## Plutus Env: Setup Starter Pack

To set up a local Plutus development environment, there are several resources available:

#### Source: https://docs.plutus-community.com/

- Strength: this is a detailed env setup guide for various OS (Linux, Mac, Windows)
- Weakness: the later material on this site (lectures and PAB related stuff) is mostly obsolete.

#### Source: <a href="https://developers.cardano.org/docs/smart-contracts/plutus/">https://developers.cardano.org/docs/smart-contracts/plutus/</a>

- Strength: this guide is focused on big picture explanations of plutus.
- Weakness: it is not as user friendly as https://docs.plutus-community.com/

#### Source: https://github.com/input-output-hk/plutus-apps

- Strength: this is the canonical source, it gives very sparse but fully reliable instructions
  on how to install plutus applications like Plutus Playground or Plutus PAB with nix. This
  is what the development team uses.
- Weakness: It requires experience with Nix.

### Source: <a href="https://github.com/input-output-hk/plutus-starter">https://github.com/input-output-hk/plutus-starter</a>

- Strength: this helps users of VSCode and Docker to get an environment with the correct tools set up.
- Weakness: It's geared only towards VSCode users, and is not directly applicable to course content.

See page 2 for set up guide for a local instance of the Plutus Playground.

# Plutus Playground Local Instance

The hosted Plutus Playground (<u>here</u>) is currently unusable, as documented in plutus-apps <u>issue</u> <u>195</u>. **To set up a local instance**, you can follow the instructions below:

- 1. Download the plutus-apps repository: git clone https://github.com/input-output-hk/plutus-apps
- 2. Go to the latest commit of the repository: git checkout 41149926c108c71831cfe8d244c83b0ee4bf5c8a
- 3. At top of this repo, nix-build -A plutus-playground.server
- 4. Enter nix-shell then:

cd plutus-playground-client
plutus-playground-server

Wait for server to start, it'll log "Interpreter ready"

5. In second terminal at top of this repo, enter nix-shell then:

cd plutus-playground-client
npm run start

Wait for the client to start, it'll log "webpack compiled with ..."

- 6. In web browser, navigate to url https://localhost:8009/ (need to accept that ssl certificate is invalid)
- 7. Compile and evaluate plutus code without DecodingError

See issue 195 for context.

## **Environment Setup Guides (pioneer contributed)**

- Renzwo wrote a <u>Plutus Pioneers environment setup quide for Apple M1</u>.
- Whatever [SIDAN]#3725 wrote a Plutus Playground setup guide for Apple M1.
- kreisys#4215 shared his output of successful Nix installation in macOS Monterey.
- pgwada#0227 wrote a guide about <u>Plutus Pioneers environment setup guide for Apple</u> M1.
- Taco\_Man#4870 wrote a guide about <u>Plutus Pioneers environment setup guide for Apple M1 Big Sur.</u>
- hotchocolate#9119 wrote a guide about <u>Plutus Pioneers environment setup guide for</u> macOS Intel Monterrey.
- Deceptikon#9964 wrote a setup guide for <u>Plutus Playground with VirtualBox or native</u> Ubuntu.
- photonwings#3183 wrote a setup guide for Plutus Playground with Ubuntu 20.04.
- ingelran#8323 shared his <u>video</u> for French speakers about Plutus Playground set up in a Virtual Machine for Ubuntu 20.04.
- banshee#8497 wrote a guide about <u>Plutus Pioneers environment setup with docker-compose</u>.
- dbiddy#4521 wrote a guide about <u>Plutus Pioneers environment setup with git and nix-shell.</u>
- R2#3029 wrote a Plutus Playground setup guide for Windows 10/11 with WSL and Ubuntu 20.4.
- selipso#3964 shared a <u>hub</u> of long-form installation guides and other community driven material.