Gitpod

Ephemeral development environment in the container
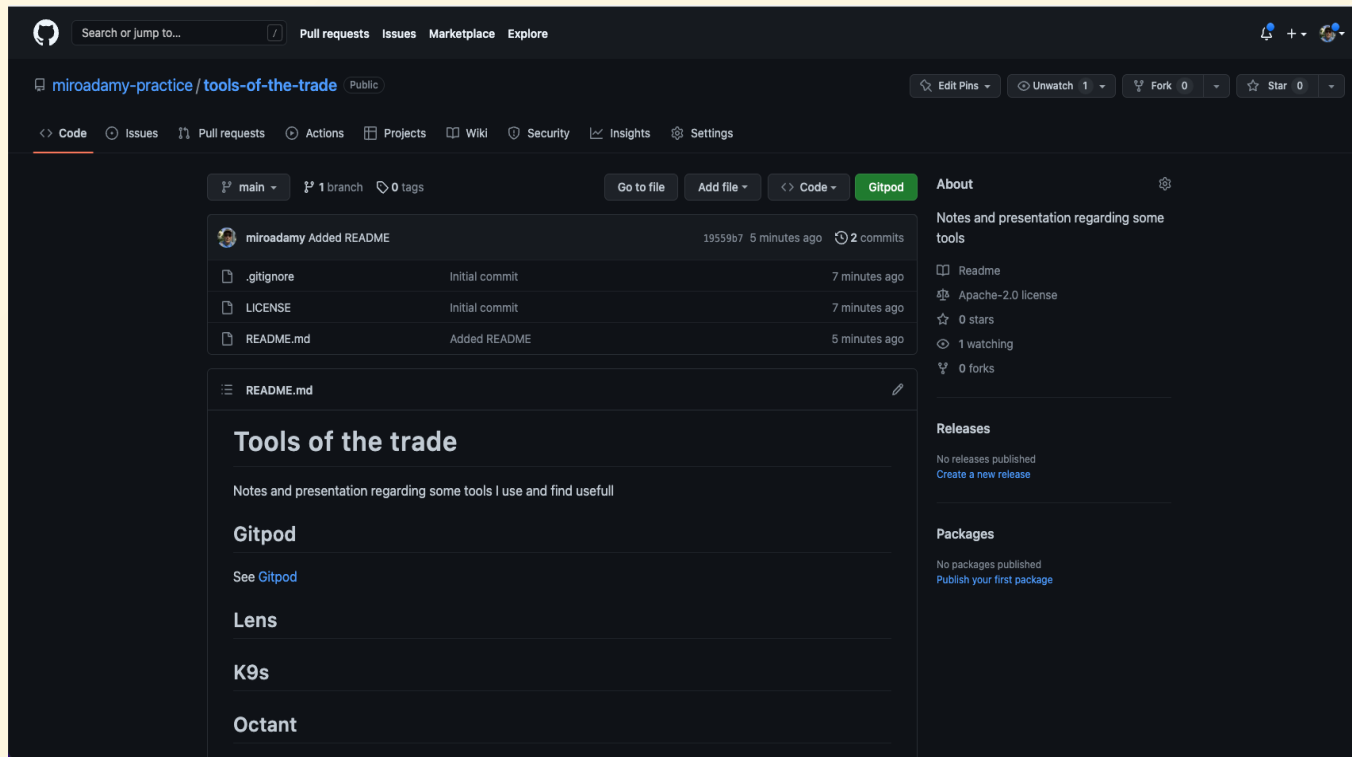
See https://www.gitpod.io/docs

To get started, install extension for Github, Bitbucket and Gitlab

Works with browser extension in any Chromium-based browser (Google Chrome, Microsoft Edge, Brave) or in Firefox

Open a workspace

Then open a repository in container from the browser:

Open a workspace - no plugin

Prefix URL with https://gitpod.io/#
Must be logged in both - BB and Gitpod
Use Web URL, not clone URL:

- OK : https://bitbucket.org/pivotree/oneclick-security/src/master/

- Not OK: https://miro-adamy-PVT@bitbucket.org/pivotree/oneclick-security.git

```
https://gitpod.io/#https://bitbucket.org/ pivotree/oneclick-
security/src/master/
```

