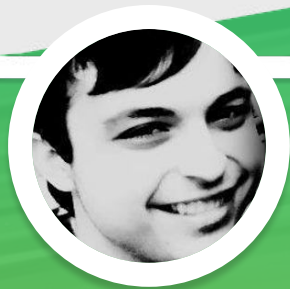




Making Games with Flame



HELLO!

I am Luan Nico

Software Craftsman

You can find me at @luanpotter



1. What is a game?



“

The obvious objective of video games is to entertain people by surprising them with new experiences.

- Shigeru Miyamoto





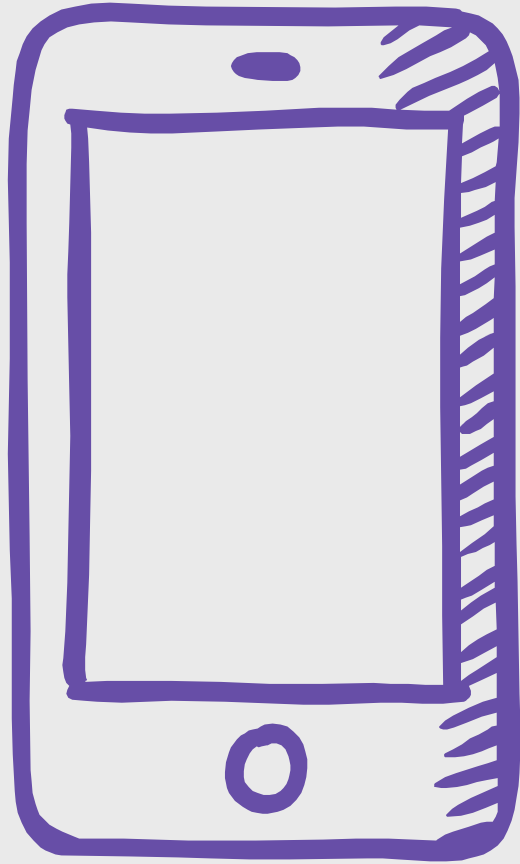
Games are:

