flame

the modular game engine

Sobre o Palestrante

Luan Nico

Software Craftsman | Physicist

luan.xyz | github.com/luanpotter

dextra FAIRE

1.
What is a game?

Flutter
Talks 2019

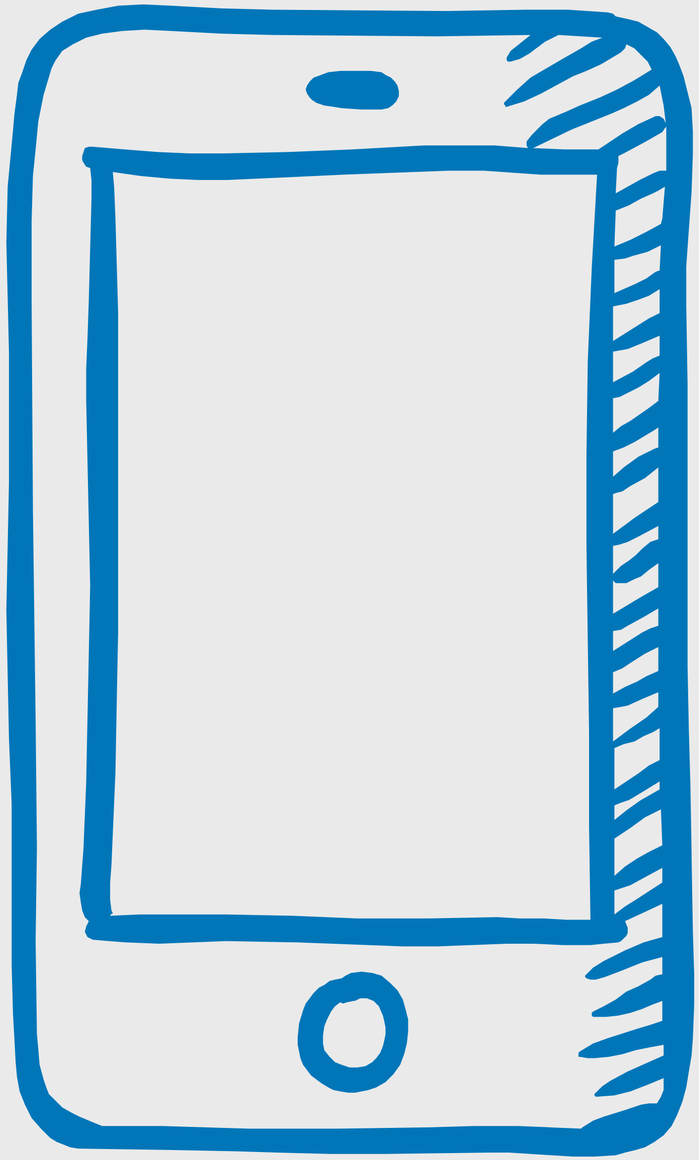
Multimedia

- Graphics
- Audio
- Text

Interactive

- Input
- Player Agency

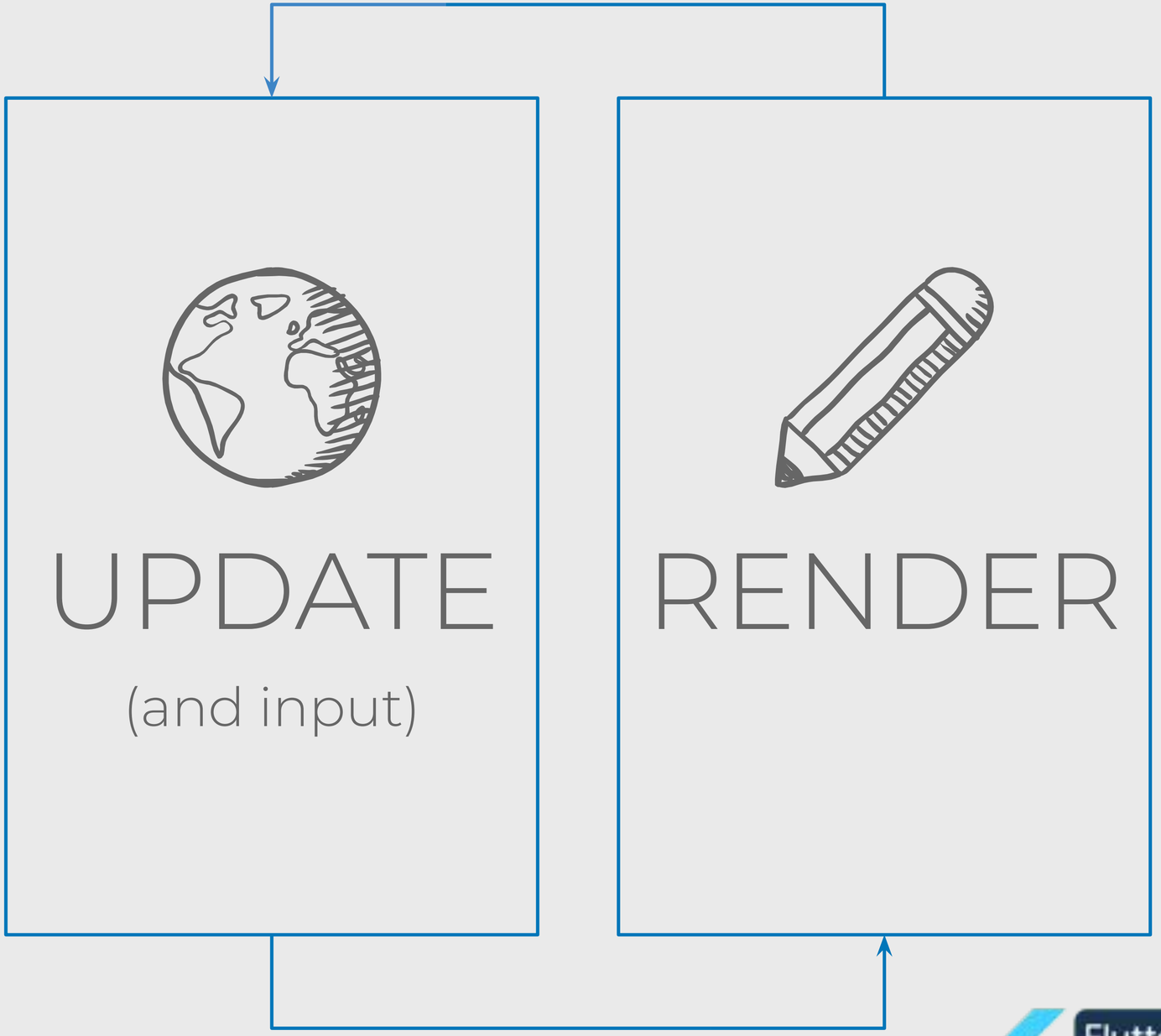
Flutter Talks 2019



Note that regular apps might have some of those characteristics as well...

2.
How do games work?

The Game Loop