Environment

It is essentially an Visual Studio Code in the cloud.
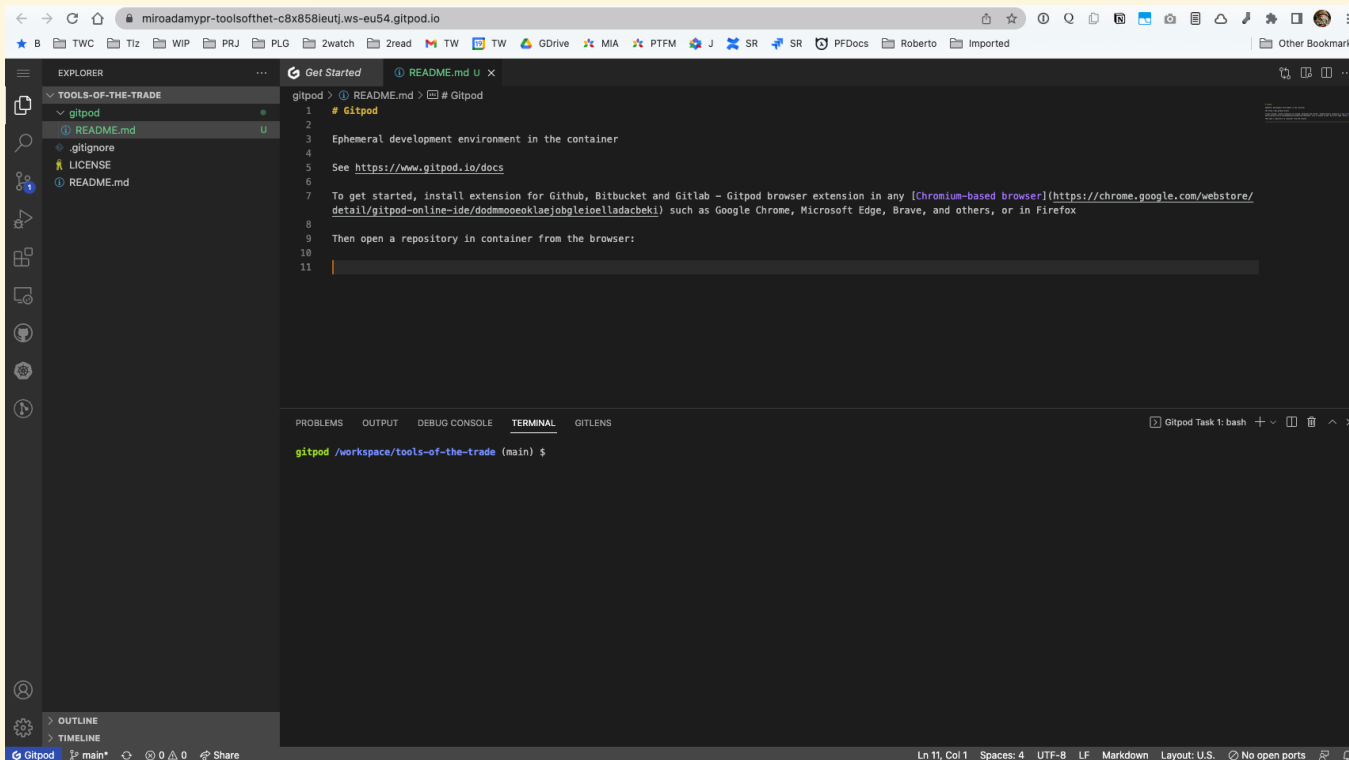
Its free(mium)

Plans
Manage account usage and billing.

Account

Notifications

Plans

Team Plans

Variables

SSH Keys

Integrations

Preferences

You are currently using the **Open Source** plan.
Upgrade your plan to get more hours and more parallel workspaces.

Remaining hours: 38.8

€ / $

OPEN SOURCE ⊙	PERSONAL	PROFESSIONAL	UNLEASHED
OPEN SOURCE **50** hours	**100** hours	**unlimited** hours	**unlimited** hours
✓ Public & Private Repositor...	← Everything in Open Source	← Everything in Personal	← Everything in Professional
✓ 4 Parallel Workspaces		✓ 8 Parallel Workspaces	✓ 16 Parallel Workspaces
✓ 30 min Inactivity Timeout		✓ Teams	✓ 1h Inactivity Timeout
			✓ 3h Timeout Boost
FREE	€8 per month	€23 per month	€35 per month
Current Plan	Upgrade	Upgrade	Upgrade

ⓘ If you are interested in purchasing a plan for a team, purchase a Team plan with one centralized billing. Learn more

Workspaces

- your own source code copy in container

- can have multiple, even parallel (plan)

