Blockdude class

import packages

java awt

java awt.event

javax.swing

class Blockdude extends JPanel implements KeyListener

create new JFrame object “frame” and name it Kappa

make 2d array levels in matrix format

create private class variables needed to keep track of everything for

guy, rock, direction, rows, columns, inGame, blockOn,Top

eventlistener variables

left, right, up, down

private image variables

door, dude right, dude left, rock, door

create new JFrame

constructor(int level number)

always call super

add keylistener to panel

implement a lot of if statements to change rows and columns correspondingly according to level number variable

create new coordinateFinder object and get the coordinates of the dude

set class variables equal to the coordinates of the dude

setBackground color

setFocusable to true

set initial direction to be left

loadImages method

createGame method

similar to constructor, with a whole bunch of if statements for levelnumber variable

set the contentpane to the corresponding level

close the frame after reaching the door method

to be implemented in real code

loadImages method

get the images of the needed icons

paintComponent method

super.paintComponent(g) to paint stuff

doDrawing(g) method below

doDrawing method

resize the icons

loop through the whole matrix

multiply each icon by 32 pixels to set uniform size

set each image to each corresponding matrix number

0 is air

1 is wall

2 is block

3 is dude

4 is door

move method - the longest method everrrr

if left key is pressed, update guy position

check for a whole bunch of stuff like

if there’s a wall next to him then nothing happens

if there’s a block on his head, the block must move with him

if the door is next to him, update the level, etc.

repeat opposite thing for right key since it’s so similar

track the dude’s movements for certain cases

if he jumps off a ledge, he should reach the floor

the same rule applies if he drops a block off a ledge

if the down button is pressed and there’s a block next to him, he should pick it up

only if there is air above that block

if the up button is pressed he should be able to walk up a one block stair

otherwise nothing happens

repaint after each action

CoordinateFinder class

(private variables)

int array map

int rows, columns

create variables that track the x and y locations of the dude and the door

guyX, guyY, doorX, doorY

constructor(params map, rowN, colN)

set class variables equal to corresponding params

now loop through matrix array and find the play and door

initialize corresponding variables

\*accessor methods for x and y locations of dude and door