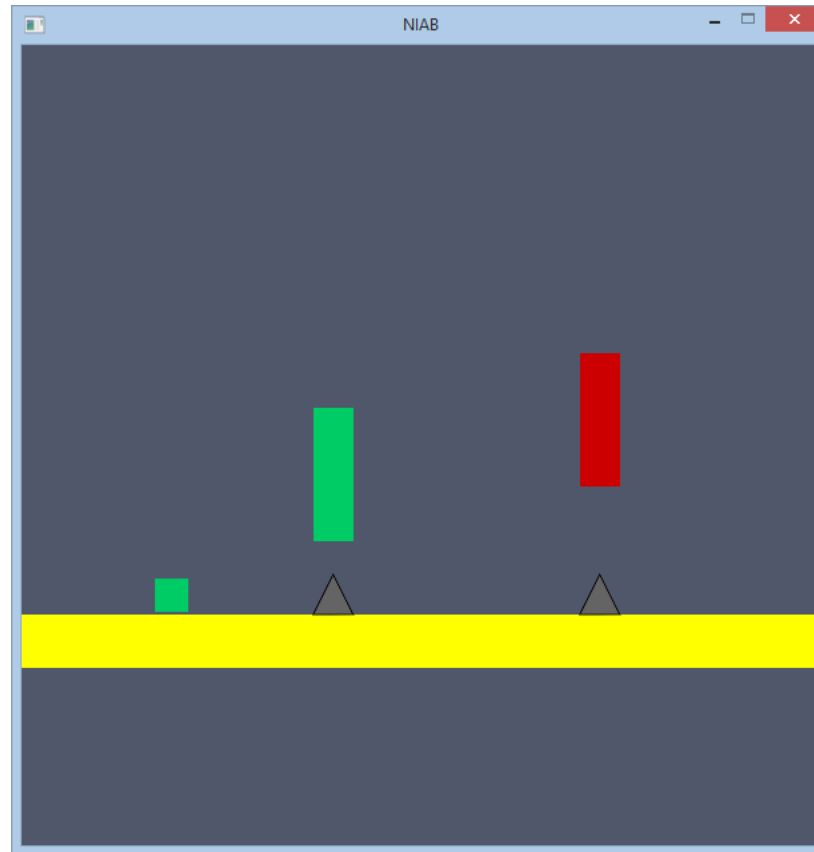
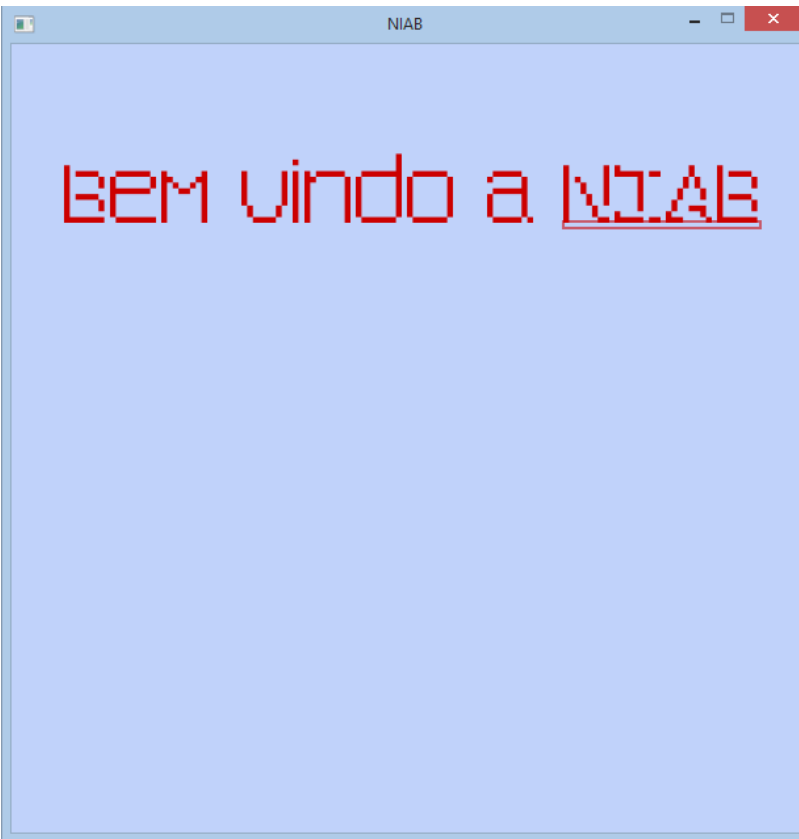