Flutter Talks 2019

In Flutter?

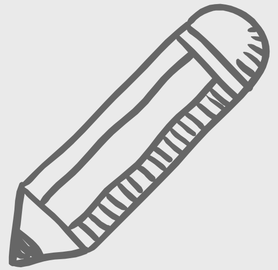
- Direct Low-Level Canvas Access
- High Performance Animations

Flutter Talks 2019

In Flutter?

Schedule Frame Callback

60 FPS updates



RenderBox

extendable widget

paint method

Flutter Talks 2019

These are used by Flutter's low-level widgets!

Flutter Talks 2019

3.
Flutter + Game = Flame

Flutter
Talks 2019

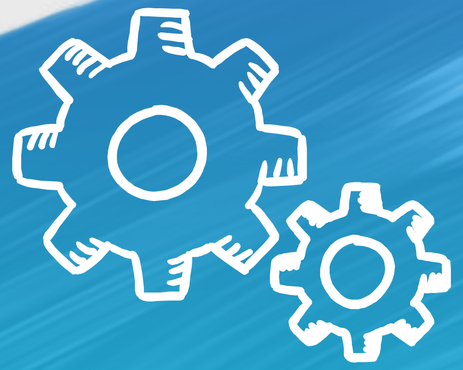
Flame

A minimalist Flutter game engine.

