

A simple, fun, small and fast scripting programming language

## Agenda

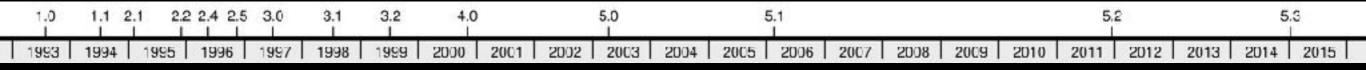
- Overview
- History
- Data types
- Object Oriented Programming
- Error Handling
- Coroutines
- Package management & libraries

#### Overview

- an extension/embeddable language
  - ~20 keywords ~20 operators
  - ~24k lines of C
  - Lua interpreter ~246K
  - Lua library ~421K
- Fast
  - Interpreted Lua is slightly faster than python, ruby and php
  - LuaJIT is in C++ territory
- Similar to JS with ruby syntax
- Easy Lua <-> C interop
- Coroutines (~Ruby fibers)
- First-class functions
- Prototyped OO, meta programming

## History

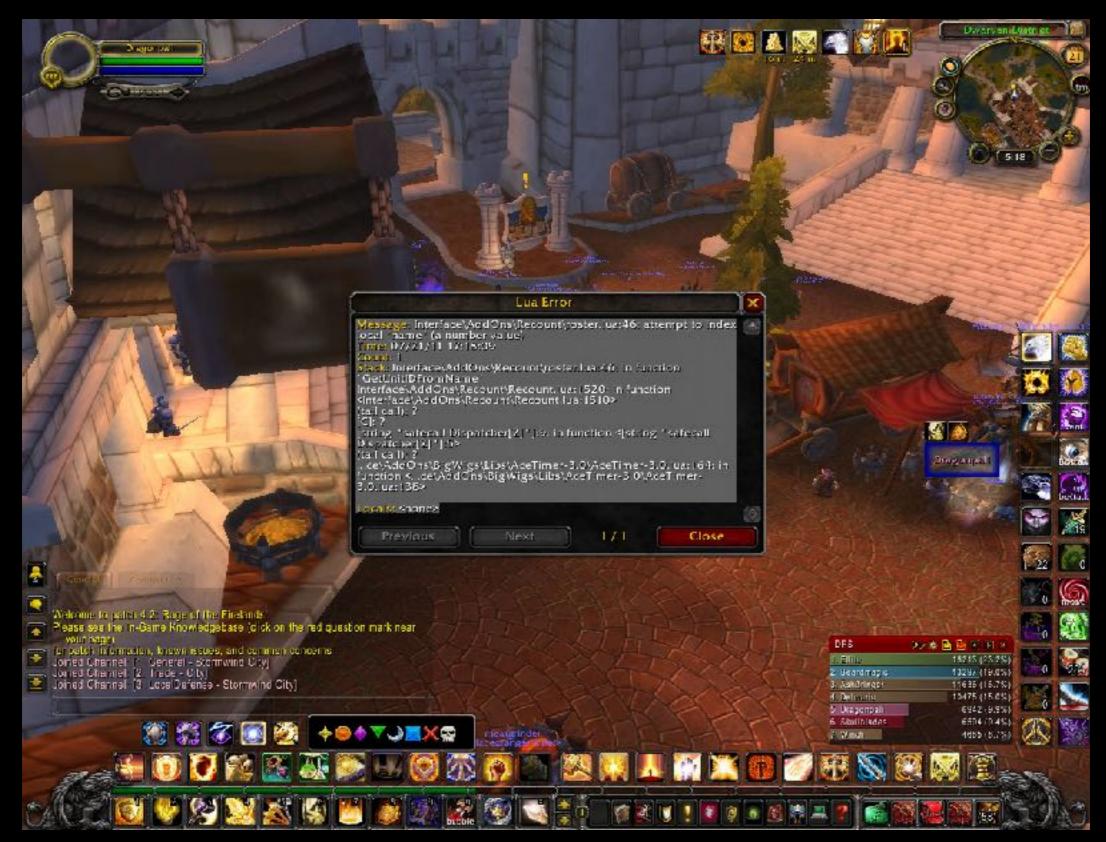
 Designed, implemented, and maintained by the Pontifical Catholic University, Rio de Janeiro, Brazil.



### Escape from Monkey Island



#### World of Warcraft



# Angry Birds



## Industry









NGINX





#### Data types

- number, bool, string, nil
- functions (first class)
- tables
- arrays
- user data
- threads / coroutines

## Object Oriented

- Prototyped based
- Meta-tables

## Error handling

- There are no exceptions
- Convention is to return nil and an error (string)
- error, assert and pcall

## Coroutines

Similar to Ruby fibers

## LuaJIT

• FFI: Foreign Function Interface

## Package management

- require & modules
- package table (loaded & paths)
- luarocks.org
- https://github.com/uhub/awesome-lua