NEW IS ALWAYS BETTER

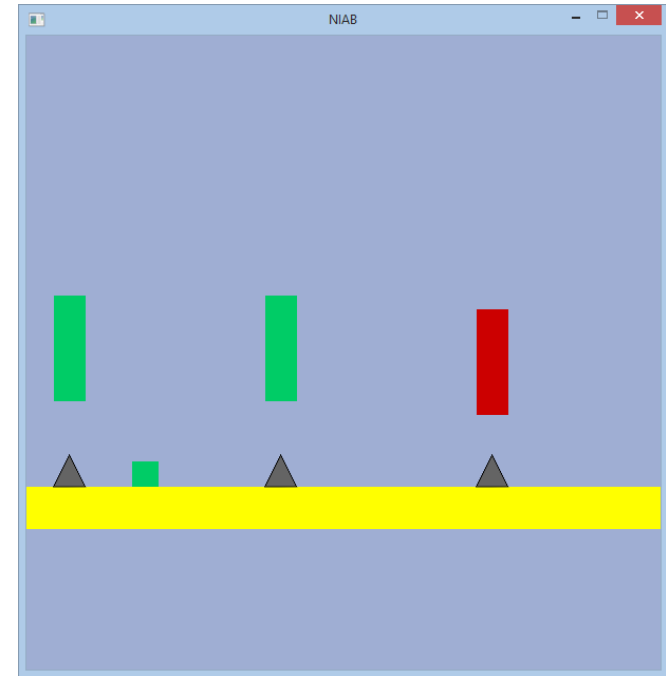
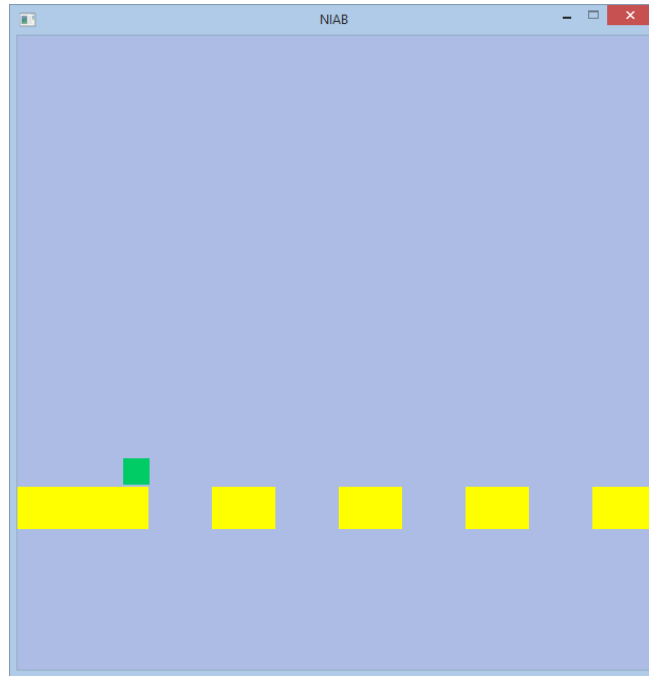
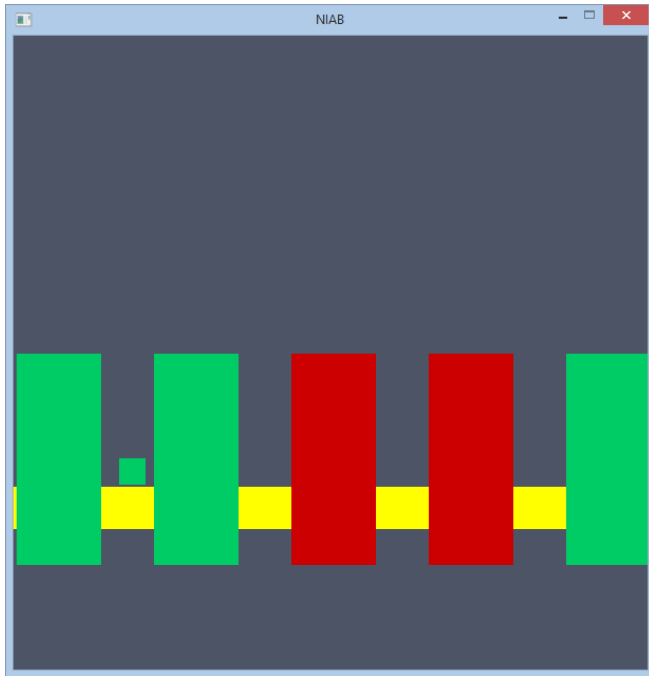
0 jogo