1570 120 Github,
Discord,
& more

https://github.com/flame-engine/flame

Flutter Talks 2019



Flame is Modular

Game Loop	Sprites and Animations	Input Handling
Component System	Audio Player	General Utilities

Flutter Talks 2019

Additional Modules

- audioplayers (included)
- tiled (included)
- box2d (included)
- flame_gamepad (external)
- play_games (external)

Flutter Talks 2019

4.
Let's do it!

GAMES ARE MORE THAN CODE!

Flutter Talks 2019

What's required for making a game?

Game Design

Level Design

Graphic Assets

Audio Assets

Fonts

PR & Marketing

Coding

What's required for making a game?

Game Design

Level Design

Graphic Assets

Audio Assets

Fonts

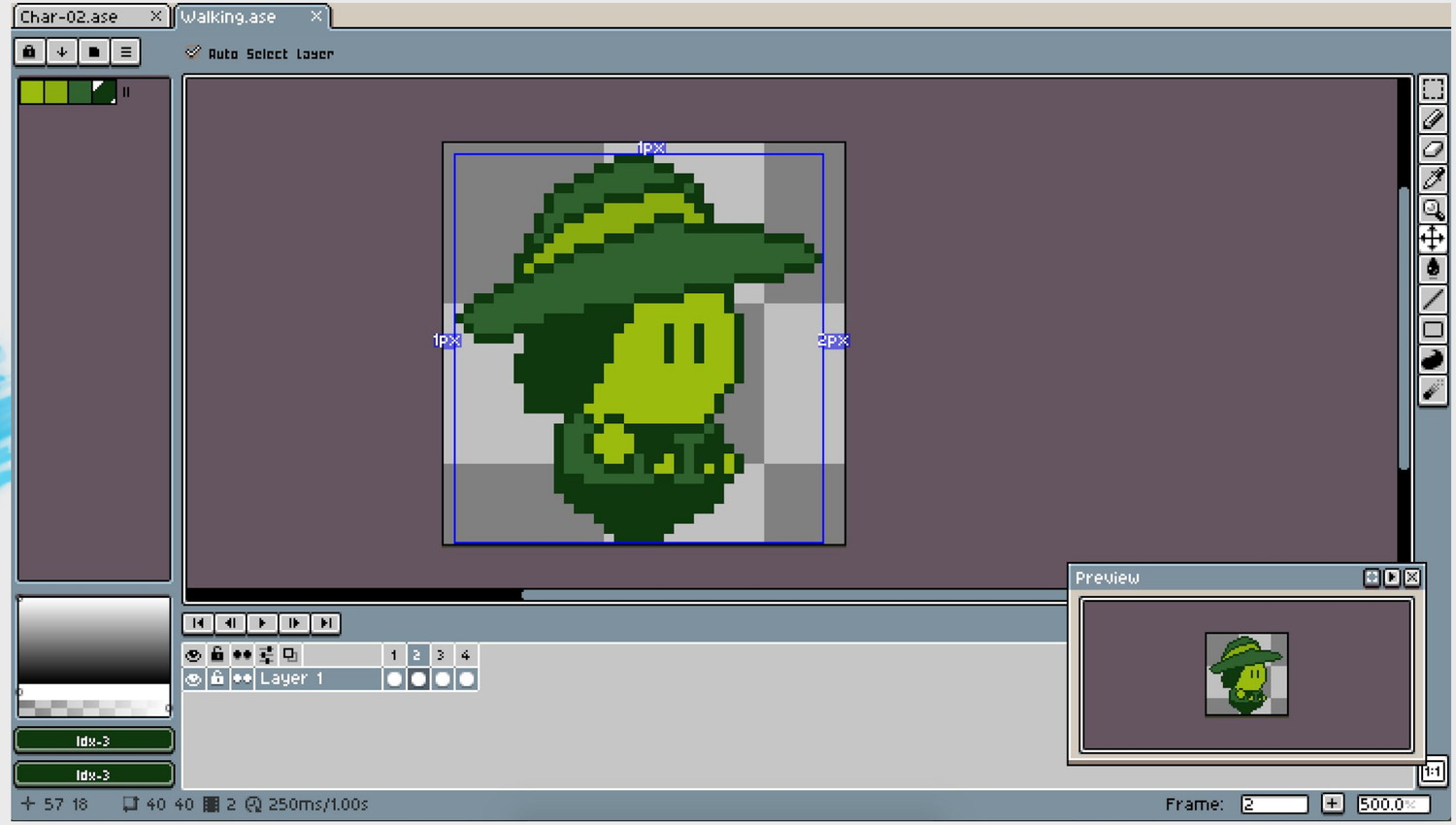
PR & Marketing

Coding

flame helps here

Flutter Talks 2019

Assets?



