel

            - name: "Download build files"
              uses: actions/download-artifact@v4
              with:
                name: build
                run-id: ${{ github.event.workflow_run.id }}
                github-token: ${{ github.token }}

            - name: "Deploy to vercel"
              run: vercel --prod --token=${{ secrets.VERCEL_TOKEN }} --confirm --name=cicdproject
```

name of job

os

which env to run

nodejs

install vercel CLI

linux command

download the artifact

file name to download

UI

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