Making Small-Scale 2D Games with LÖVE and Lua
Objectives
Objectives

how to design a small-scope game that can be created within fourteen days
Objectives

how to get started using the LÖVE 2D framework to create your 2D game
Objectives

how to avoid the three landmines of small-scope game design.
How to design a small-scope game that can be created within fourteen days
Scope
--[[ how, then, do you make sure that you are not overcommitting to a game scope that exceeds your capabilities and available time? ]]--
function stepOne()

--Take stock of what game dynamic is at the core of your desire to create a game.

end
Game Dynamic
Game Dynamic

Territorial Acquisition;
Prediction;
Spatial Reasoning;
Survival;
Destruction;
Building;
Collection;
Chasing or Evading;
Trading; and
Race to the End.

(Romero & Scheiber, 2017, pp.5-8)
Game Dynamic
function stepTwo()

--Take stock of the game that you would like to create.
Game Features
Game Features

The player;
Environment;
Characters;
Artwork;
Abilities;
Levels;
Power-Ups; and
Scoring.
Game Features
Game Features
Game Features
Game Features
function stepThree()

Reduce the game down to a Minimal Viable Product.
How to get started using the LÖVE 2D framework to create your 2D game
LÖVE Basics
LÖVE Basics

```lua
function love.load()
end

function love.update()
end

function love.draw()
    love.graphics.rectangle("line", 100, 100, 200, 200)
end
```
function love.load()
    x = 100
    y = 100
end

function love.update()
    if love.keyboard.isDown('w') then
        y = y - 1
    elseif love.keyboard.isDown('s') then
        y = y + 1
    elseif love.keyboard.isDown('a') then
        x = x - 1
    elseif love.keyboard.isDown('d') then
        x = x + 1
    end
end

function love.draw()
    love.graphics.rectangle("line", x, y, 200, 200)
end
function love.load()
    mySquare = {}
    mySquare.x = 100
    mySquare.y = 100
    mySquare.height = 200
    mySquare.width = 200
end

function love.update()
    if love.keyboard.isDown('w') then
        mySquare.y = mySquare.y - 1
    elseif love.keyboard.isDown('s') then
        mySquare.y = mySquare.y + 1
    elseif love.keyboard.isDown('a') then
        mySquare.x = mySquare.x - 1
    elseif love.keyboard.isDown('d') then
        mySquare.x = mySquare.x + 1
    end

    if mySquare.y < 0 then
        mySquare.y = mySquare.y + 4
    elseif mySquare.y > 400 then
        mySquare.y = mySquare.y - 4
    elseif mySquare.x < 0 then
        mySquare.x = mySquare.x + 4
    elseif mySquare.x > 600 then
        mySquare.x = mySquare.x - 4
    end
end
LÖVE Basics

```plaintext
elseif love.keyboard.isDown('s') then  
    mySquare.y = mySquare.y + 1
elseif love.keyboard.isDown('a') then  
    mySquare.x = mySquare.x - 1
elseif love.keyboard.isDown('d') then  
    mySquare.x = mySquare.x + 1
end

if mySquare.y < 0 then  
    mySquare.y = mySquare.y + 4
elseif mySquare.y > 400 then  
    mySquare.y = mySquare.y - 4
elseif mySquare.x < 0 then  
    mySquare.x = mySquare.x + 4
elseif mySquare.x > 600 then  
    mySquare.x = mySquare.x -4
end

end

function love.draw()  
    love.graphics.rectangle("line", mySquare.x,  
                mySquare.y, mySquare.width, mySquare.height)
end
```
Phases of building a LÖVE game
Best resources to help you get started
Best resources to help you get started

Sheepolution’s “How to LÖVE”

https://sheepolution.com/learn/book/contents
Best resources to help you get started

Simple Game Tutorials

https://simplegametutorials.github.io/love/
Best resources to help you get started

Brenda Romero and Ian Schreiber’s “Challenges for Game Designers.”
Best resources to help you get started

Extra Credits

https://www.extracredits.site
How to avoid the three landmines of small-scope game design. For less comfortable and more comfortable programmers alike.
function landmineOne()

--skipping prototyping

end
function landmineTwo()
    -- over-scoping
end
function landmineThree()

-- focusing on features over function

end