- can be shared, downloaded, snapshot

- co-development

- only FS under `/workspace` is preserved between runs

Configuration

- can install packages - even sudo

- access to Docker and Dockercompose

- `gitpod/worspace-full` and `gitpod/workspace-base`

- lang-c,lang-clojure, lang-go:1.17.5, lang-java:11

- lang-node:16.13.2

- lang-python, lang-ruby:2.7, lang-rust

- tool-brew, tool-nginx, tool-nix:2.3.14

Variables

Available to one or more containers

Automation

`.gitpod.yml` - runs on workspace creation / restart

```
.gitpod.yml > [ ] tasks > { } 0 > abc name
     Gitpod Configuration (gitpod-schema.json) | Miro Adamy, 14 hours ago | 1 author (Miro Adamy)
1    # List the start up tasks. Learn more https://www.gitpod.io/docs/config-start-tasks/
2    tasks:
3      - name: Dev          Miro Adamy, 14 hours ago • Demo app with npm …
4        before: |
5          npm version
6          node --version
7        init: |
8          cd demo-app
9          npm install
10         gp sync-done npm-inst
11       command: echo 'Ready to develop'
12     - name: Server
13       before: |
14         npm version
15         node --version
16       init: echo 'waiting init' && gp sync-await npm-inst
17       command: |
18         cd demo-app
19         npm start
20
21   # List the ports to expose. Learn more https://www.gitpod.io/docs/config-ports/
22   ports:
23     - port: 3000
24       onOpen: open-preview
```

Prebuilds

Enable prebuild: New Project - https://gitpod.io/new

New Workspace:

- with prebuild: BEFORE + COMMAND
- no prebuild: BEFORE + INIT + COMMAND

Restart workspace (with or w/o Prebuild): BEFORE + COMMAND
Start snapshot: BEFORE + COMMAND

See https://www.gitpod.io/docs/prebuilds

gp CLI

```
gp help
```

```
gp init
```

```
gp ports
```

```
gp url 3000
```

```
gp env foo=bar
```

```
eval $(gp env -e foo=bar)
```
=> update the variable AND terminal

Ports

- specify in gitpod.yml
- `gp port list`
- `gp url PORT` => URL
  - can be public or private

Sharing and connectivity

- can share live environment => Token URL

- can share snapshot

- can add public key and use SSH

- can get public URL with token (connect for shared access)

- can open a port for public or private remote access

Custom Docker images

```
.gitpod.Dockerfile > 📦 FROM
You, 2 hours ago | 1 author (You)
1    FROM jsii/superchain:1-buster-slim-node16        You, 2 months ago • Using node 16
2
3    ARG KUBECTL_URL='https://dl.k8s.io/release/v1.24.3/bin/linux/amd64/kubectl'
4    ARG AWS_CLI_V2_URL='https://awscli.amazonaws.com/awscli-exe-linux-x86_64.zip'
5    ARG TERRAFORM_URL='https://releases.hashicorp.com/terraform/1.2.6/terraform_1.2.6_linux_amd64.zip'
6    ARG SESSION_MANAGER_PLUGIN='https://s3.amazonaws.com/session-manager-downloads/plugin/latest/ubuntu_64bit/session-manager-plugin.deb'
7
8
9    USER root:root
10   # install jq wget
11   RUN apt-get update && apt-get install -y jq wget groff
12
13   RUN mv $(which aws) /usr/local/bin/awscliv1 && \
14     curl "${AWS_CLI_V2_URL}" -o "/tmp/awscliv2.zip" && \
15     unzip /tmp/awscliv2.zip -d /tmp && \
16     /tmp/aws/install
17
18   # install kubectl
19   RUN curl -L0 -o kubectl "${KUBECTL_URL}" && \
20     chmod +x kubectl && \
21     mv kubectl /usr/local/bin && \
22     curl --silent --location "https://github.com/weaveworks/eksctl/releases/latest/download/eksctl_$(uname -s)_amd64.tar.gz" | tar xz -C /tmp &&\
23     chmod +x /tmp/eksctl &&\
24     mv /tmp/eksctl /usr/local/bin
25
26   # install terraform
27   RUN curl -o terraform.zip "${TERRAFORM_URL}" && \
28     unzip terraform.zip && \
29     mv terraform /usr/local/bin/ && \
30     rm -f terraform.zip && \
31     curl -sSL https://raw.githubusercontent.com/helm/helm/master/scripts/get-helm-3 | bash
32
```

Custom images ...

`.gitpod.yml` - use custom Docker file

Multi-repo projects

Multiple workspaces - OK is browser is only client
Backend-integrations: Tailscale - https://tailscale.com/

See https://www.gitpod.io/guides/connect-multiple-repositories-using-tailscale