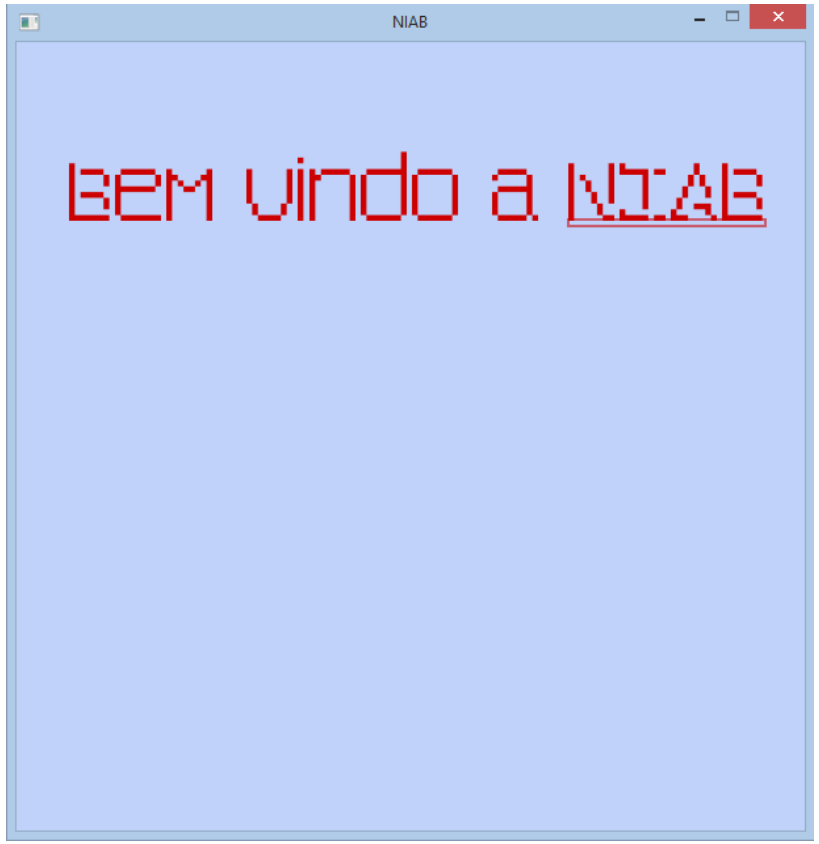
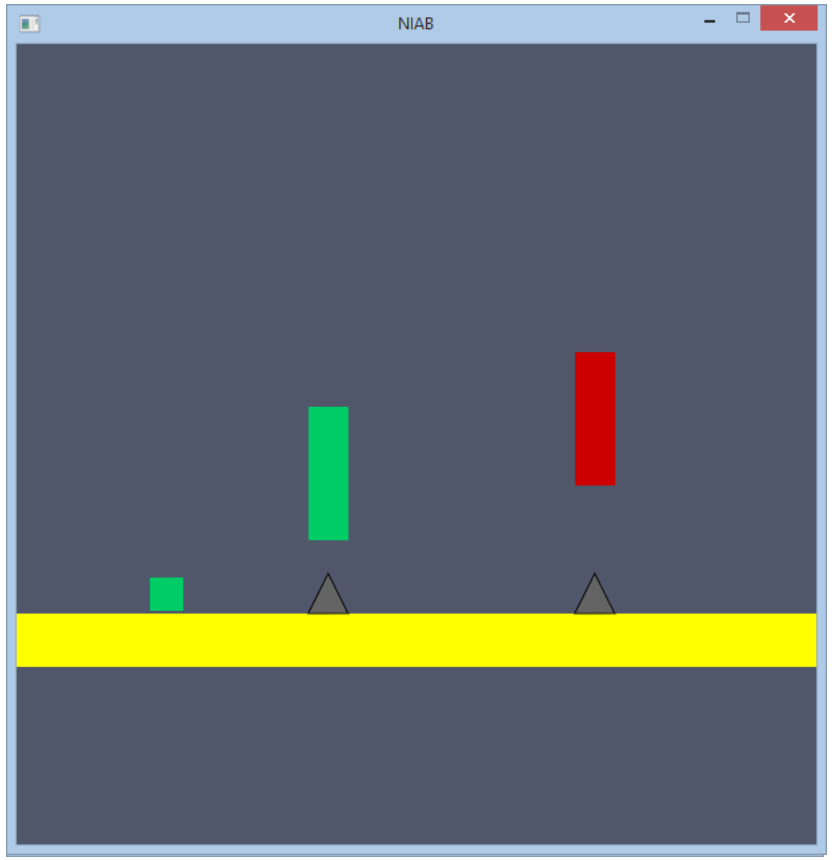

