

# Writing Smart Contracts

## 02 Tool Setup

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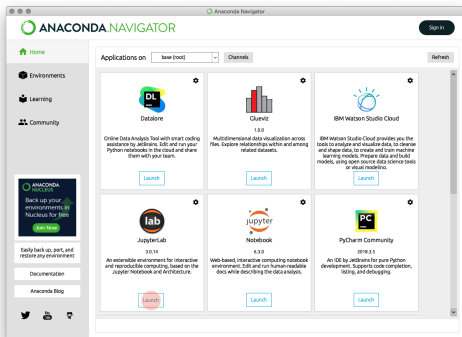
Supported by the Algorand Foundation

# Anaconda

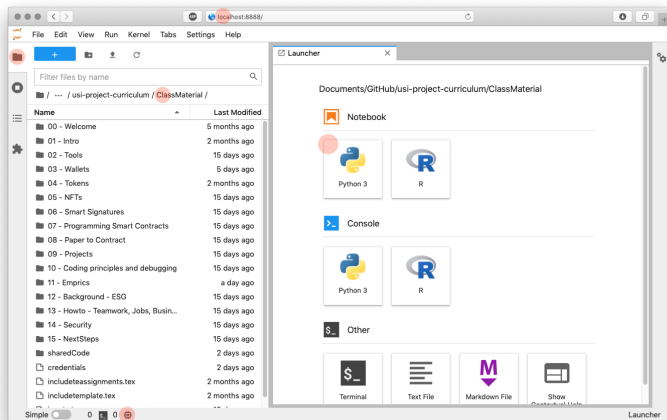
## (1) Get Anaconda

- <https://www.anaconda.com/products/individual>
- No need to register or create an account
- Download and install Anaconda “Individual Edition”

## (2) Anaconda Navigator



# A quick intro to Jupyterlab



- Jupyter = Julia/Python/R
- Notebook (text+code+results)
- Markdown language
  - 02\_WSC\_JupyterLab.ipynb
- Access with browser
- Files in current directory
- Directly run Python
  - 02\_WSC\_Python.ipynb

# Algorand Wallet App – Install

iOS



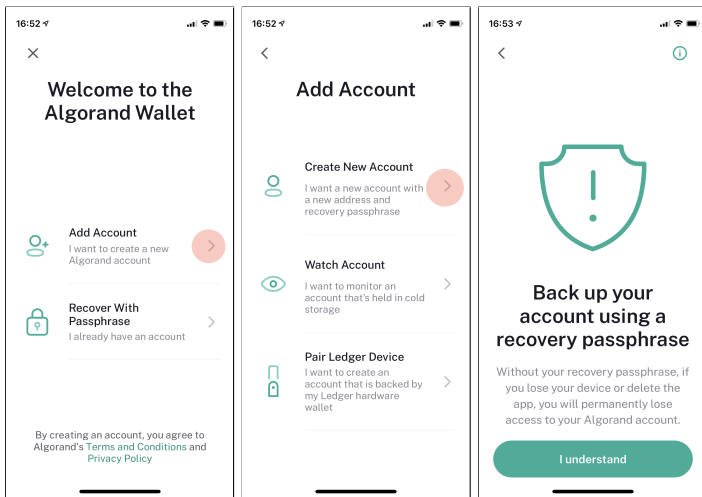
Android



<https://apps.apple.com/at/app/algorand-wallet/id1459898525?l=en>

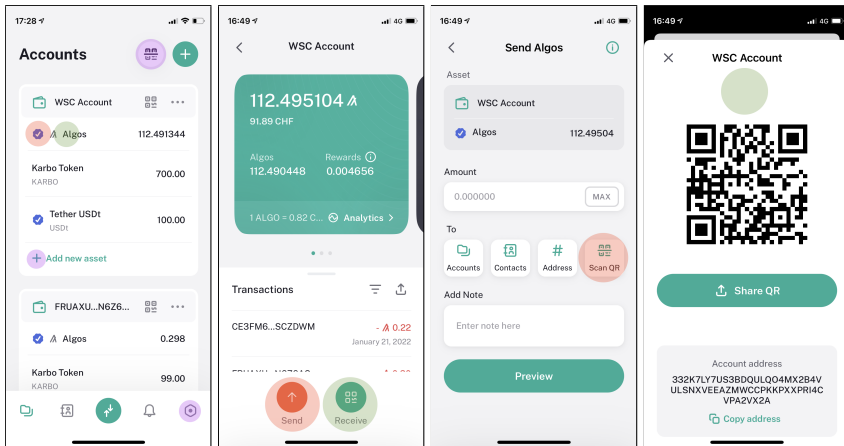
<https://play.google.com/store/apps/details?id=com.algorand.android&hl=en&gl=US>

