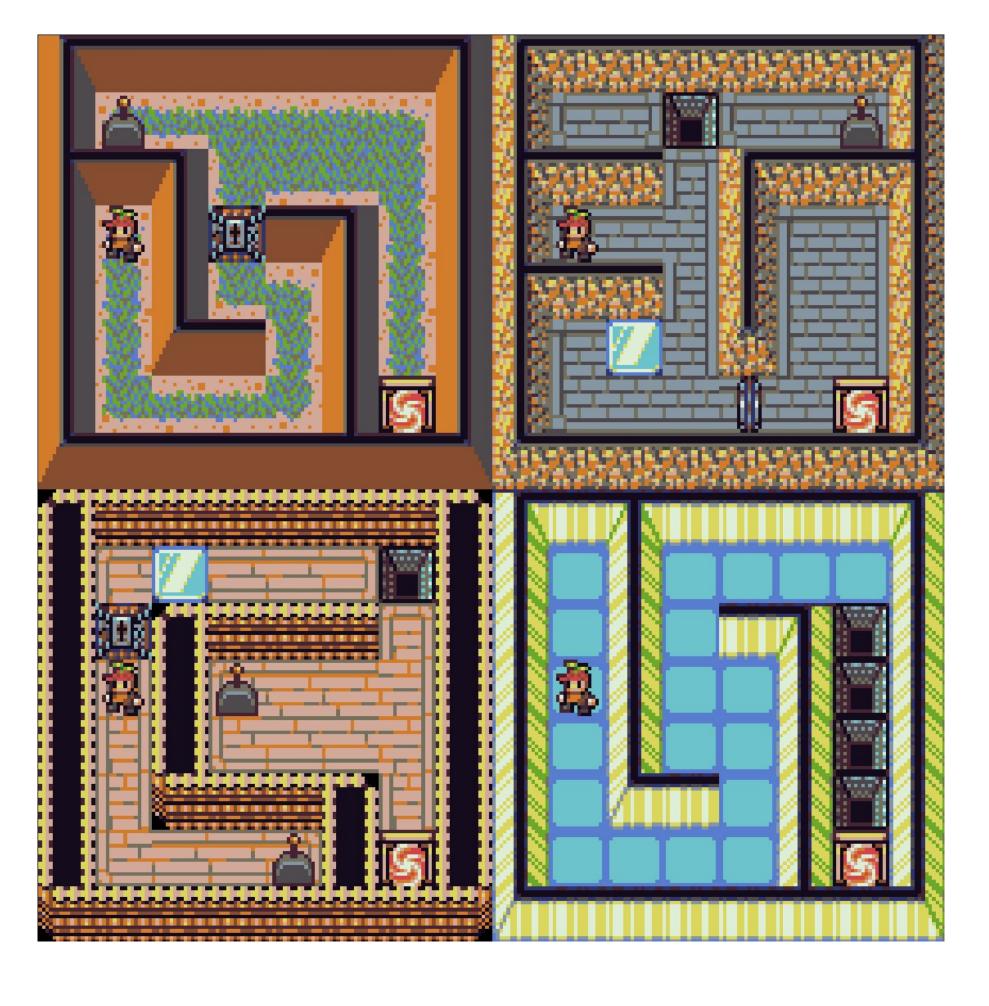


# Abstract

DungeonBots is a fun, powerful gaming platform that facilitates coding education, allowing educators to write make game-like lessons that demonstrate programming principles.



# Goals

Give level authors and educators an intuitive, flexible, and powerful development environment

Provide players and students fun and exercises that also teach programming principles

Make a community space that facilitates sharing of games among players and teacher-to-student

DungeonBots		Feed	About	Contact	Help	Account +	
F	Pack						
		Choose File No file chosen					

end

### **Key Features**

Level editor is a powerful tool for game designers and teachers to create unique programming challenges

Game is a visually appealing environment for

#### Pack Feed

Conditional Statements uploaded by Stewart Yet another Intro to If/Else statements





The world's init script. In the command line, run help() for more info

ghost = world.findEntity('ghost')
ghostgoal = world.findEntity('ghostgoal')
bot = world.findEntity('bot')

-- Set the positon of the Ghost's goal
local goal\_x, goal\_y = math.random(1,16), math.random(6,16)
ghostgoal:setPosition(goal\_x, goal\_y)

