

Go to Gno

Introducing the Gno.land tech stack

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Agenda

- 11:30 - Intro talk
- 12:30 - Lunch break
- 13:30 - Gno Builder Challenge
- 17:30 - Networking
- 18:30 - 19:00 - Venue doors close

So, what is Gno?

Gno

- An interpreted version of Go, running inside a custom virtual environment - the **Gno VM**
- Works as part of **Gno.land**, a layer 1 blockchain network focused on FOSS, simplicity, and scalability
- Completely **deterministic**, with **automatic state persistence**
- Secured by **Proof of Contribution**
- Created by Cosmos co-founder **Jae Kwon**

Memeland

A meme-sharing platform build using the Gno tech stack, and a frontend in React+vite.

[Demo](#)

A few Gno concepts

Packages & Realms

Gno code is organized into **Packages & Realms**.

- **Packages** are reusable code, libraries without state.
- **Realms** are meant to store and persist application state, and import packages.

Example Package

```
// Package ufmt provides utility functions for
// formatting strings [...]
package ufmt

import "strconv"

// Sprintf offers similar functionality to Go's fmt.Sprintf
// or the sprintf equivalent available in many languages,
// [...]
func Sprintf(format string, args ...interface{}) string {
    end := len(format)
    argNum := 0
    argLen := len(args)
    buf := ""

    for i := 0; i < end; {
        isLast := i == end-1
        c := format[i]

        if isLast || c != '%' {
            buf += string(c)
            i++
            continue
        }

        // ...
    }
}
```

Example Realm

```
package counter

import "strconv"

var counter int

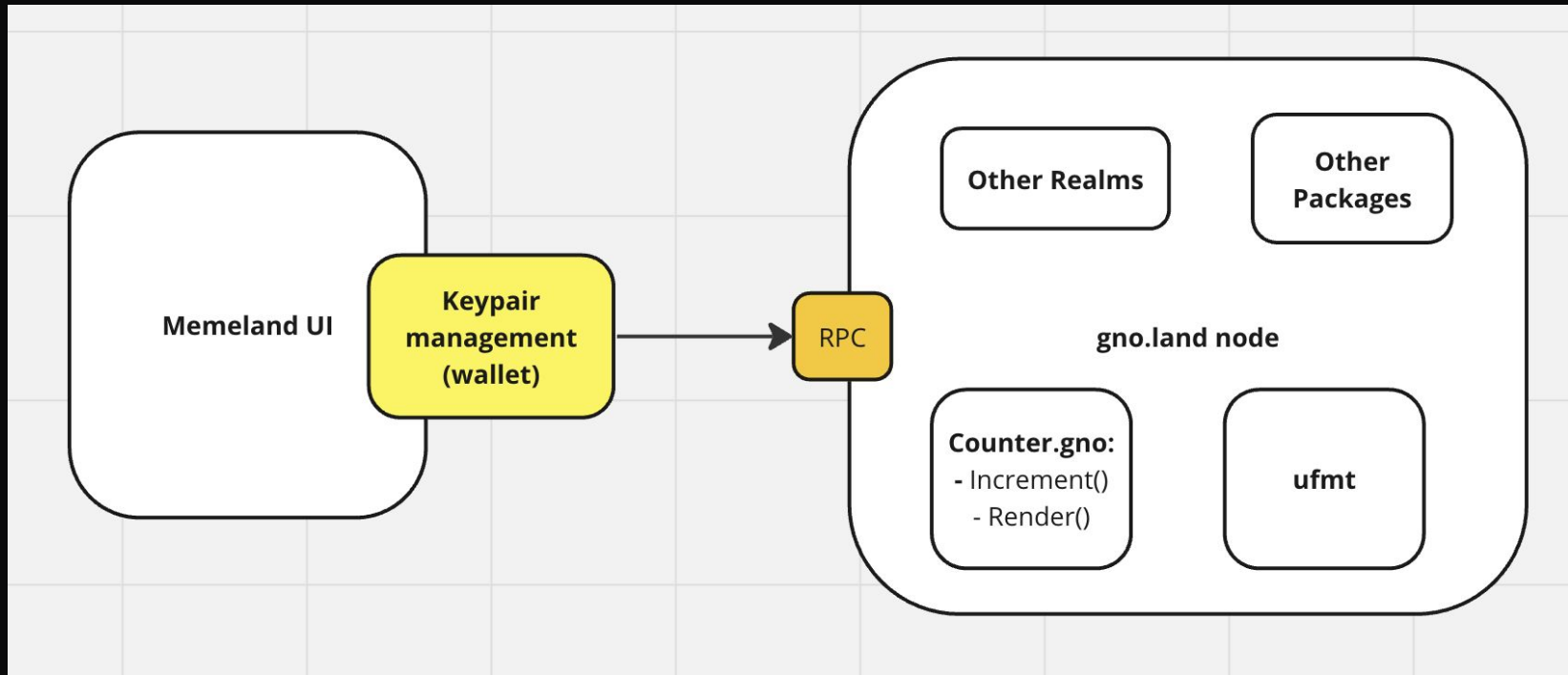
func Increment() {
    counter++
}

func Render(string) string {
    return "Times incremented: " + strconv.Itoa(counter)
}
```

Realms are like mini-servers

- Exported functions found in Realms are callable from the outside world
- A caller is identified by a gno.land keypair:
 - *g125em6arxsnj49vx35f0n0z34putv5ty3376fg5*
- Every call is transactional

Architecture of Memeland



Let's get to the code

Next up: Lunch Break

After lunch: Gno Builder Challenge

Get started at:

<https://shorturl.at/alCJU>



Useful links:

- gno.land
- docs.gno.land
- github.com/gnolang/gno
- github.com/gnolang/ecosystem-fund-grants

Thank you!