Multimedia

- Graphics
- Audio
- Text

Interactive

- Input
- Player
Agency

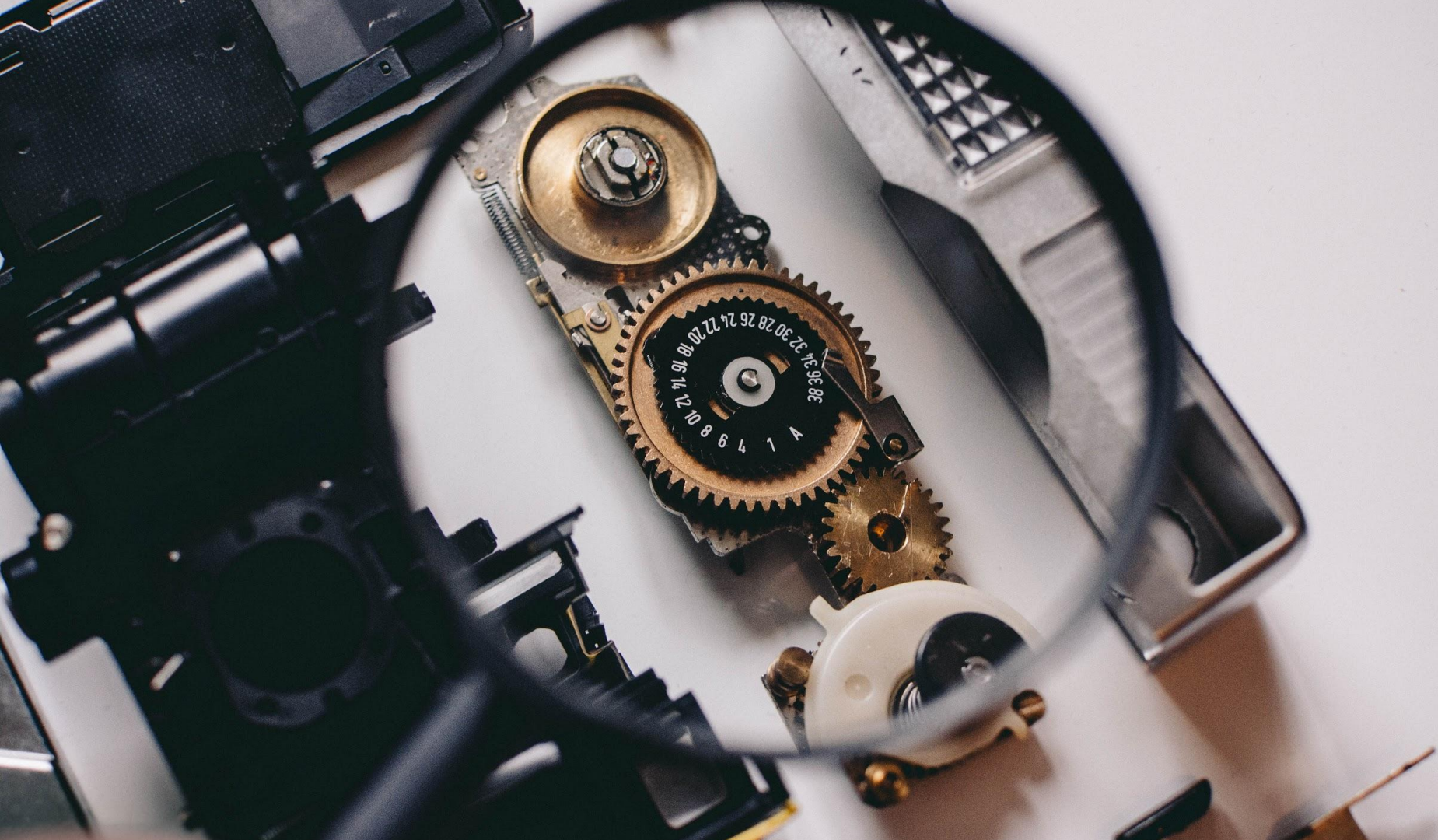


Note that regular apps might have some of those characteristics as well...

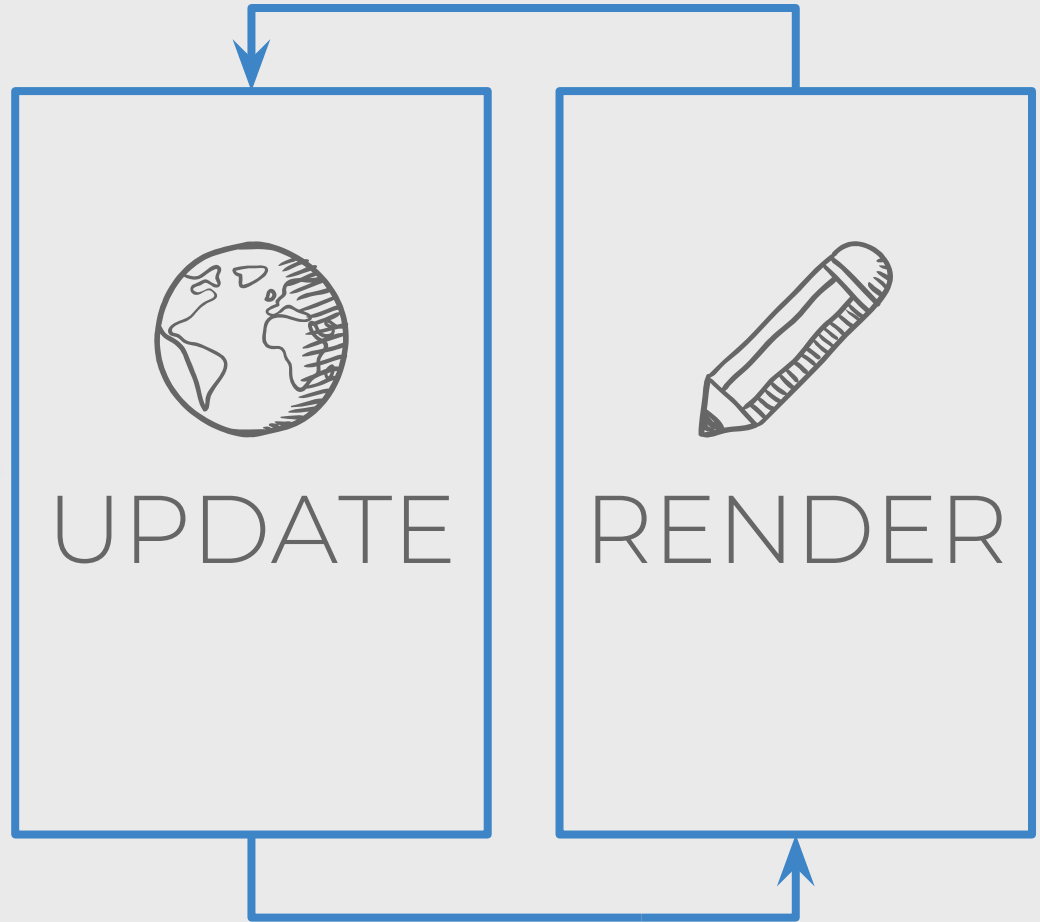


2.