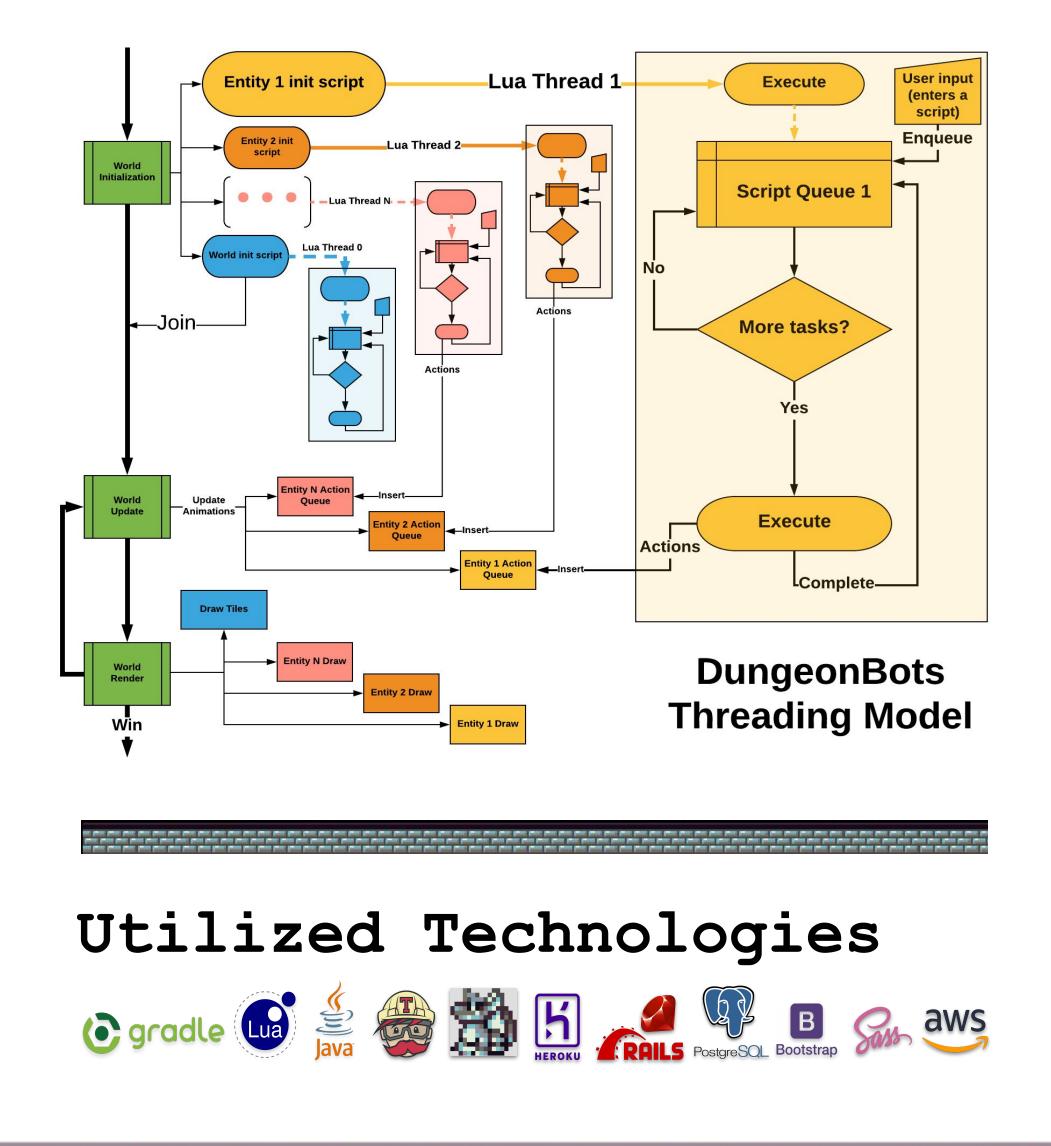
-- Set the position of the Ghost
local ghost\_x, ghost\_y = goal\_x, goal\_y
while ghost\_x == goal\_x and ghost\_y == goal\_y do
 ghost\_x, ghost\_y = math.random(1,16), math.random(6,16)
end
ghost:setPosition(ghost\_x, ghost\_y)

bot.data.ghost\_position = function()
 return ghost:position()

bot.data.ghost\_goal = function()
 return ghostgoal:position()
end

# System Design

Built on our custom Java game engine Has a highly concurrent architecture Designed for integrated Lua scripting support



solving challenges, and is customizable so the game can respond to key presses, command-line scripting, or runtime scripting

Community facilitates in-game downloads of lessons, links users to follow each other, and allows publication of new lessons