# Algorand Wallet App – Create an account





Create an account, store the passphrase

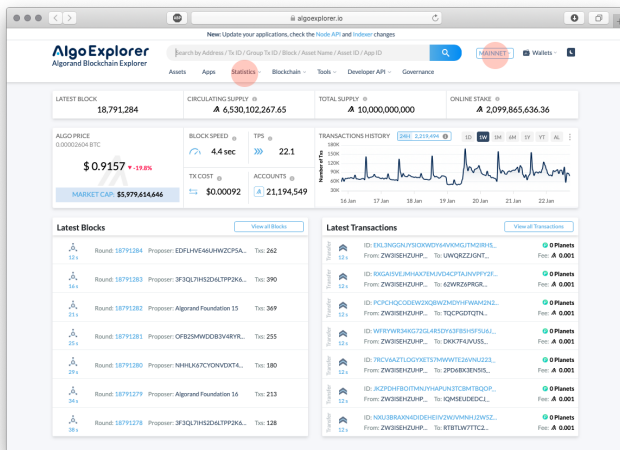
# Algorand Wallet App – Make a transfer



RED = send, GREEN = receive

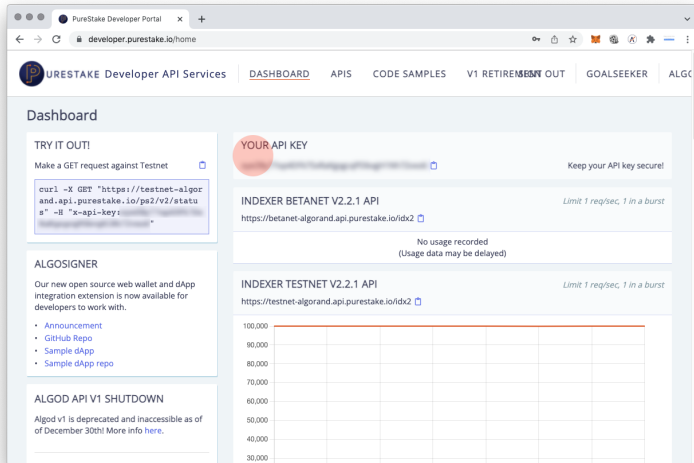
**Testnet:**  Hexagon /  Developer Settings / Node Settings / TestNet (orange bar)

# A quick view of the Algorand Blockchain



- <https://algoexplorer.io/>
- Explore statistics
  - Search for your wallet address (how?)
  - Search for “USI” on the testnet

# Purestake API



The screenshot shows the Purestake Developer API Services Dashboard. The header includes the Purestake logo and navigation links: DASHBOARD, APIS, CODE SAMPLES, V1 RETIREMENT OUT, GOALSEEKER, and ALGOD. The main content area is titled "Dashboard" and contains several sections:

- TRY IT OUT!**: A section for making a GET request against Testnet. It includes a code block with the following command:

```
curl -X GET "https://testnet-algorand.api.purestake.io/ps2/v2/status" -H "x-api-key: [redacted]"
```
- YOUR API KEY**: A section for displaying the user's API key, with a warning to "Keep your API key secure!".
- INDEXER BETANET V2.2.1 API**: A section for the Betanet API, showing the URL <https://betanet-algorand.api.purestake.io/idx2> and a usage limit of "Limit 1 req/sec, 1 in a burst".
- INDEXER TESTNET V2.2.1 API**: A section for the Testnet API, showing the URL <https://testnet-algorand.api.purestake.io/idx2> and a usage limit of "Limit 1 req/sec, 1 in a burst". Below this is a line graph showing usage over time, with the y-axis ranging from 30,000 to 100,000.
- ALGOSIGNER**: A section for the new open source web wallet and dApp integration extension, with links to the Announcement, GitHub Repo, Sample dApp, and Sample dApp repo.
- ALGOD API V1 SHUTDOWN**: A section for the deprecated and inaccessible Algod v1 API, with a warning to "More info here."

<https://developer.purestake.io/> > Register for free > Login



# Tools overview

## Locally installed

- Anaconda
  - ▶ JupyterLab (access via browser)
  - ▶ Python + Algorand SDK Library + PyTEAL
- Algorand Wallet App for iOS/Android

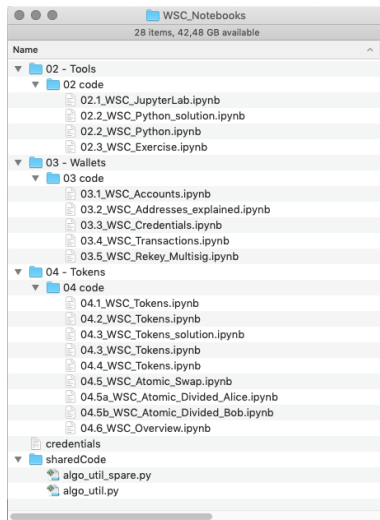
## API-Access

- Read blockchain data via Purestake API
- Submit transactions via Purestake API

## Web-Access

- Algo Explorer

# Folder structure notebooks



**Do not change this structure!** Add new folders in correct level.