Alexandre Wanick
Bernardo Ruga



Jogabilidade

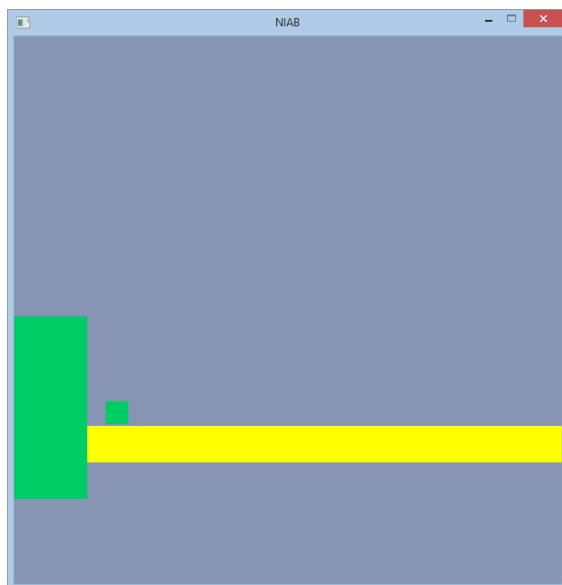
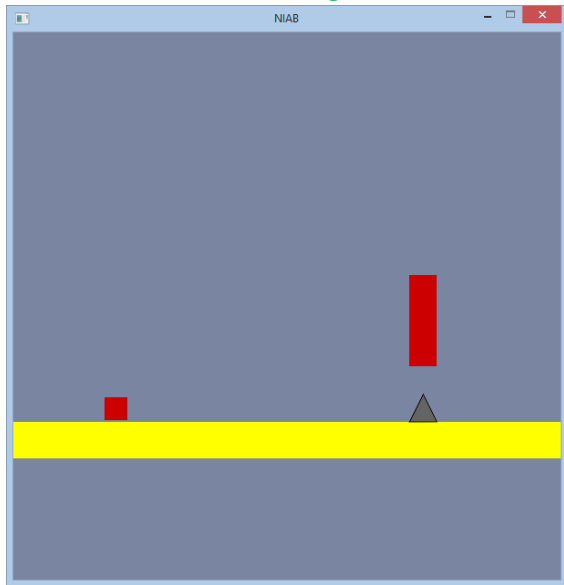
3 inimigos



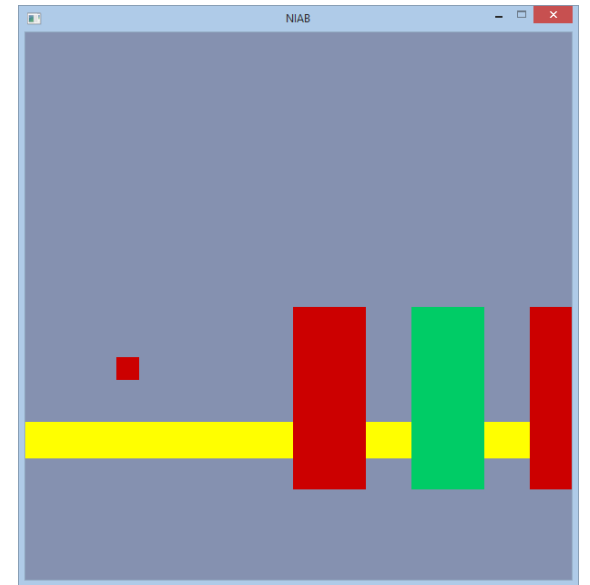
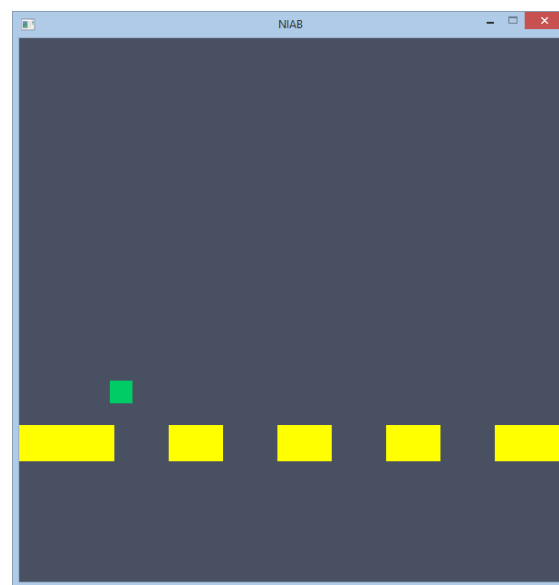
Jogabilidade

NodeMCU

Mudança de cor



Salto



Funcionalidade

LUA/LOVE2d

```
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
    }
end
```

```
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
                end
                if enemy_type == 2 then
                end
                if enemy_type == 3 then
                end
            end,
        update =
            function (dt)
                if enemy_type == 1 then
                end
                if enemy_type == 2 then
                end
                if enemy_type == 3 then
                end
            end
    }
end
```

Encapsulamento

```
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
            end,
        update =
            function (dt)
                if gamestate == "preplaying" then
                end
                if pula == true then
                end
                if mudaCor == true then
                end
            end,
        keypressed =
            function (key)
                if key == "left" then
                end
                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

```
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)
end

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

function Love_callback(c)
  local function mensagemLove(userdata, topic, message)
    if(message == "inicio") then
      ledstate = 1
      led(ledstate)
    end
  end
  c:on("message", mensagemLove)
end
```

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