NEW IS ALWAYS BETTER

O jogo

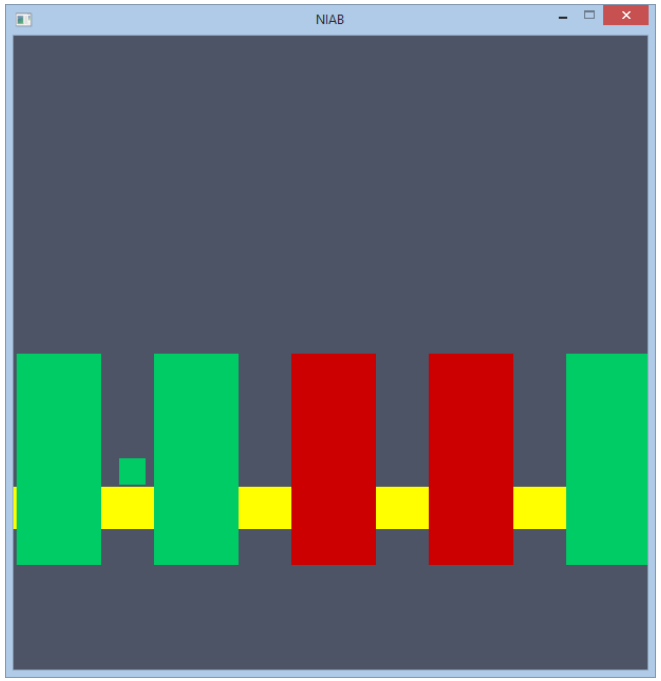
Alexandre Wanick
Bernardo Ruga

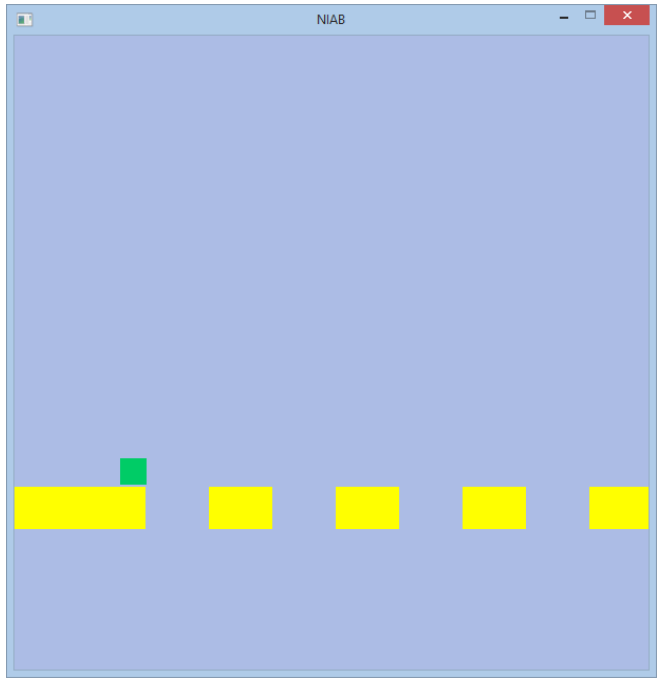


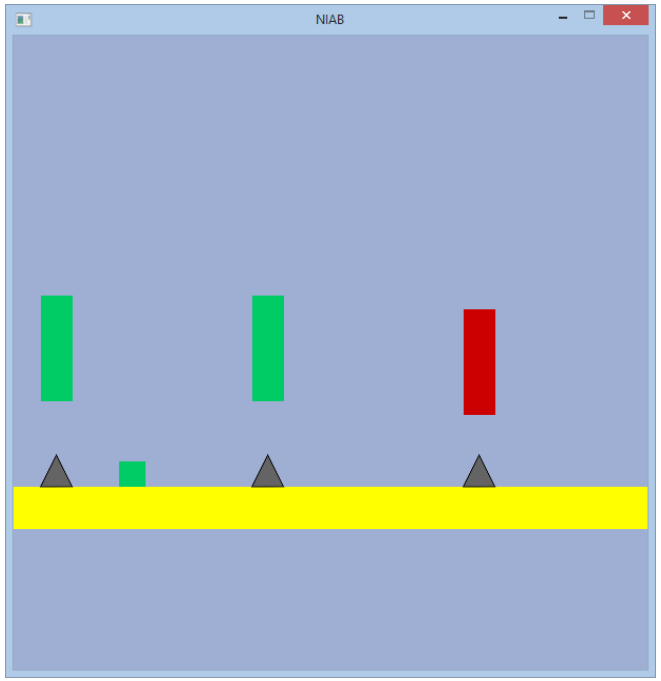


Jogabilidade

3 inimigos



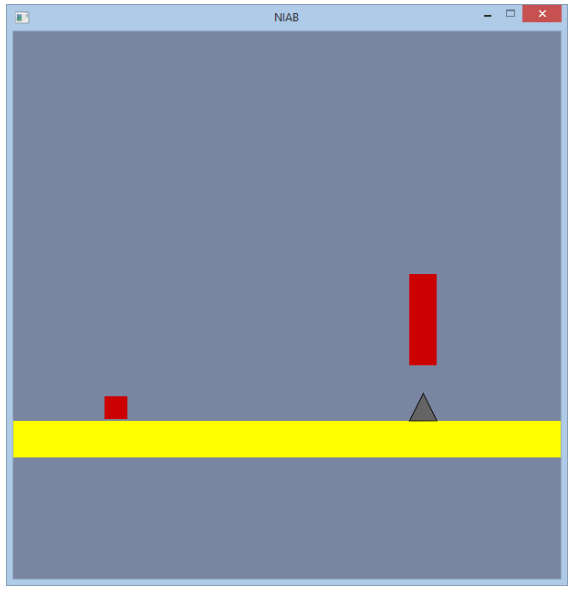


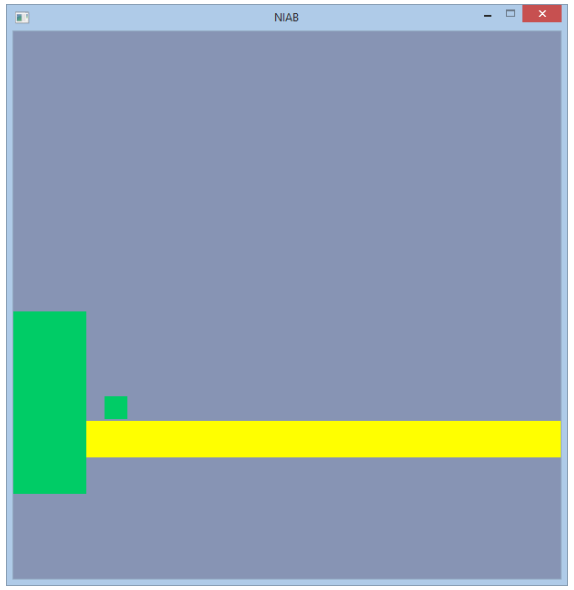


Jogabilidade

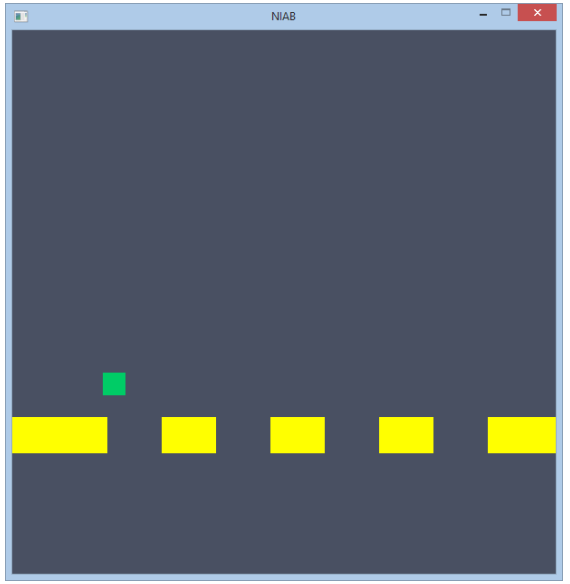
NodeMCU

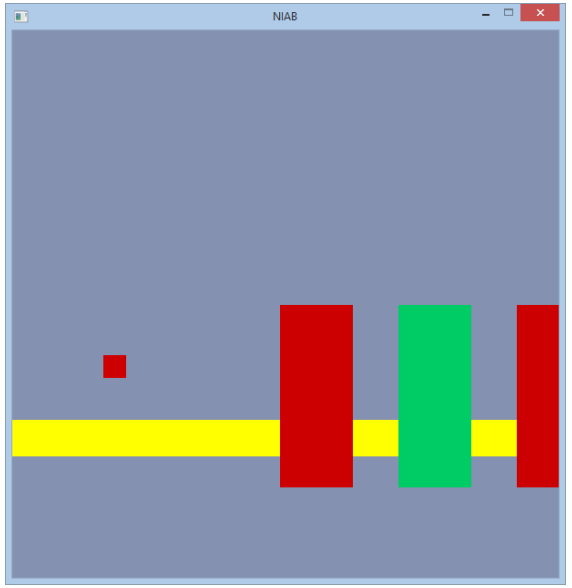
Mudança de cor





Salto





Funcionalidade

LUA/LOVE2d

```lua
function platform (x,y,w,h)
  local originalx, originaly, rx, ry, rw, rh = x, y, x, y, w, h
  return {
    draw =
      function ()
        love.graphics.setColor(255, 255, 0)
        love.graphics.rectangle("fill", rx, ry, rw, rh)
      end,
    update =
      function (dt)
  }
end
```

```lua
function enemy (enemy_type, x, y)
  local rx, ry, ry2 = x, y, y
  local width = 0
  local ry_t = {0, 0, 0}
  local dir = {1, 1, 1}
  return {
    draw =
      function (rand)
        if enemy_type == 1 then
        if enemy_type == 2 then
        if enemy_type == 3 then
      end,
    update =
      function (dt)
        if enemy_type == 1 then
        if enemy_type == 2 then
        if enemy_type == 3 then
      end