How do games work?



The Game Loop





In Flutter?

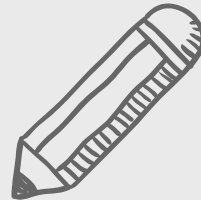
- Direct Low-Level Canvas Access
- High Performance Animations

In Flutter?



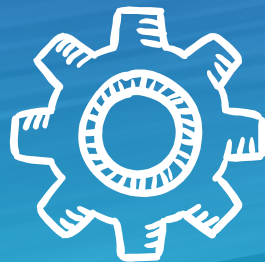
Schedule Frame Callback

60 FPS
updates



RenderBox

extendable
widget
paint method



**These are used by
Flutter's low-level
components!**



3.

Flutter + Game = Flame



A minimalist Flutter game engine.



813



58



Github,
Discord,
& more

<https://github.com/luanpotter/flame>



“

*From a little spark
may burst a flame.*

- Dante Alighieri

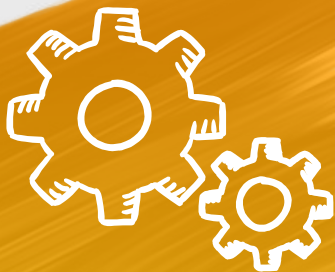
Entry Points

Full Game App

- MyGame extends Game
- runApp(game.widget)
- There is a BaseGame!

Game as Widget

- EmbeddedGame, SimpleGame
- game.widget in the tree



**Flame is
Modular**

Game Interface

**Sprites and
Animations**

Input Handling

**Component
System**

Audio Player

**General
Utilities**



Component System

- Component (update & render)
- Position Component
- Sprite Component
- Animation Component
- Many others!



External Modules


- tiled
- box2d
- flame_gamepad
- play_games

The background features three horizontal, overlapping brushstrokes in various shades of green, ranging from a vibrant lime green to a deeper forest green. The strokes have a textured, painterly appearance with visible bristles and varying opacity. A thin white rectangular frame is centered over the middle stroke, containing the text.

