

NOTE: I was unable to process my image data with the code through Sourcetree. Planning to get help during class on 11/22. Committed files straight from my computer to github.

## Skills Inventory:

### Shapes

1. line, ellipse, rect, triangle, quad, arc, curve
  - draw hallway background
2. fill, stroke, strokeWeight, noFill, noStroke, color
  - draw ghosts
3. Modes: CORNER, CORNERS, CENTER, RADIUS
  - draw hallway background

### System

4. setup(), draw()
  - draw background and set canvas size to 400x400
5. background(), random(), noise()
  - set background color to black

### Loops

16. for loop, while loop
  - loop ghosts floating in the background using a for loop
17. A nested loop
  - traverse an array for values within the above loop

### Functions

24. Pass by reference (objects): declare and use a function that takes an object as an argument
  - create an array object that stores background ghost x position values. call the array in a function that draws the ghosts and builds on the array input

### Classes/objects

28. Write a class with a constructor function
  - call a subclass that draws the ghosts in the main class
29. Use the keyword new to instantiate an object
  - create a class that draws the ghosts

### Lists

33. Initialize and populate an array
  - write an array for ghost movement
34. Initialize and populate an ArrayList
  - the above array contains a list of x locations
35. Manage a set of objects with an array or ArrayList
  - the ghosts move based on the above values, which are traversed and added to list
36. Use an ArrayList method: size(), get(), remove(), contains()
  - use size to traverse the length of the array

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## Vectors

### 38. Use the PVector class

- regulate ghost movement using pvector

### 39. Do some basic physics: use position, velocity, and acceleration

(due to gravity) vectors

- x location, speed, and distance = velocity of ghosts

### 40. Find the direction and distance between two points

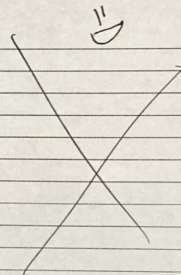
- use velocity

### 41. Create a random 2D vector

- the ghost movement vector takes random y location values

Plan:

Dylan Johnson

| Milestone 1  | Milestone 2   | Milestone 3  | Milestone 4  |
|--|---|--|--|
| What will I deliver?<br>plan ✓<br>- precode ✓<br>- 1st class (main) ✓<br>- background ✓<br>- move ghosts ✓<br>- draw character ✓<br>- move character if have time ✓<br>Which inventory skills will this demonstrate? List them.<br>shapes 1 1<br>" 2 2<br>" 3 3<br>system 4 4<br>" 5 5<br>" 6 6<br>loops 16 6<br>" 17 7<br>" 18 8<br>" 19 9<br>functions 24 8 9 60<br>classes 25 26 27 28 29<br>You should deliver approx. 10 skills at this milestone | move character if don't have time in milestone 1<br>- wand/spell beam mechanics<br>- shooting vs standing<br>- collision detection<br>- spell beam w/ vbs<br>system 7<br>" 8<br>" 9<br>" 10<br>debugging 11<br>" 12<br>" 13<br>" 14<br>" 15<br>functions 20<br>" 21<br>" 22<br>You should deliver approx. 10 skills at this milestone | You are strongly encouraged to deliver your finished game at Milestone 3.<br>- game states<br>- score counter<br>- any text if necessary i.e. "start, end, win, lose"<br>- fix any collision detection errors<br>- comment all code<br>all inventory skills done by now unless I need help with one or two in class<br>You must deliver 30 inventory skills by this milestone. | - anything I missed or forgot from past weeks milestones<br>- additions<br> |

*\* written questions, to comment in Milestone 3*

*main class*  
*subclass*  
*subobject*

*instantiate 2*

*lists 31 32 vectors 37*  
*" 33 " " " 38 15 = classes 30*  
*" 34 " " " 39 16*  
*" 35 13 " " 40 17*  
*" 36 14 " " 41 18*  
*" 42 19*