  }
end
```

Encapsulamento

```lua
function player (x,y,w,h)
  local rx, ry, rw, rh = x, y, w, h
  local jy = y
  return {
    draw =
      function ()
        if playerColour == 0 then
        love.graphics.rectangle("fill", rx, ry, rw, rh)
      end,
    update =
      function (dt)
        if gamestate == "preplaying" then
        if pula == true then
        if mudaCor == true then
      end,
    keypressed =
      function (key)
        if key == "left" then
        if key == "right" then
          pula = true
        end
      end
  }
end
```

Funcionalidade

LUA/LOVE2d

Mqtt

```
m = mqtt.client.create("test.mosquitto.org", 1883, mqttcb)
m:connect("BernardoSnow")
m:subscribe({"jump"})
m:subscribe({"changeColour"})
```

```
function mqttcb (topic, message)
  print("Received from topic: " .. topic .. " - message:" .. message)
  if message == "pula" then
    pula = true
  elseif message == "mudaCor" then
    mudaCor = true
  end
end
```

Funcionalidade

NodeMCU

Mqtt

```
m:connect("test.mosquitto.org", 1883, 0,
                conectado,
                function(client, reason) print("failed reason: "..reason) end)
```

```
local m = mqtt.Client("1511651", 120)

function publica(c, Msg, subject)
  pub = c:publish(subject, Msg ,0,0,
            function(client, reason) print( Msg .. " enviada!") end)
    gpio.write(led_r, gpio.LOW)
    gpio.write(led_g, gpio.LOW)

end

function conectado (c)
    c:publish("Sucesso", "NodeMCU Conectou.", 0,  0,
              function(client, reason) print("Conexão estabelecida") end)
end
```

Funcionalidade

NodeMCU

```
function Button_pressed2()
    local delay = 500000
    local last = 0
    return
    function (level, timestamp)
        local now = tmr.now()
        if now - last < delay then return end
            last = now
            gpio.write(led_r, gpio.HIGH)
            publica(m, "mudaCor", "changeColour")
    end
end
gpio.trig(sw2, "down", Button_pressed2())
```

```
function Button_pressed1()
    local delay = 500000
    local last = 0
    return
    function (level, timestamp)
        local now = tmr.now()
        if now - last < delay then return er
            last = now
            gpio.write(led_g, gpio.HIGH)
            publica(m, "pula", "jump")
    end
end
gpio.trig(sw1, "down", Button_pressed1())
```

Dificuldades

Tempo de resposta do Mqtt com love

Criar os inimigos + colisão