Flutter Talks 2019

FILTER RESULTS (Clear)

Price

Free

More Options

RELATED COLLECTIONS

All Assets Packs
ansimuz

Assets and examples
YellowAfterlife

Tiled Resources

Top free Game assets (2,661 results)

Sort by Popular New & Popular Top sellers Top rated Most Recent

Select a tag... Pixel Art 2D 16-bit Retro Fantasy Tilemap based tools Role Playing sprites Forest Adventure (View all tags)

Classic RPG Tileset
Free forest themed set where human bei...
Jestan

Shadow Mines - Free 2D Game Asset Pack
A free asset pack with 2D pixel art sprite...
waxx

Jungle platformer assets
BigBuckBunny

SBH
Void

16x16 Dungeon Tileset
Free fantasy dungeon tileset (+character...
0x72

Anima
Free 2
rvros

16x16 DungeonTileset II
A free tileset + animated characters + w...
0x72

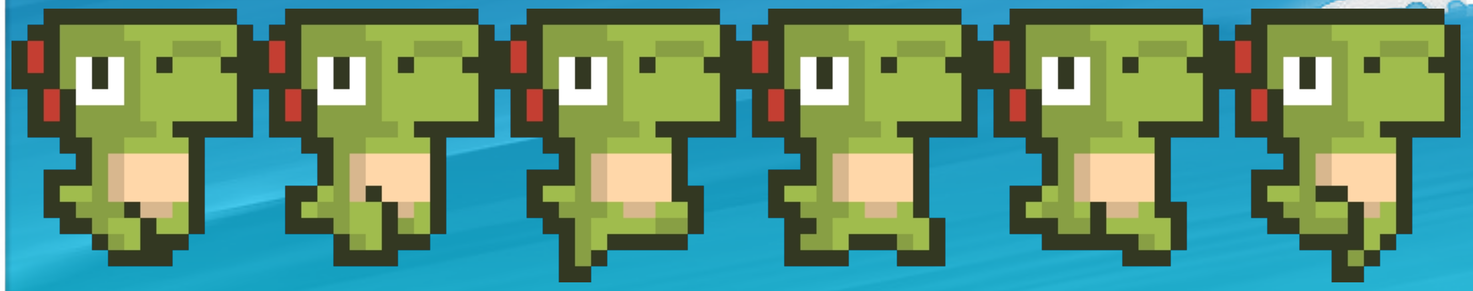
Jungle Asset Pack
Awesome pixel-art Jungle Asset Pack
Jesse Munguia

2D Pixel Dungeon Asset Pack
16x16 pixel character and tileset
Pixel_Poem

Skeleton Sprite Pack
Awesome Skeleton sprite pack (Idle, Rea...
Jesse Munguia

Free Pixel Art Forest
A Free Pixel Art Forest for you!
edermunizz

Sunny
2D Pla
ansimu



https://arks.itch.io/dino-characters

Flutter Talks 2019

5.
Now we are ready!

```dart
import 'package:flutter/foundation.dart' show
debugDefaultTargetPlatformOverride;
import 'package:flutter/material.dart' show TargetPlatform;

import './main.dart' as game;

main() {
 debugDefaultTargetPlatformOverride =
TargetPlatform.fuchsia;
 game.main();
}
```

6.
Get involved!

Links

Beginner Tutorials by Alekhin

Flame inside regular apps

discord channel

github

Fire Slime

https://fireslime.xyz

Flutter Talks 2019

THANKS!

Any questions?

You can find me at

@luanpotter

luannico27@gmail.com

Flutter Talks 2019

CREDITS

Special thanks to everyone that helped create this presentation:

- Presentation template by SlidesCarnival
- Fonts: Montserrat
- Photographs by Unsplash, including:
  - Watch by Shane Aldendorff
  - Typewriter by Camille Orgel
  - Et al.
- http://blog.apbbuilders.com/builders-work-in-progress
- Game Assets by Arks on Itch
- Invaluable help from Erick and Renan
- Everyone at the community helping flame!

Flutter Talks 2019