4.
Let's do it!



**GAMES ARE MORE
THAN CODE!**



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

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Audio Assets

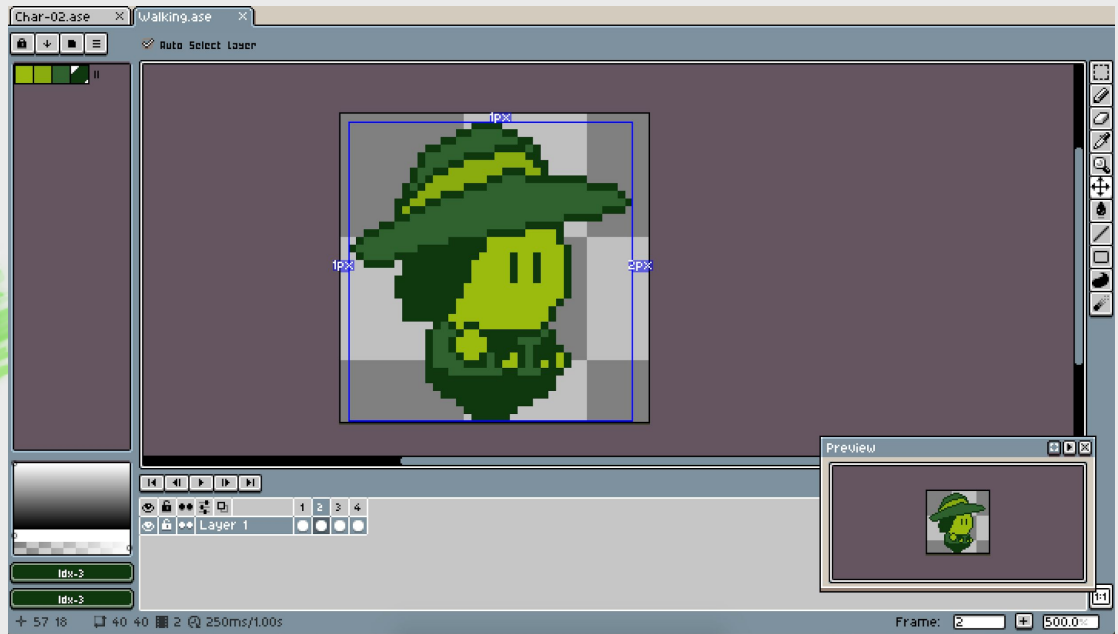
Fonts

PR & Marketing

Coding

flame helps here

Assets?





FILTER RESULTS (Clear)

Price

★ Free

More Options

RELATED COLLECTIONS



All Assets Packs

animuz



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...

Ox72



16x16 Dungeon Tiles II

A free tileset + animated characters + w...

Ox72



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

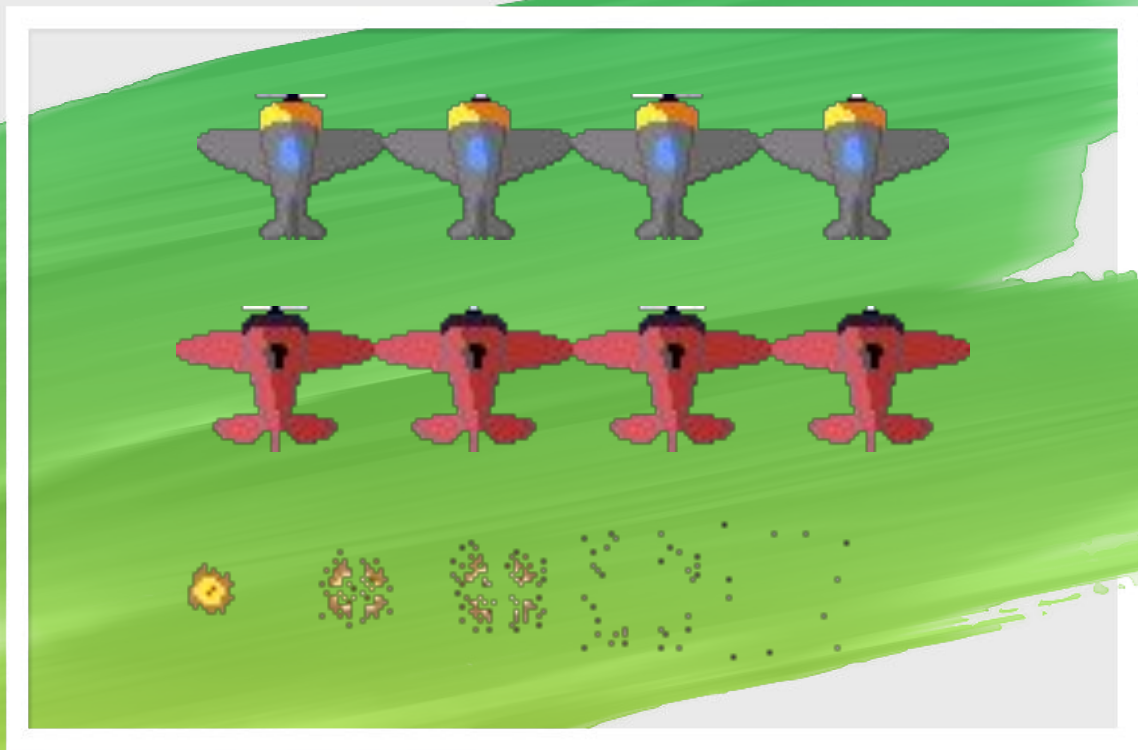


Free Pixel Art Forest

A Free Pixel Art Forest for you!

edermunizz





The background features a light gray surface with two broad, horizontal, overlapping brushstrokes in shades of blue. A white rectangular frame is centered on the page, enclosing the text.

5.

Now we are ready!





7. Get involved!



Articles

[Beginner Tutorial](#)
[by Alekhin](#)

[Sprite Sheet](#)
[Animations \(inside](#)
[regular apps\)](#)



<https://fireslime.xyz>



• <https://github.com/luanpotter/bgug>





THANKS!

Any questions?

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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 and invaluable help from Erick
- Everyone at the community helping flame!